

**Agenda for the 10:00 am Wednesday, January 18, 2023, Town of Qualicum Beach
Regular Council Meeting to be held in the Council Chamber, Municipal Office,
660 Primrose Street, Qualicum Beach, BC**

Page No.

(This meeting may be recorded)

1. ADOPTION OF THE AGENDA

1-6 THAT Council adopts the January 18, 2023, regular Council meeting agenda.

2. ADOPTION OF THE CONSENT AGENDA

- 7-8 (1) **Correspondence Log** – January 18, 2023
9-14 (2) **Monthly Finance Report** – November 2022
15-18 (3) **Monthly Fire Department Report** – November and December 2022
19-20 (4) **Monthly Building Permit Report** – November and December 2022

3. APPROVAL OF THE MINUTES

21-30 THAT Council approves the minutes of the following meetings:

- November 30, 2022 Committee of the Whole meeting;
- December 2, 2022 special Council meeting; and
- December 7, 2022 regular Council meeting.

4. BUSINESS ARISING FROM THE MINUTES

(1) **Notices of Motion from the December 7, 2022 Regular Council Meeting**
Mayor Westbroek:

(a) THAT Councillor Jean Young be appointed as Town Liaison to the Oceanside Hospice Society.

Staff Comment: N/A

(b) THAT Council directs staff to extend the hours of lighting at the Qualicum Beach Skate Park; AND FURTHER THAT staff be directed to verbally inform Council if extending the hours of light at the Qualicum Beach Skate Park is not possible for any reason.

Staff Comment: motion not required; lights have been repaired and remain on until 10:00 pm, 7 days per week.

(c) THAT Council directs staff to provide a preliminary project scope, including, but not limited to, budget, staff capacity, and insurance implications, to remove the fencing surrounding the Qualicum Beach Skate Park.

Staff Comment: a preliminary project scope can be achieved within existing operating budget and staff capacity.

(d) THAT Council directs staff to provide a preliminary project scope, including, but not limited to, budget, staff capacity, and insurance implications, to improve visibility around the Qualicum Beach Skate Park by removing vegetation.

Staff Comment: staff recommend that discussion of vegetation removal be included in the preliminary design and consultation process that is currently under consideration in Council's strategic plan.

- (e) THAT Council directs staff to provide a preliminary project scope, including, but not limited to, budget, staff capacity, and insurance implications, to install benches and/or picnic tables at the Qualicum Beach Skate Park.

Staff Comment: a preliminary project scope can be achieved within existing operating budget and staff capacity.

Councillor Vander Valk:

- (f) THAT Council direct staff to prepare a report summarizing Council decision making to date regarding the St. Andrews Lodge located at Saahtlam Park for matters including, but not necessarily limited to, the requirement for seismic upgrades and the inclusion of onsite washrooms; AND FURTHER, THAT the Mayor respectfully request Chief Recalma's consideration of, and welcomed participation in, design of a plaque recognizing the gifting of the name Saahtlam from the Qualicum First Nation, for the Park formerly recognized as St. Andrews, as per the Council resolution dated September 28, 2022.

Staff Comment: staff support the motion as provided.

Councillor Young:

- (g) THAT representatives from the City of Nanaimo be invited to attend an upcoming meeting of Council to present on their 'Doughnut Economic Model'.

Staff Comment: see item 5(4), 'Delegations'

- (h) THAT representatives from Island Good, a non-profit society, be invited to attend an upcoming meeting of Council as a delegation to promote awareness of Shop Local programs, with an emphasis on goods produced on Vancouver Island.

Staff Comment: N/A

- (i) THAT Council commits to hosting a second Public Open House meeting monthly on the fourth Monday of each month, in addition to the currently scheduled monthly Public Open House on the second Monday of each month.

Staff Comment: N/A

(2) Recommendation from the November 30, 2022 Committee of the Whole Meeting

THAT renewal or replacement of the skate park be considered in the 2022-2026 Council Strategic Plan and five-year Financial Plan.

Staff Comment: motion not required; strategic planning and budget discussions are in progress and include this project.

5. DELEGATIONS

- 31
- (1) **Joanne Sales, Executive Director of Broombusters Invasive Plant Society**
Reviewing the Society's activities in 2022, plans for 2023, and highlighting the Society's Provincial Showcase Project for Communities in Bloom.
 - (2) **Marlys Diamond, Communities in Bloom**
Reporting on the 2022 Communities in Bloom Activities and Symposium.
 - (3) **Ceri Peacey, Community Facilitator for the Brant Wildlife Festival**
Providing an overview of the 2023 Brant Wildlife Festival, and request for financial support in the amount of \$5,000.
 - (4) **Lisa Bhopalsingh, City of Nanaimo, Doughnut Economic Model**
Presenting 'Doughnut Economics' and the City of Nanaimo's implementation of the model.

6. PUBLIC AND STATUTORY HEARINGS

- (1) **Zoning Amendment and Development Permit: 365 First Avenue West**
To facilitate subdivision of the subject property into two parcels, with a duplex to be built on proposed Lot B.
- (2) **Public Input Opportunity: Agricultural Land Reserve Exclusion**
Application for 230/250/270 Rupert Road East

7. BYLAWS

- 32-60
- (1) **Zoning Amendment and Development Permit: 365 First Avenue West**
Staff Recommendation:
THAT "Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022" be read a third time.

8. COMMITTEE & LIAISON REPORTS

- (1) **General Government** (Mayor Teunis Westbroek)
- (2) **Public Safety** (Councillor Scott Harrison)
- (3) **Parks & Recreation** (Councillor Anne Skipsey)
- (4) **Community Development** (Councillor Petronella Vander Valk)
- (5) **Arts & Culture** (Councillor Jean Young)

9. STAFF REPORTS

(1) Fire Department

61-62

(a) **Engine 2 Permanent Storage and Maintenance Funding** **Staff Recommendation:**

THAT Council allocates up to \$20,000 in the 2023 budget for the repairs and acquisition of storage space for Engine 2;

AND FURTHER THAT Council allocates up to \$3000 annually for the maintenance and display of Engine 2.

(2) Planning

63-65

(a) **Registry of Section 57 *Community Charter* Notice against Land Title - 345 Burnham Road** **Staff Recommendation:**

THAT Council directs the Corporate Administrator to register a notice in the Land Title Office, under Section 57 of the Community Charter, stating that a resolution relating to 345 Burnham Rd - LOT 1, DL 63, LD 35, PLAN EPP61122, PID 029-902-762, has been made;

AND FURTHER THAT the matter be referred to a solicitor for further action to correct and/or remove all non-compliant uses and alterations to the structure.

66-74

(b) **Development Variance Permit: 864 Royal Dornoch Drive** **Staff Recommendation:**

THAT Council directs staff to fulfill statutory notification requirements so that Council can consider issuance of a Development Variance Permit for 864 Royal Dornoch Drive at the Council Meeting on February 8, 2023.

75-98

(c) **Agricultural Land Reserve Exclusion Application: 230/250/270 Rupert Road East** **Staff Recommendation:**

THAT the exclusion application for 230/250/270 Rupert Road be forwarded to the Agriculture Land Commission for consideration, as detailed in the August 10, 2022 Planning memo to Council.

99-165

(d) **Community Climate Change Adaptation Plan (CCCAP) Update** **Staff Recommendation:**

THAT Council adopts the Community Climate Change Adaptation Plan, as attached to the January 18, 2023 Planning report to Council.

- 166-167 (e) **Grant Application Resolution for Crescent Road East Culvert Rehabilitation**
 Staff Recommendation:
 THAT Council directs staff to submit an application for grant funding application for Crescent Road East Culvert Rehabilitation through the Investing in Canada Infrastructure Program – Green Infrastructure program;
 AND FURTHER THAT Council supports the project and commits to its share (\$500,062) of the project, as well as cost overruns.
- (f) **College Heights – Verbal Update**
- 168-195 (3) **Engineering & Operations**
 (a) **BC Hydro Lease Lights – Request for Direction on Next Steps**
 Staff Comment:
 Staff have identified several options for next steps with the LED streetlight conversion project and request direction from Council.
- 196-198 (b) **Waterfront Expansion Phase 1 Ditch Infill Parking – Tender Award**
 Staff Recommendation:
 THAT the Town of Qualicum Beach awards the Waterfront Expansion Phase 1 Ditch Infill Parking Contracts 1, 2 and 3 to Edgett Excavating Ltd. in the amount of \$636,107.85.

10. Review of Comments from the Public

Comments for this regular Council meeting must be received no later than 12:00 pm two days following the meeting (January 20, 2023). Submissions must be regarding business discussed by Council at the meeting, be 300 words or fewer, and any submissions relating to closed public hearing topics, or unrelated to Council business discussed at the meeting, will not be distributed to Council. Submissions that meet these guidelines will be distributed to all Council, posted on the Town's website, and a brief summary of the comments will be included in the meeting minutes. Comments must include a full name and address in order to be submitted for the record.

To submit a comment please use one of the following options:

- Mail: Box 130, Qualicum Beach, BC V9K 1S7
- Phone: 250-752-6921
- Email: communications@qualicumbeach.com

11. MOTION TO CLOSE

THAT the meeting be closed to the public for the purpose of considering:

- (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality;
- (b) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;
- (c) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose;
- (d) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public.

12. ADJOURNMENT

THAT Council adjourns the meeting.

NEXT SCHEDULED

REGULAR COUNCIL MEETING: Wednesday, February 8, 2023 at 10:00 am

THE TOWN OF
QUALICUM BEACH



COUNCIL CORRESPONDENCE LOG
January 18, 2023

DATE REC'D	TOPIC	ACTION
Jan 9	BCSPCA Newsletter	Rec'd for Information
Jan 9	Telus Cell Tower Proposal at French Creek	Rec'd for Information
Jan 6	Vancouver Island North Film Commission – 2021 and 2022 Update	Rec'd for Information
Jan 6	365 First Avenue Public Input Process Query	Rec'd for Information
Jan 6	365 First Avenue & 230 Rupert Road – Tree Removal Concerns	Rec'd for Information
Jan 4	Scooter Pilot Project	Rec'd for Information
Jan 4	Qualicum Beach Streetlight Group - LED Streetlight Concerns	Rec'd for Information
Dec 30	Strategic Plan Input	Rec'd for Information
Dec 28	Inclusive Meeting Times	Rec'd for Information
Dec 28	Tax Exemptions for Churches – Opposed	Rec'd for Information
Dec 28	3022 Island Hwy Development - Opposed	Rec'd for Information
Dec 28	ALC Chair - Congratulations to Council on their Election	Rec'd for Information
Dec 22	Dog Off Lease Area Concerns	Rec'd for Information
Dec 22	Temporary Bylaw for Tree Protection	Rec'd for Information
Dec 14	Comments from December 7 Council Meeting	Rec'd for Information
Dec 12	Warming Shelter Concerns	Rec'd for Information
Dec 12	Lack of Cold Weather Shelters	Rec'd for Information
Dec 12	Check News on Homelessness	Rec'd for Information
Dec 12	Strategic Plan Input	Rec'd for Information
Dec 12	LED Streetlight Complaint	Rec'd for Information
Dec 12	Seniors Centre - Appreciation for Town Support at 25th Anniversary	Rec'd for Information
Dec 12	Proposal to Decrease Housing Parking	Rec'd for Information
Dec 12	Comments from Committee of the Whole November 30 Meeting	Rec'd for Information
Dec 12	Climate Change Thinking	Rec'd for Information
Dec 12	Zoning Bylaws and Climate Change	Rec'd for Information
Dec 8	365 First Ave - Opposed	Rec'd for Information
Dec 7	Second Avenue Development - Opposed	Rec'd for Information
Dec 7	Sidewalks and Curb Concerns	Rec'd for Information
Dec 7	Homelessness Shelter Problem	Rec'd for Information
Dec 7	Ravensong Pool Taxation Concerns	Rec'd for Information

Dec 7	LED Streetlight Complaint	Rec'd for Information
Dec 7	Hon Mobina S.B Jaffer - Congratulations re Mayor's Election	Rec'd for Information
Dec 7	Skateboard Park Rejuvenation Concerns	Rec'd for Information
Dec 6	Doctor Crisis	Rec'd for Information
Dec 5	Shen Yun - Introduction to New Council	Rec'd for Information
Dec 1	Shaw - Introduction to New Council	Rec'd for Information

Note: Copies of the correspondence listed on the Council Correspondence Log are available to review in the binder at the Municipal Offices information counter, #201 – 660 Primrose Street, Qualicum Beach, BC. The Correspondence Log contains letters not already on a regular agenda, and does not contain form letters/solicitations and letters that are not routinely releasable.

Town of Qualicum Beach
M E M O R A N D U M

To: Lou Varela, CAO

For: Regular Meeting January 18, 2023

From: Genelle Conn, Interim Acting Director of Finance

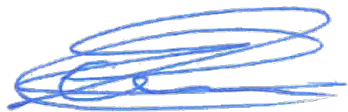
RE: Finance Monthly Report

RECOMMENDATION

For Council to receive for information.

REPORT ANALYSIS

Attached is the Financial Plan Report listing revenues and expenditures to November 30, 2022 with a comparison to November 30, 2021. Revenue and expenditures are within budget expectations at this point in the year. A listing of capital expenditures to November 30, 2022 has also been included.



Genelle Conn, CPA, CA
Interim Acting Director of Finance
Report Writer



Lou Varela, MCIP, RPP
CAO
Concurrence

TOWN OF QUALICUM BEACH
FINANCIAL PLAN REPORT - November 30, 2022

	Budget 22 (not finalized)	YTD to Nov 30/22 (compared to 2022 budget)		Budget 21	YTD to Nov 30/21 (compared to 2021 budget)	
REVENUES:						
PROPERTY VALUE TAXES						
Municipal Property Taxation						
Municipal Taxation	10,431,000	10,430,681	100.0%	9,794,000	9,796,630	100.0%
Total Municipal Property Taxation	10,431,000	10,430,681	100.0%	9,794,000	9,796,630	100.0%
Other Gov't Taxes (this section nets to nil)						
V.I. Regional Library	562,000	561,947	100.0%	539,000	539,392	100.1%
Sewer Tax Rate Levy	1,978,000	1,980,433	100.1%	1,740,000	1,745,081	100.3%
Other - Regional District	2,849,000	2,848,858	100.0%	2,544,000	2,544,240	100.0%
School District #69	5,825,000	5,828,961	100.1%	5,296,000	5,298,479	100.0%
Regional Hospital District	1,438,000	1,434,812	99.8%	721,000	721,447	100.1%
B C Assessment Authority	167,000	166,735	99.8%	144,500	144,638	100.1%
Municipal Finance Authority	1,000	922	92.2%	500	682	136.4%
Sub Total Other Gov't Taxes Collected	12,820,000	12,822,668	100.0%	10,985,000	10,993,960	100.1%
Less Taxes Paid To Other Gov'ts	-12,820,000	-12,427,210	96.9%	-10,985,000	-10,775,660	98.1%
Less Accounts Payable Other Gov'ts	0	-395,458		0	-218,299	
Total Net Other Gov't Taxes	0	0		0	0	
Grants In Lieu Of Taxes & 1% Utility Tax						
Grants For 1% Utility Taxes	147,000	144,921	98.6%	151,000	146,206	96.8%
Grants in Lieu of Property Taxes	306,000	353,446	115.5%	280,000	326,873	116.7%
Total Grants In Lieu Of Taxes	453,000	498,367	110.0%	431,000	473,079	109.8%
PARCEL TAXES - WATER & SEWER						
Parcel Tax - Water	919,000	933,000	101.5%	826,000	838,260	101.5%
Parcel Tax - Sewer	211,000	213,615	101.2%	187,000	189,560	101.4%
TOTAL PARCEL TAXES	1,130,000	1,146,615	101.5%	1,013,000	1,027,820	101.5%
TOTAL PROPERTY VALUE TAXES	12,014,000	12,075,662	100.5%	11,238,000	11,297,530	100.5%
FEES AND CHARGES						
Public Works Services	24,000	19,490	81.2%	34,000	18,662	54.9%
Cemetery Services	48,000	57,530	119.9%	47,000	57,945	123.3%
Waste Removal Fees	702,000	546,892	77.9%	750,000	537,397	71.7%
Water Connections	10,000	34,420	344.2%	10,000	32,593	325.9%
Water Rates	1,580,000	1,372,206	86.8%	1,299,000	1,348,923	103.8%
Sewer Connections	10,000	13,500	135.0%	10,000	18,000	180.0%
Sewer Rates	697,000	539,011	77.3%	648,000	498,508	76.9%
TOTAL FEES AND CHARGES	3,071,000	2,583,049	84.1%	2,798,000	2,512,028	89.8%

TOWN OF QUALICUM BEACH
FINANCIAL PLAN REPORT - November 30, 2022

	Budget 22 (not finalized)	YTD to Nov 30/22 (compared to 2022 budget)		Budget 21	YTD to Nov 30/21 (compared to 2021 budget)	
OWN SOURCES						
Licences	95,000	99,425	104.7%	85,000	97,131	114.3%
Permits	139,000	178,351	128.3%	105,000	219,703	209.2%
Leases and Rentals	560,000	451,600	80.6%	500,000	555,404	111.1%
Interest on Investments	58,000	416,711	718.5%	54,000	99,095	183.5%
Interest and Penalty on Taxes	49,000	53,508	109.2%	52,000	42,705	82.1%
Airport Services	127,000	115,101	90.6%	80,000	96,680	120.8%
Community Hall	22,000	25,333	115.2%	16,000	11,722	73.3%
Civic Centre	114,000	128,363	112.6%	70,000	79,994	114.3%
Contributions and Sales	48,000	168,338	350.7%	240,000	132,735	55.3%
Affordable Housing Contribution	0	0	0.0%	0	450,000	0.0%
Miscellaneous Revenues	54,000	125,454	232.3%	62,000	124,340	200.5%
TOTAL OWN SOURCES	1,266,000	1,762,182	139.2%	1,264,000	1,909,509	151.1%
GOVERNMENT GRANTS						
Revenue Sharing	467,000	563,711	120.7%	467,000	450,974	96.6%
Other Government Grants	4,713,000	3,023,719	64.2%	3,144,000	12,517	0.4%
RDN Fire and Other Services	503,000	592,839	117.9%	286,000	300,001	104.9%
Gas Tax Grants	451,000	225,739	50.1%	451,000	883,211	195.8%
TOTAL GOVERNMENT GRANTS	6,134,000	4,406,009	71.8%	4,348,000	1,646,703	37.9%
GRAND TOTAL REVENUES	22,485,000	20,826,902	92.6%	19,648,000	17,365,770	88.4%
EXPENDITURES:						
DEBT CHARGES						
Miscellaneous Interest	26,000	6,443	24.8%	26,000	8,291	31.9%
Debt Interest	61,000	39,060	64.0%	60,000	49,476	82.5%
Debt Principal	614,000	462,936	75.4%	463,000	462,936	100.0%
TOTAL DEBT CHARGES	701,000	508,439	72.5%	549,000	520,704	94.8%
CAPITAL EXPENDITURES						
General Capital	12,456,000	5,923,769	47.6%	11,363,000	5,853,586	51.5%
Water Capital	841,000	318,579	37.9%	785,000	169,085	21.5%
Sewer Capital	60,000	38,778	64.6%	375,000	9,604	2.6%
TOTAL CAPITAL EXPENDITURES	13,357,000	6,281,126	47.0%	12,523,000	6,032,275	48.2%
OTHER MUNICIPAL PURPOSES						
General Government						
Legislative Services	264,000	216,380	82.0%	258,000	160,490	62.2%
Grants in Aid & Tax Exemptions	255,000	233,269	91.5%	252,000	195,789	77.7%
Administrative	589,000	483,221	82.0%	567,000	514,639	90.8%
Finance	409,000	345,897	84.6%	390,000	351,587	90.2%
Information Technology	444,000	431,172	97.1%	599,000	428,114	71.5%
Common Services	701,000	491,039	70.0%	621,000	573,568	92.4%
Total General Government	2,662,000	2,200,978	82.7%	2,687,000	2,224,187	82.8%

TOWN OF QUALICUM BEACH
FINANCIAL PLAN REPORT - November 30, 2022

	Budget 22 (not finalized)	YTD to Nov 30/22 (compared to 2022 budget)		Budget 21	YTD to Nov 30/21 (compared to 2021 budget)	
Protective Services						
RCMP Police Protection	1,469,000	1,289,200	87.8%	1,474,000	1,316,797	89.3%
Bylaw Compliance	129,000	109,637	85.0%	124,000	107,240	86.5%
Emergency Services	312,000	161,240	51.7%	203,000	146,094	72.0%
Building Inspection	127,000	111,628	87.9%	123,000	114,304	92.9%
Security/Vandalism	50,000	20,171	40.3%	48,000	24,645	51.3%
Fire Department Services	1,200,000	1,106,674	92.2%	1,161,000	978,681	84.3%
Total Protective Services	3,287,000	2,798,550	85.1%	3,133,000	2,687,761	85.8%
Transportation Services						
P/W Administration	670,000	543,664	81.1%	645,000	512,409	79.4%
P/W Yard	140,000	138,284	98.8%	136,000	168,057	123.6%
Roadway Surfaces	263,000	194,823	74.1%	256,000	246,584	96.3%
Road Allowances	114,000	97,150	85.2%	111,000	75,730	68.2%
Sidewalk Maintenance	57,000	82,238	144.3%	55,000	39,171	71.2%
Drainage Ditches	60,000	102,438	170.7%	57,000	90,955	159.6%
Storm Sewers	172,000	67,429	39.2%	169,000	101,685	60.2%
Street Cleaning	55,000	39,298	71.5%	50,000	24,764	49.5%
Snow and Ice Removal	125,000	40,641	32.5%	120,000	38,309	31.9%
Signs and other	47,000	33,692	71.7%	46,000	28,153	61.2%
Other Road Transport	33,000	24,036	72.8%	32,000	30,992	96.9%
Street Lighting	204,000	188,743	92.5%	198,000	179,023	90.4%
Airport Services	216,000	125,643	58.2%	210,000	160,729	76.5%
Equipment Operating	632,000	473,514	74.9%	610,000	436,220	71.5%
Total Transportation Services	2,788,000	2,151,593	77.2%	2,695,000	2,132,781	79.1%
Environmental And Public Health						
Town Garbage Pickup Services	85,000	101,637	119.6%	83,000	94,330	113.7%
Other Solid Waste	106,000	83,475	78.8%	105,000	95,226	90.7%
RDN Food Waste, Recycling & Garbage	717,000	623,485	87.0%	764,000	628,434	82.3%
Water Maintenance	1,198,000	1,005,999	84.0%	1,152,000	991,986	86.1%
Sewer Maintenance	295,000	267,279	90.6%	284,000	236,895	83.4%
Total Environmental Services	2,401,000	2,081,875	86.7%	2,388,000	2,046,871	85.7%
Community Development						
Planning and Zoning	421,000	286,788	68.1%	394,000	319,053	81.0%
Community Dev - Town Functions	410,000	197,715	48.2%	390,000	374,179	95.9%
Community Dev - Restart Initiatives	200,000	72,624	36.3%	150,000	121,712	0.0%
Community Dev - Partnerships and Other	348,000	277,520	79.7%	137,000	63,676	0.0%
Community Dev - Special Events	108,000	128,258	118.8%	105,000	43,051	41.0%
Community Dev - Museum	113,000	109,326	96.7%	110,000	102,730	93.4%
Community Dev - Chamber & D/T	83,000	75,500	91.0%	81,000	65,500	80.9%
Total Community Development	1,683,000	1,147,731	68.2%	1,367,000	1,089,901	79.7%

**TOWN OF QUALICUM BEACH
FINANCIAL PLAN REPORT - November 30, 2022**

	Budget 22 (not finalized)	YTD to Nov 30/22 (compared to 2022 budget)		Budget 21	YTD to Nov 30/21 (compared to 2021 budget)	
Parks And Recreation						
Administration & Supervision	327,000	305,666	93.5%	330,000	313,723	95.1%
Parks Yard	54,000	66,065	122.3%	52,000	62,147	119.5%
Civic Centre & Community Hall	414,000	254,355	61.4%	402,000	267,469	66.5%
Parks/Cultural Buildings	107,000	77,982	72.9%	104,000	91,145	87.6%
Community Park	179,000	156,164	87.2%	173,000	159,392	92.1%
Garden/Park Areas	527,000	357,486	67.8%	506,000	445,967	88.1%
Trails	107,000	57,752	54.0%	103,000	56,558	54.9%
Beach Areas	194,000	103,992	53.6%	154,000	164,139	106.6%
Other Park Functions	106,000	77,326	72.9%	73,000	74,094	101.5%
Public Health (Cemetery)	56,000	51,782	92.5%	55,000	47,987	87.2%
Total Parks And Recreation	2,071,000	1,508,570	72.8%	1,952,000	1,682,621	86.2%
Sub Total General Municipal Purposes	13,399,000	10,616,019	79.2%	12,786,000	10,635,241	83.2%
Sub Total Water Municipal Purposes	1,198,000	1,005,999	84.0%	1,152,000	991,986	86.1%
Sub Total Sewer Municipal Purposes	295,000	267,279	90.6%	284,000	236,895	83.4%
TOTAL OTHER MUNICIPAL PURPOSES	14,892,000	11,889,297	79.8%	14,222,000	11,864,122	83.4%
GRAND TOTAL EXPENDITURES	28,950,000	18,678,862	64.5%	27,294,000	18,417,101	67.5%
TOTAL NET EXPENDITURES	-6,465,000	2,148,040		-7,646,000	-1,051,331	
NON OPERATING ITEMS AND TRANSFERS						
Other Non Operating Items						
Proceeds from Borrowing	2,245,000	0	0.0%	2,920,000	0	0.0%
Proceeds from Sale Of Assets	4,000,000	4,372,488	109.3%	2,517,000	917,009	36.4%
Total Other Non Operating Items	6,245,000	4,372,488	70.0%	5,437,000	917,009	16.9%
Other Non Operating Transfers						
Transfer from Reserve - General	601,000	0	0.0%	1,675,000	0	0.0%
Transfer from Reserve - Covid 19	526,000	0	0.0%	0	0	0.0%
Transfer from Reserve - Water	650,000	0	0.0%	480,000	0	0.0%
Transfer from Reserve - Sewer	0	0	0.0%	118,000	0	0.0%
Transfer from DCC's	400,000	0	0.0%	0	0	0.0%
Transfer to Reserve - Funds	-14,000	0	0.0%	-14,000	-8,415	0.0%
Transfer to Reserve - General	-1,800,000	-78,908	0.0%	0	0	0.0%
Transfer to Reserve - Sewer	-93,000	0	0.0%	0	0	0.0%
Transfer to Reserve - Water	-50,000	0	0.0%	-50,000	0	0.0%
Total Other Non Operating Transfers	220,000	-78,908	-35.9%	2,209,000	-8,415	-0.4%
TOTAL ITEMS & TRANSFERS	6,465,000	4,293,580	66.4%	7,646,000	908,594	11.9%
FINANCIAL PLAN BALANCE	0	6,441,620		0	-142,737	

**Town of Qualicum Beach
Capital Projects - November 30, 2022**

	<u>Budget 22</u>	<u>Actual</u>
Building Projects		
Childcare Facility (grant funded)	1,843,000	2,153,573
Curling Club Improvements	14,500	16,068
Fire Hall Improvements (AC Unit)	140,000	136,272
Town Hall Improvements	25,000	19,636
Golf Club Works Yard (paid back through lease)	650,000	577,749
QB Public Works Yard (Roof Replacement)	0	25,000
QB Public Works Yard	100,000	15,619
Total	2,772,500	2,943,916
Roads and Drainage Projects		
Paving Program	120,000	0
Misc. Age-Friendly Trans Plan Improvements	250,000	188,851
Misc. Drainage System Improvements	189,000	0
Bay Street	150,000	129,324
West Crescent (Grandon Creek)	300,000	0
East Crescent (Beach Creek)	200,000	9,384
Eaglecrest Dr Drainage	450,000	0
East Village (Phs 2 portion through Local Area Service)	1,825,000	548,121
Memorial Improvements	530,000	417,833
Total	4,014,000	1,293,514
Other Projects		
Equipment Replacement	360,000	82,273
Fire Department Equipment Replacement	920,000	491,721
Miscellaneous projects	121,000	19,494
Bus Garage Site (parking & other)	500,000	10,212
Servicing Town Property (Dorset and Claymore)	175,000	86,944
Airport Projects (grant funded)	1,114,000	837,481
Grandon Creek Stairs	49,500	1,410
Rodway Trail	150,000	101,311
Waterfront Improvements (parking area grant funded)	600,000	55,494
Beach Path and Viewing Platform (grant dependent)	1,680,000	0
Total	5,669,500	1,686,340
Sub Total General Fund Capital	12,456,000	5,923,770
Water and Sewer Capital		
Hemsworth Pump Station	46,000	55,053
Eaglecrest Watermain	450,000	0
Water Looping Project	0	14,490
Misc. Water System Improvements	110,000	27,242
Sandpiper Water	235,000	221,794
Miscellaneous Sewer Improvements	60,000	38,778
Total	901,000	357,357
Total Capital Projects	<u>13,357,000</u>	<u>6,281,126</u>



**Town of Qualicum Beach
FIRE RESCUE DEPARTMENT**

M E M O R A N D U M

TO: Lou Varela, CAO

FOR: Regular Council meeting December 7, 2022

FROM: Peter Cornell, Fire Chief

SUBJECT: Monthly Fire Department Report for November 2022

PURPOSE

To provide Council with an update regarding Fire Rescue Department activities.

CALLS FOR SERVICE

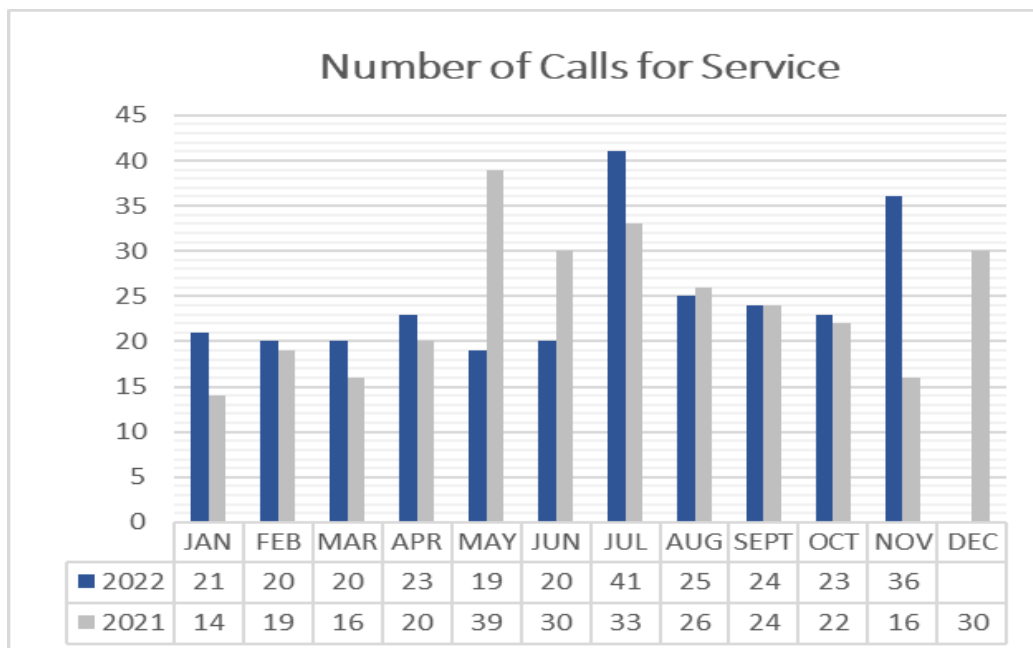
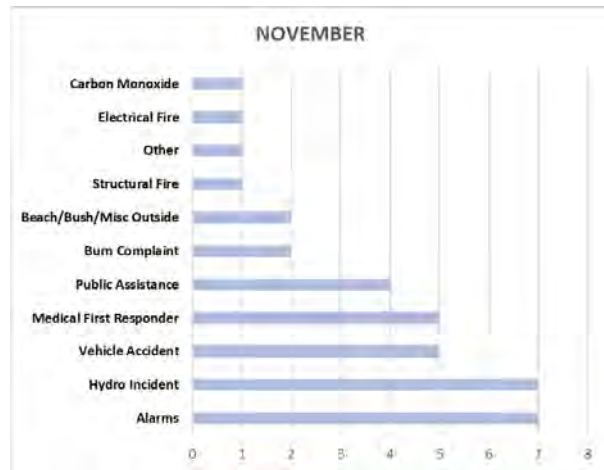
Summary for November 2022:

Calls for Service in November = **36**

Duty Officer Only: **9** Automatic Aid: **0** out; **0** in

Mutual Aid: **2** out; **0** in

- Incident Hours: 77 hours, 30 minutes
- Average # of Personnel responding: 10.26
(Full Time: 2.04 | On-Call: 8.22)
- Incident Staff Hours: 238 hours, 7 minutes
- Average Response Time All: 8:28 minutes
- Average Muster Time E52: 7:15 minutes
- Average Response Time E52: 11:39 minutes



OPERATIONS/ADMINISTRATION

- The District 69 Fire Department's Boots for Food Event on November 19th & 20th was a huge success. Fire Fighters from the area's Fire Departments were out in the district collecting cash and food donations to support the Salvation Army Food Bank.
- November was a recruiting milestone with 12 new members joining the department, this is one of the largest recruit classes in over 25 years.
- With the Wildfire season behind us, the forestry hose and equipment was tested and placed in storage until next season.

TRAINING

2022	<i>Sessions</i>	<i>Subjects</i>	<i>Session Hours</i>	<i>Instructor Hours</i>	<i>Staff Hours</i>
<i>Weekly:</i>	13	7	26	46	256
<i>Additional:</i>	5	5	23.5	7.5	81
<i>Month Total:</i>	18	12	49.5	53.5	337
Annual Total:	198	159	873.5	613.5	4527

Training highlights:

- Training subjects covered in November included CPR refresher, station orientation, personal protective equipment, high-angle rescue and a whole department scenario night.

FIRE PREVENTION

- Crews were out on November 26th at Moonlight Madness handing out candy canes and answering fire and life safety inquiries.
- Recruitment has started for the 2023 Youth Fire Camp with members in both High Schools answering questions and accepting applications.

21 Inspections; 384 YTD | 1 Public Education Events | 1 Development Plan Review | 0 New Pre-Incident Plans | 0 Pre-Incident Plan Updates | 6 Public Outreach | 0 Garden Refuse Fire Permits

Career Staff Members: 4
Paid On-call Members: 32 (excludes non-operational and Career staff)
Change from previous month: +12

<i>REGULAR DUTY</i>		<i>NON-OPERATIONAL</i>	
Officer	3	Special Duty (Assistant FFs)	2
Full-Service	15		
Interior	4		
Exterior	0		
Recruits	10		


Peter Cornell Fire Chief
Report Writer


Lou Varela, CAO
Concurrence



**Town of Qualicum Beach
FIRE RESCUE DEPARTMENT**

M E M O R A N D U M

TO: Lou Varela, CAO

FOR: Regular Council meeting January 18, 2023

FROM: Peter Cornell, Fire Chief

SUBJECT: Monthly Fire Department Report for December 2022

PURPOSE

To provide Council with an update regarding Fire Rescue Department activities.

CALLS FOR SERVICE

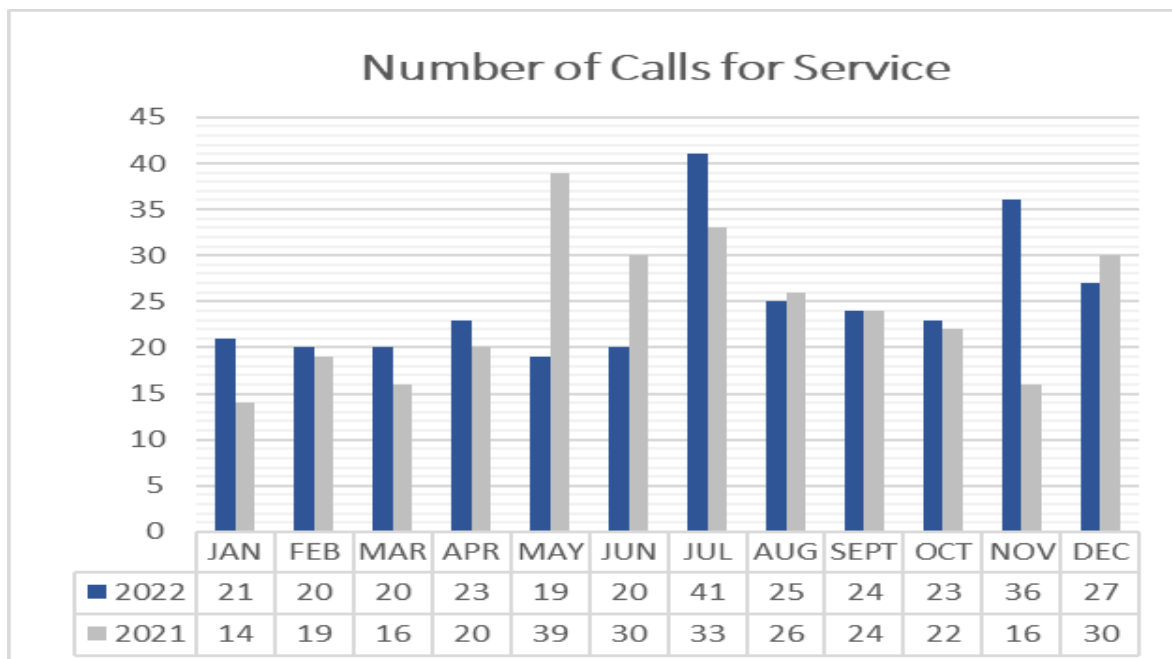
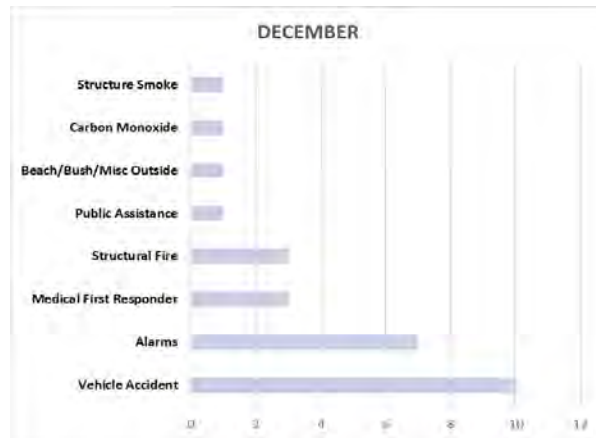
Summary for December 2022:

Calls for Service in December = **27**

Duty Officer Only: **1** Automatic Aid: **3** out; **0** in

Mutual Aid: **1** out; **0** in

- Incident Hours: 23 hours, 46 minutes
- Average # of Personnel responding: 8.77
(Full Time: 2.08 | On-Call: 6.69)
- Incident Staff Hours: 177 hours, 23 minutes
- Average Response Time All: 7:20 minutes
- Average Muster Time E52: 7:15 minutes
- Average Response Time E52: 9:17 minutes



OPERATIONS/ADMINISTRATION

- The annual awards dinner took place on December 17. Firefighter Marshall received the Nick Koelewyn Service award, Lieutenant Ducharme received both the Officer of the Year and Bob Smart Attendance award. Thanks to the generous donations of the local businesses, the Big Red Sleigh Fundraiser that took place during the event, raised \$2500 for local families.

TRAINING

2022	<i>Sessions</i>	<i>Subjects</i>	<i>Session Hours</i>	<i>Instructor Hours</i>	<i>Staff Hours</i>
<i>Weekly:</i>	10	10	20	22	263
<i>Additional:</i>	5	5	7	2	30
<i>Month Total:</i>	15	15	27	24	293
Annual Total:	215	174	901	638	4820

Training highlights:

- Training subjects covered in December included natural gas safety, hydro safety, WHMIS, chimney fires, aerial attack, and PPE and SCBA orientation.

FIRE PREVENTION

- Recruitment continued for the 2023 Youth Fire Camp, with members visiting both High Schools to answer questions and accept applications.

52 Inspections; 436 YTD | 0 Public Education Events | 1 Development Plan Review | 0 New Pre-Incident Plans | 0 Pre-Incident Plan Updates | 0 Public Outreach | 0 Garden Refuse Fire Permits

Career Staff Members: 4
Paid On-call Members: 32 (excludes non-operational and Career staff)
Change from previous month: 0

<i>REGULAR DUTY</i>		<i>NON-OPERATIONAL</i>	
Officer	3	Special Duty (Assistant FFs)	2
Full-Service	15		
Interior	4		
Exterior	0		
Recruits	10		


Peter Cornell, Fire Chief
Report Writer


Lou Varela, CAO
Concurrence



TOWN OF QUALICUM BEACH 2022 Construction and Building Permit Report

R E S I D E N T I A L																	
No.	Permit #	Roll #	Civic	Street	Scope of Work	Contractor	# of Units SFD	# of Units Sec/Gar Suites	# of Units Multi	Additions and/or Renos	SFD (new)	Multi (new)	Commercial	Institutional	Industrial	Recreational	Totals
	Year to Date as at October 31, 2022						21	9	0	\$4,303,000	\$16,088,000	\$0	\$1,685,000	\$3,500,000	\$475,000	\$0	\$26,051,000
NOVEMBER																	
91	5918	928.600	781	Hemsworth Rd	Single Family Dwelling	Ballard Fine Homes	1				\$775,000						
92	5924	10039.330	1203	Pintail Dr	Garden Suite	Todsen Design & Cons		1		\$350,000							
93	5925	385.015	136	Village Way	Multi-family	Saywell Contracting			56			\$13,000,000					
94	5926	963.028	600	Tamarack Dr	Accessory Bldg	(self)				\$10,000							
95	5927	819.000	234	Fern Rd W	Demolition												
96	5928	929.000	384	Mant Rd	Accessory Bldg	C Large Construction				\$15,000							
97	5930	952.100	485	Timberlane Pl	Demolition (garage)												
98	5932	594.002	2712	Island Hwy W	Oil/Sediment Separator	Dean & Associates							\$30,000				
99	5934	1019.000	2767	Island Hwy W	Seawall Reinforcement	(self)							\$100,000				
100	5935	952.100	485	Timberlane Pl	Move Accessory Bldg												
	Year to Date as at November 30, 2022						1	1	56	\$375,000	\$775,000	\$13,000,000	\$130,000	\$0	\$0	\$0	\$14,280,000
	Year to Date as at November 30, 2022						22	10	56	\$4,678,000	\$16,863,000	\$13,000,000	\$1,815,000	\$3,500,000	\$475,000	\$0	\$40,331,000



TOWN OF QUALICUM BEACH **2022 Construction and Building Permit Report**

R E S I D E N T I A L																	
No.	Permit #	Roll #	Civic	Street	Scope of Work	Contractor	# of Units SFD	# of Units Sec/Gar Suites	# of Units Multi	Additions and/or Renos	SFD (new)	Multi (new)	Commercial	Institutional	Industrial	Recreational	Totals
Year to Date as at November 30, 2022							22	10	56	\$4,678,000	\$16,863,000	\$13,000,000	\$1,815,000	\$3,500,000	\$475,000	\$0	\$40,331,000
DECEMBER																	
101	5915	706.001	660	Beach Rd	Multi-family/Commercial	Saywell Contracting			15			\$4,500,000	\$500,000				
102	5917	912.794	650	Berwick Rd N	Renovation	(self)								\$47,000			
103	5922	92.000	555	Crescent Rd W	Single Family Dwelling	Dogwood Mtn Homes	1				\$800,000						
104	5923	92.000	555	Crescent Rd W	Accessory Bldg	Dogwood Mtn Homes		1		\$10,000							
105	5929	897.503	817	Primrose St	Addition	Richardson Homes				\$300,000							
106	5931	952.100	485	Timberlane Pl	Single Family Dwelling	Dombrowski Homes	1				\$600,000						
107	5933	181.000	375	Poplar Ave	Renovation	JDI Homes Ltd				\$100,000							
108	5937	819.000	234	Fern Rd W	Single Family Dwelling	Trafalgar Homes	1				\$325,000						
109	5938	660.422	780	Canyon Cres Rd	Renovation	(self)				\$154,000							
							3	1	15	\$564,000	\$1,725,000	\$4,500,000	\$500,000	\$47,000	\$0	\$0	\$7,336,000
December 31, 2022							25	11	71	\$5,242,000	\$18,588,000	\$17,500,000	\$2,315,000	\$3,547,000	\$475,000	\$0	\$47,667,000

**Minutes of the 10:00 am Wednesday, November 30, 2022, Town of Qualicum Beach
Committee of the Whole Meeting held in the Council Chamber, Municipal Office,
660 Primrose Street, Qualicum Beach, BC**

PRESENT: Council: Mayor Teunis Westbroek
Councillor Anne Skipsey
Councillor Petronella Vander Valk
Councillor Jean Young

ABSENT: Councillor Scott Harrison

ALSO PRESENT: Staff: Lou Varela, Chief Administrative Officer (CAO)
Heather Svensen, Corporate Administrator
Luke Sales, Director of Planning
Bob Weir, P.Eng, Director of Engineering
Weslie Gould, Deputy Corporate Administrator

The Mayor called the meeting to order at 10:00 am acknowledging that the meeting is being held on the traditional lands of the Coast Salish people, specifically the Qualicum First Nation.

ADOPTION OF THE AGENDA

Councillor Skipsey MOVED and Councillor Young SECONDED, THAT the Committee adopts the November 30, 2022 Committee of the Whole meeting agenda.

CARRIED UNANIMOUSLY

APPROVAL OF THE MINUTES

Councillor Vander Valk MOVED and Councillor Young SECONDED, THAT the Committee approves the March 9, 2022 Committee of the Whole meeting minutes.

CARRIED UNANIMOUSLY

DELEGATIONS

(1) **Qualicum Beach Skate Park** – Lindsay Reed, Josh Reed, Gauri Chopra

The delegation appeared before the Committee to present on the Qualicum Beach Skateboard Park, summarized as follows:

- Rejuvenation or replacement of the existing skate park and it's fit with the goals and visions within the Town's Official Community Plan;
- History of the existing park;
- Benefits of skate parks;
- Examples of neighbouring community skate parks;
- Concerns and misconceptions about skate parks;
- Issues and safety concerns with the existing Qualicum Beach skate park;
- Community feedback, highlighting a survey conducted by the delegation with 251 respondents;
- Location, design, funding, and timeline considerations;
- Partnership, engagement, consultation, and collaboration with stakeholders, developers, and government;

- Request for Council to include a new and upgraded skate park in their strategic plan and budget, to establish an advisory board with stakeholders to guide the project, and to develop a skateboard amenities strategy.

In response to a question from the Committee regarding next steps, Luke Sales, Director of Planning, commented that, should Council wish to advance the project, a feasibility study would be the first step, followed by development of project scope, determining budget and grant opportunities, involving stakeholders, and designing and building the skate park.

Lou Varela, CAO, commented that the existing park was assessed by the Municipal Insurance Association of BC in September of this year and the park was assessed as 'low risk' from an insurance perspective, noting that 'low risk' does not consider useability.

STAFF REPORTS

(1) **PLANNING** (Luke Sales, Director of Planning)

(a) **Skate Park Backgrounder**

Councillor Skipsey MOVED and Councillor Vander Valk SECONDED, THAT the Committee of the Whole recommends to Council, THAT renewal or replacement of the skate park be considered in the 2022-2026 Council Strategic Plan and five-year Financial Plan.

CARRIED UNANIMOUSLY

ADJOURNMENT

Councillor Skipsey MOVED and Councillor Vander Valk SECONDED, THAT the Committee of the Whole adjourns the meeting.

CARRIED

MEETING ADJOURNED: 11:06 am

Certified Correct:

Heather Svensen
Corporate Administrator

Teunis Westbroek
Mayor

Minutes of the 3:00 pm Friday, December 2, 2022, Town of Qualicum Beach Special Council Meeting held in the Council Chamber, Municipal Office, 660 Primrose Street, Qualicum Beach, BC

PRESENT: Council: Mayor Teunis Westbroek
Councillor Scott Harrison
Councillor Anne Skipsey
Councillor Petronella Vander Valk
Councillor Jean Young

ALSO PRESENT: Staff: Lou Varela, CAO
Luke Sales, Director of Planning

The Mayor called the meeting to order at 3:00 pm acknowledging that the meeting is being held on the traditional lands of the Coast Salish people.

ADOPTION OF THE AGENDA

Council adopted, by unanimous consent, the December 2, 2022 Special Council meeting agenda.

MOTION TO CLOSE

Councillor Harrison MOVED and Councillor Young SECONDED, THAT the meeting be closed to the public for the purposes of considering the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

CARRIED

MEETING CLOSED TO THE PUBLIC AT 3:00 pm

MEETING REOPENED TO THE PUBLIC AT 3:47 pm

ADJOURNMENT

Councillor Skipsey MOVED and Councillor Harrison SECONDED, THAT Council adjourns the meeting.

CARRIED

MEETING ADJOURNED: 3:47 pm

Certified Correct:

Heather Svensen
Corporate Administrator

Teunis Westbroek
Mayor

Minutes of the 10:00 am Wednesday, December 7, 2022, Town of Qualicum Beach Regular Council Meeting held in the Council Chamber, Municipal Office, 660 Primrose Street, Qualicum Beach, BC

PRESENT: Council: Mayor Teunis Westbroek
Councillor Scott Harrison
Councillor Anne Skipsey
Councillor Petronella Vander Valk
Councillor Jean Young

ALSO PRESENT: Staff: Lou Varela, CAO
Heather Svensen, Corporate Administrator
Bob Weir, Director of Engineering and Operations
Luke Sales, Director of Planning
Genelle Conn, Acting Director of Finance
Weslie Gould, Deputy Corporate Administrator

The Mayor called the meeting to order at 10:00 am acknowledging that the meeting is being held on the traditional lands of the Coast Salish people.

ADOPTION OF THE AGENDA

Councillor Skipsey MOVED and Councillor Young SECONDED, THAT Council adopts the December 7, 2022 Regular Council meeting agenda, as amended to include a Late Item under Staff Reports, Finance, 'Appointment of External Auditor'.

CARRIED UNANIMOUSLY

APPROVAL OF THE MINUTES

Council approved, by unanimous consent, the minutes of the September 21, 2022 and November 23, 2022 regular Council meetings.

CARRIED UNANIMOUSLY

DELEGATIONS

- (1) John Horn, Executive Director for **Connective Nanaimo**, appeared before Council to introduce 'Rent Bank', an initiative from the Vancity Community Foundation, to loan money to individuals experiencing a crisis related to the payment of rent or utility bills.

Connective Nanaimo requested an annual contribution of \$10,000 from the Town of Qualicum Beach to support the Rent Bank initiative, noting that they hope to offer the initiative starting April 1, 2023.

Councillor Harrison MOVED, THAT the Town of Qualicum Beach states a willingness to provide financial assistance to Connective Nanaimo for their 'Rent Bank' initiative, pending review with staff and neighbouring local governments.

Motion did not proceed due to a lack of a Secunder.

Council noted they will consider the request from Connective Nanaimo in collaboration with neighbouring local governments.

STAFF REPORTS

(1) Finance

(a) LATE ITEM - Appointment of External Auditor

Councillor Harrison MOVED and Councillor Skipsey SECONDED, THAT KPMG LLP be appointed as the external auditors for the Town of Qualicum Beach for the fiscal year ending December 31, 2022.

CARRIED UNANIMOUSLY

BYLAWS

(1) Estate Properties Tree Protection Bylaw and Workplan

Councillor Skipsey MOVED and Councillor Harrison SECONDED, THAT Council defers further consideration of "Town of Qualicum Beach Tree Protection Bylaw No. 559, 1995, Amendment (Estate Properties Tree Expansion) Bylaw No 559.03, 2022" until there has been public consultation.

CARRIED UNANIMOUSLY

Councillor Skipsey MOVED and Councillor Harrison SECONDED, THAT Council direct staff to notify the affected property owners to advise them of the Tree Protection Bylaw No. 559, 1995, Amendment (Estate Properties Tree Expansion) Bylaw No. 559.03, and invite them to attend a Town hosted Public Information Meeting to learn more about the proposed Bylaw and its importance.

CARRIED UNANIMOUSLY

COMMITTEE & LIAISON REPORTS

(1) General Government (Mayor Teunis Westbrook)

Mayor Westbrook commented on the following:

- The process for considering Notices of Motion from Council, noting that the Notices listed on today's agenda will be considered at the next regular meeting of Council.
- Receiving positive feedback from the Seniors' Activity Centre.

Notices of Motion (to be considered at the January 18, 2023 regular Council meeting)

- THAT Councillor Jean Young be appointed as Town Liaison to the Oceanside Hospice Society.
- THAT Council directs staff to extend the hours of lighting at the Qualicum Beach Skate Park; AND FURTHER THAT staff be directed to verbally inform Council if extending the hours of light at the Qualicum Beach Skate Park is not possible for any reason.
- THAT Council directs staff to provide a preliminary project scope, including, but not limited to, budget, staff capacity, and insurance implications, to remove the fencing surrounding the Qualicum Beach Skate Park.
- THAT Council directs staff to provide a preliminary project scope, including, but not limited to, budget, staff capacity, and insurance implications, to improve visibility around the Qualicum Beach Skate Park by removing vegetation.

- THAT Council directs staff to provide a preliminary project scope, including, but not limited to, budget, staff capacity, and insurance implications, to install benches and/or picnic tables at the Qualicum Beach Skate Park.

(2) **Public Safety** (Councillor Scott Harrison)

Councillor Harrison commented on the following:

- Attended the 'Housing Central Conference' held by the BC Non-Profit Housing Association in November, and noted that the City of Quesnel has a new program to streamline the process for homeowners to build secondary suites.
- Attended the task force on homelessness meeting.

Mayor Westbroek called a five-minute recess. The meeting recessed at 10:28 am.
The meeting resumed at 10:32 am.

(3) **Parks & Recreation** (Councillor Anne Skipsey)

Councillor Skipsey commented on the following:

- November 25, attended the Red Dress ceremony at Town Hall put on by the Canadian Federation of University Women.
- November 29, attended the Regional District of Nanaimo Solid Waste Committee meeting.
- December 2, attended the Mount Arrowsmith Biosphere Region meeting.
- Requested that the Council meeting schedule be considered during the upcoming Strategic Planning sessions.

Staff were directed to send a letter of appreciation to Reverend Twiddy for his role in the Red Dress ceremony.

(4) **Community Development** (Councillor Petronella Vander Valk)

Councillor Vander Valk commented on the following:

- Attended the Red Dress ceremony at Town Hall.
- Met with the St. Andrews Historical and Culture Society, and discussed the requirements for bringing the lodge building into compliance.

Notice of Motion (to be considered at the January 18, 2023 regular Council meeting)

- THAT Council direct staff to prepare a report summarizing Council decision making to date regarding the St. Andrews Lodge located at Saahtlam Park for matters including, but not necessarily limited to, the requirement for seismic upgrades and the inclusion of onsite washrooms; AND FURTHER, THAT the Mayor respectfully request Chief Recalma's consideration of, and welcomed participation in, design of a plaque recognizing the gifting of the name Saahtlam from the Qualicum First Nation, for the Park formerly recognized as St. Andrews, as per the Council resolution dated September 28, 2022.

(5) **Arts & Culture** (Councillor Jean Young)

Councillor Young commented on the following:

- Attending the Annual General Meeting for the Qualicum Beach Residents' Association, which included a presentation from Mike Garland of the Oceanside Community Safety Volunteers.
- Meeting with The Old School House staff, drawing attention to the importance of the arts in the community.
- Noting that Oceanside Hospice Society is selling holiday lights and decorations as a fundraiser.
- Expressed support for the Rotary Club in Qualicum Beach.

Notices of Motion (to be considered at the January 18, 2023 regular Council meeting)

- THAT representatives from the City of Nanaimo be invited to attend an upcoming meeting of Council to present on their 'Doughnut Economic Model'.
- THAT representatives from Island Good, a non-profit society, be invited to attend an upcoming meeting of Council as a delegation to promote awareness of Shop Local programs, with an emphasis on goods produced on Vancouver Island.
- THAT Council commits to hosting a second Public Open House meeting monthly on the fourth Monday of each month, in addition to the currently scheduled monthly Public Open House on the second Monday of each month.

STAFF REPORTS

(2) **Planning**

(a) **Development Permit: 230 Second Avenue West**

Councillor Harrison MOVED and Councillor Skipsey SECONDED, THAT the Development Permit application for 230 Second Avenue West be referred to the Advisory Planning Commission for comment.

CARRIED UNANIMOUSLY

Councillor Skipsey MOVED and Councillor Harrison SECONDED, THAT a public information meeting be held for the Development Permit application for 230 Second Avenue West after the application is considered by the Advisory Planning Commission and before the application is brought back to Council for further consideration.

CARRIED UNANIMOUSLY

(b) **Community Climate Change Action Plan – Recommendations from the Select Committee on the Environment and Sustainability**

Councillor Skipsey MOVED and Councillor Harrison SECONDED, THAT Council directs staff to present Council with an updated draft of the Community Climate Change Adaptation Plan (CCCAP) to state that the Town will prioritize the climate change adaptation objectives in the following order:

1. Integrate climate change thinking into all planning and decision making.
2. Improve public health, safety and preparedness to climate-related events.
3. Effectively manage and support a healthy urban forest.
4. Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.
5. Continue to prioritize the supply of clean water including: improve coordinated watershed management and planning and increase water conservation practices and policies.
6. Sustainable Development Policies - Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.
7. Continue to manage invasive species throughout the community.

AND FURTHER THAT the following recommendations from the September 21, 2022 memo to the Select Committee on Environment and Sustainability, as attached to the December 7, 2022 Planning memo to Council, be referred to the 2023-2025 Council Strategic Plan and five-year Financial Plan review:

- The recommendations contained in Appendix 'A' of that report;
- The recommendations in that report under the heading "RECOMMENDATIONS IN ALIGNMENT WITH SUSTAINABILITY PLAN";
- and
- THAT Council adopt an updated Community Climate Change Plan that integrates climate change mitigation and adaptation.

CARRIED UNANIMOUSLY

(c) **Grant Application Resolutions**

Councillor Harrison MOVED and Councillor Skipsey SECONDED, THAT Council authorizes the submission of a grant application to the B.C. Air Access Program to fund an Aviation Fuel System Tank Replacement project.

CARRIED

Opposed: Mayor Westbroek

In Favour: Councillor Harrison; Councillor Skipsey; Councillor Vander Valk;
Councillor Young

Councillor Harrison MOVED and Mayor Westbrook SECONDED, THAT Council authorizes the submission of a grant application to the BC Destination Development Fund to fund the Beach Creek Viewing Platform & Walkway at the Memorial Roundabout.

CARRIED UNANIMOUSLY

Mayor Westbrook MOVED and Councillor Skipsey SECONDED, THAT Council directs staff to apply to the Island Coastal Economic Trust (ICE-T) for funding for the Beach Creek Viewing Platform & Walkway at the Memorial Roundabout.

CARRIED UNANIMOUSLY

Councillor Harrison MOVED and Councillor Skipsey SECONDED, THAT Council authorizes the submission of a grant application to the Rural Economic Diversification and Infrastructure Program to fund a Feasibility Study and Planning for a modernized Operations Facility.

CARRIED UNANIMOUSLY

REVIEW OF COMMENTS FROM THE PUBLIC

Comments for this regular Council meeting were received by 12:00 pm two business days following the meeting (December 9, 2022). Submissions were distributed to all Council, and a brief summary of the comments are as follows:

- Len Flint, regarding the Community Climate Change Action Plan, Waterfront Master Plan, and the Sustainability Plan.

MOTION TO CLOSE

Councillor Skipsey MOVED and Councillor Young SECONDED, THAT the meeting be closed to the public for the purposes of considering:

- a. the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;
- b. the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
- c. negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public.

CARRIED UNANIMOUSLY

MEETING CLOSED TO THE PUBLIC: 11:25 am

MEETING REOPENED TO THE PUBLIC: 1:49 pm

ADJOURNMENT

Councillor Skipsey MOVED and Councillor Vander Valk SECONDED, THAT Council adjourns the meeting.

CARRIED UNANIMOUSLY

MEETING ADJOURNED: 1:50 pm

Certified Correct:

Heather Svensen
Corporate Administrator

Teunis Westbroek
Mayor

To: Mayor Teunis Westbroek and Qualicum Beach Council

Dear Mayor and Council,

The Brant Wildlife Festival team has appreciated the Town of Qualicum's support in the past and are asking for your support once again for our 2023 Brant Wildlife Festival.

As you know, The Brant Wildlife Festival is a spring celebration of nature, named after the Brant Goose, a tireless traveler migrating from Mexico to Alaska who rests and feeds along the shores of mid-Vancouver Island before continuing their arduous migration to northern breeding grounds.

We are fortunate to live in an internationally-recognized biosphere region and designated Important Bird Area. As winter gives way to spring our coast is a happening place with herring spawning, eagles gathering, and tens of thousands of migrating birds of many species seen along our shores—including the Brant.

The Brant Wildlife Festival was started in 1991 by businessman Bashir El-Khalafawi, the then manager of the Bayside Inn and president of the Parksville Chamber of Commerce, and Neil Dawe who worked for the Canadian Wildlife Service. Today, the festival continues to include community organizations that host a variety of festival activities and events. The festival and community organizations encourage locals and visitors, children and adults, to get outdoors to enjoy and to learn about the natural wonders around them.

The Nature Trust of British Columbia is a non-profit land conservation organization with properties across the province including along the Englishman River. The Nature Trust helps to coordinate the Brant Wildlife Festival with a part-time community facilitator and the participation of many community volunteer organizations. We work with Parksville-Qualicum Beach Tourism, the PQB News, The Beach radio station, along with the Chambers of Commerce and other local businesses and stewardship groups to make the festival a success.

The budget for the festival is a modest \$17,000 plus \$5,000 in-kind provided by The Nature Trust which applies for a grant each year. The City of Parksville has annually provided \$5,000, which we have applied for again this year. The Town of Qualicum Beach in the past two years has provided much appreciated support in the amount of \$5000. Support has also come from Mid Island Co-op (\$1,000) and in some years from TD Friends of the Environment Foundation (\$1,500). Community support is crucial for the festival and we are grateful for this support.

In our hopes to sustain the longevity of the festival, we would like to request that The Town of Qualicum Beach consider providing support to the 2023 Brant Wildlife Festival in the amount of \$5,000. This would be much appreciated.

Our presentation will include updates regarding our 2023 festival events.

If you have any questions, we would be pleased to answer them. I look forward to being a delegation on January 18th.

Warm regards,

Ceri Peacey,
Community Facilitator
<https://brantfestival.bc.ca>
brantwildlifefestival@gmail.com

Town of Qualicum Beach
M E M O R A N D U M

TO: Luke Sales, Director of Planning

FOR: Council Meeting, January 18, 2023

FROM: Rebecca Augustyn, Planner

SUBJECT: Zoning Amendment and Development Permit: 365 First Avenue West

RECOMMENDATION

1. THAT "Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022" be read a third time.

PURPOSE

To consider a zoning amendment and Development Permit application for 365 First Avenue West that would facilitate the subdivision of the parcel into two parcels, with a duplex to be built on proposed Lot B.

BACKGROUND

The owner of 365 First Avenue West has submitted a zoning amendment and Development Permit application to facilitate development of the subject parcel. For reference, two excerpts (Zoning Amendments, Development Permits) from the Town's Development and Construction guide are attached to this memo.

The existing single-family dwelling would remain on Lot A and a duplex is proposed for Lot B. The subject property is currently zoned Residential 14 (R14) and is identified as Mixed Residential 1 in the Official Community Plan and falls within Development Permit Area M1 - Village Neighbourhood. The zoning amendment will change the zoning classification from Residential 14 (R14) to Residential 19 (R19). The R19 zone is a higher density zone that permits duplexes, as well as single-family dwellings. The zoning amendment will also change the Subdivision District from Subdivision District "D" to Subdivision District "J" to permit subdivision of the parcel. Subdivision District "D" has a 700m² minimum parcel size, whereas Subdivision District "J" has a 500m² minimum parcel size. Parcel A is proposed to be approximately 624m² and Parcel B is proposed to be approximately 553m².



Figure 1: Subject Property

On June 8, 2022, Council adopted the following motions:

- THAT “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022” be introduced and read a first time.
- THAT “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022” be referred to the Advisory Planning Commission, subject to submission of the following additional information: (a) Tree and vegetation management plan; and, (b) Alternative access options.
- THAT prior to the bylaw entitled “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022” being adopted, that the developer makes a contribution to the Village Neighbourhood Sidewalk Reserve Account equivalent to the value of constructing a sidewalk for this property.

In response to the Council motions, the applicant submitted an arborist report and rationale for access to the parcel from Pine Street. The application went before the Advisory Planning Commission (APC) on August 17, 2022. The APC adopted the following motions:

- THAT the Advisory Planning Commission supports the zoning amendment application for a change of zoning of 365 First Avenue West from Residential 14 (R14) to Residential 19 (R19) and changing the Subdivision District from Subdivision District “D” to Subdivision District “J”.
- THAT the Advisory Planning Commission supports the development application for 365 First Avenue West, subject to a review of the north façade interface to mitigate the impact on the existing property to the north.

The application went before Council on September 21, 2022 and the following motions were adopted:

- THAT the bylaw entitled “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022” be read a second time;
- AND FURTHER THAT consideration of the Public Hearing for “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022” be referred to the November 23, 2022 Regular Council Meeting.
- THAT, prior to the public hearing for the development at 365 First Avenue West, there be a review of the north façade interface to mitigate the impact on the existing property to the north.

In response to the Council motion to review the north façade, the applicant submitted the following:

- *The existing home will require renovation due to spatial separation reasons, these renovations will include covering the majority of the windows. The living spaces inside become oriented to the East-West rather than the South. Increasing setbacks would be of very minimal benefit at the expense of valuable floor area and usable, landscape-able yard space. Solid fencing is necessary to screen an area that will be used as an outside utility and storage space. Addressing the interface*

while keeping needed privacy the solid fencing is pulled back to align with the two-storey portion of the home and extending a green landscaping screen.

Revised plans have been submitted, which reflects these changes.

The applicant hosted a Public Information Meeting on November 3, 2022. The applicant received comments on the following:

- Laneway access to the parcel;
- Future of the existing single-family dwelling and if it will become a duplex;
- Height of the duplex and impact on surrounding properties;
- Proposed density;
- Zoning amendment process and timelines to build the duplex; and,
- Design of the duplex.

The application went before Council on November 23, 2022, and Council adopted the following motion:

- THAT Council hold a Public Hearing on January 18, 2023 at 10:00 am at the Qualicum Beach Town Hall, 660 Primrose Street, Qualicum Beach in regard to “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022”; AND FURTHER THAT, prior to the Public Hearing being held for the development at 365 First Avenue West, the applicant submits details on building colours and materials.

DISCUSSION

Zoning: The R19 zone permits residential use and home occupation use.

Density: The R19 zone requires 250m² of site area per dwelling unit. Parcel A is proposed to be 624m² and Parcel B is proposed to be 553m². Under the R19 zone, a maximum of two dwellings per parcel would be permitted. The proposal is to retain the existing single-family dwelling on Parcel A, and a build a duplex on Parcel B. The Mixed Residential 1 designation in the OCP outlines a maximum density of 60 dwellings/ha. Two dwellings on Parcel B is approximately 36 dwellings/ha, which is lower than the maximum density outlined in the OCP. One dwelling on Parcel A is approximately 16 dwellings/ha, which is also lower than the maximum density.

Height: The maximum building height under the R19 zone is 9.0m. Both the duplex and single-family dwelling meet the maximum height.

Setbacks: The proposed development has a front lot line setback of 3.0m, a rear lot line setback of 3.6m, an exterior lot line setback of 3.8m and an interior lot line setback of 1.5m. The proposed development meets the R19 setbacks.

Parcel Coverage: The proposed parcel coverage is 41%, which is less than the maximum parcel coverage of 50% and comparable to adjacent zones.

Parking: The off-street parking requirements require two off-street parking spaces per single-family dwelling unit and 1.5 off-street parking spaces per multi-family dwelling unit. The single-family dwelling on Parcel A proposes two off-street parking spaces, which meets the requirement. The duplex on Parcel B proposes two off-street parking spaces, which is one off-street parking space less than what is required. The third parking space is on the boulevard and

is not considered to be off-street parking. Council may require the additional parking space, require cash-in-lieu, or vary the parking requirements.

2018 Official Community Plan (OCP):

The property is located within the “Village Neighbourhood” land use designation in the 2018 Official Community Plan (OCP), the area where development, redevelopment and densification are encouraged. The Village Neighbourhood General Policies are as follows:

1. The Town shall support the redevelopment of the “Village Neighbourhood” in a manner that demonstrates the vision of the Sustainability Plan, encouraging expanded services, compact residential development, and tourism facilities while maintaining a strong village character.

Staff Comment: This proposal is considered to be a compact residential development, although it is relatively low density for the site.

2. The Town shall discourage owners from restricting occupation or ownership of a residential unit because of age.

Staff Comment: It is not anticipated that the proposed development will restrict occupation based on age; however, a covenant could be registered to prohibit this restriction.

3. The emphasis of street design shall be pedestrian-friendly, rather than car-friendly.

Staff Comment: The design utilizes the laneway as well as Pine Street for access. There is minimal emphasis on street design.

4. In order to support school enrollment, the Town shall explore ways to attract young families to the Town and school catchment area.

Staff Comment: The proposed development could fit the needs of different age groups, including young families.

5. The Town shall require new developments in the Village Neighbourhood to submit a Rainwater Management Plan as part of the development approval and permitting process.

Staff Comment: The applicant has committed to engaging a professional engineer to develop a storm water management plan. The storm water management plan will be available for staff during the subdivision process.

6. The Town shall discourage multi-family housing projects that seek to separate themselves from the surrounding community by containing the development within walled or fenced enclaves with centralized and/or controlled access points.

Staff Comment: The proposal does not separate itself from the surrounding community.

7. Through various methods including rezonings, regulatory bylaws, incentive programs and education, the Town shall encourage a diversity of housing to meet the needs of people of all ages, income levels and special needs.

Staff Comment: The proposal includes a duplex and small-lot residential, which will diversify the Town's housing stock.

8. Through various methods including rezonings, regulatory bylaws, incentive programs and education, the Town shall explore opportunities to improve the energy efficiency of subdivisions and building construction.

Staff Comment: The duplex will be built to meet or exceed Step Code 2 of the British Columbia Step Code. Council could establish, by resolution, a higher standard as a requirement of the zoning amendment.

9. The Town shall encourage the efficient use of land within the Village Neighbourhood.

Staff Comment: The density proposed is significantly less than what is permitted in the OCP; however, the proposal is compatible with the surrounding neighbourhood.

10. The Town shall require a site-specific tree and vegetation management and conservation plan for all new development proposals in the Village Neighbourhood.

Staff Comment: A landscape plan has been provided, as well as an arborist report. The arborist report identifies moving one tree, removing two trees, and retaining two other trees. The report also notes the proposed development contains a 2:1 replacement ratio for trees that are removed.

11. As part of the off-site works and services related to a building permit or subdivision, the Town shall consider the requirement that owners provide for improvements to the street frontage, including sidewalks, street trees, and street lighting.

Staff Comment: Due to the application being in the beginning stages, off-site works and services have not been discussed. A service agreement will occur at either the subdivision or building permit stage.

12. Buildings should be a maximum of three storeys in height. However, the Town may consider taller buildings on a case-by-case basis with consideration to factors such as topography, solar access, compatibility with adjacent uses, neighbourhood impact, views and community amenities. The Town will also recognize increases in typical ceiling heights in the consideration of height limits.

Staff Comment: The proposed development is within the residential height limits and does not exceed two storeys.

The following policies are specific to Mixed Residential 1 designation:

1. The Town recognizes existing single-family and two-family dwellings within the area designated as 'Mixed Residential', as shown on map 'Schedule 2.2'.

Staff Comment: The proposal is to build a duplex and retain the existing single-family dwelling, which aligns with this policy.

2. The Town will consider rezonings for multi-family residential uses within the area designated 'Mixed Residential', as shown on map 'Schedule 2.2'.

Staff Comment: The subject property is located within the 'Mixed Residential' area.

3. The maximum density for residential dwellings in the Mixed Residential 1 area shall be up to 60 dwellings/ha. However, the Town will consider density bonuses in order to provide affordable housing, underground parking, 'green' buildings, adaptable design features, public amenities and public open space as part of multi-family residential development within the "Village Neighbourhood".

Staff Comment: The proposal is within the maximum density.

4. The Town shall develop a suitable multi-family residential zoning for the 'Mixed Residential' area that will encourage small-scale developments in accordance with 'Development Permit Area M1' design guidelines.

Staff Comment: The R19 zone is one of the numerous residential zones in zoning bylaw.

5. The implementing bylaws and policies of the Town shall ensure that existing trees are retained where possible, as part of the on-site landscape requirements for multi-family residential developments.

Staff Comment: An arborist report has been submitted as part of the application. The report identifies moving one tree, removing two trees, and retaining two other trees. The report also notes the proposed development contains a 2:1 replacement ratio for removed trees.

6. Sidewalks, curbs and gutters, grass boulevards, trees, and pedestrian-friendly streetscapes shall be encouraged as part of multi-family developments.

Staff Comment: Boulevard trees will be planted in accordance with the landscaping plan. Council has directed the applicant to make a contribution to the Village Neighbourhood Sidewalk Account equivalent to the value of constructing a sidewalk for this property.

7. Building designs and site development for multi-family residential developments shall conform to the 'Development Permit Area M1' design guidelines.

Staff Comment: The guidelines are discussed later in this memo.

8. The Town shall develop more detailed design guidelines for 'Development Permit Area M1'. After development of design guidelines, the densities for Mixed Residential 1 and Mixed Residential 2 should be reviewed to ensure compatibility with the design guidelines.

Staff Comment: Additional detailed guidelines have not been developed at this time. This clause was added to the OCP in 2006, and since then, multi-residential guidelines have not been identified as a priority by Council.

Development Permit Area M1 – Village Neighbourhood: The subject property is in the "M1 – Village Neighbourhood" Development Permit Area (DPA). If this development proceeds through the zoning amendment process, Council would consider issuance of a Development Permit in conjunction with adoption of the proposed zoning amendment bylaw. Following is a review of the M1 Development Permit Area Guidelines.

1. Developments shall be at a scale to complement the existing single-family residential uses while creating a transition area for the commercial and institutional uses.

Staff Comment: The scale of the proposed development is within the maximum height for single-family dwellings and complements the existing single-family residential uses.

2. The shape of developments shall avoid massive building components in favour of more intimate clustered designs. Such designs could include varied rooflines, ground floor access to individual units, courtyards and landscaping that stress the human scale of buildings and site improvements.

Staff Comment: The design is at the human scale and includes varied rooflines and ground floor access.

3. Public spaces for community gathering should be integrated into designs wherever possible.

Staff Comment: There are no public spaces for community gathering; however, given the location and size of the parcel, staff consider this approach to be supportable.

4. Parking facilities shall be integrated with the site landscaping and buffered from adjoining parcels and buildings on site through the use of trees, shrubs and screens. Smaller clusters are preferable.

Staff Comment: The on-street parking on First Avenue West is not integrated with landscaping; however, this is not a large parking area.

5. Driveways, and off-street parking areas shall be located off lanes and shall be avoided along major and local streets to produce a streetscape that is visually more pleasing and to reduce the conflict with pedestrians.

Staff Comment: The proposed development utilizes access off Pine Street and the laneway, and as a result, the access off Pine Street conflicts with this policy. The applicant has submitted rationale for creating an additional access off of Pine Street, which notes that to access both duplex units off of the laneway would have implications to the floor plan and yard.

SUMMARY

An application has been received to amend the zoning for 365 First Avenue West from R14 to R19 to permit the parcel to be subdivided into two parcels, with the existing single-family dwelling retained on Lot A and a duplex proposed for Lot B. In the opinion of staff, the application aligns with the OCP, except the access off Pine Street, which is in conflict with Policy #5 under the DPA – M1 – Village Neighbourhood. The applicant has submitted a rationale for designing access to one of the duplex units from Pine Street, which identifies floor plan and yard layout as the reasoning. Without the benefit of formal community input, staff recommend the application be read a third time.

ALTERNATIVES

1. THAT “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022” be denied;
2. THAT Council requests the following changes to the zoning amendment application for 365 First Avenue West: *[insert changes]*; or,
3. THAT Council provides alternative direction to staff.



R. Augustyn, MCIP, RPP
Planner
Report Writer



Luke Sales, MCIP, RPP
Director of Planning
Concurrence



Lou Varela, MCIP, RPP
CAO
Concurrence

Attachments:

[PLANS.365FirstAve.Jan182023.pdf](#)
[BYLAW.580.135 - 365 First Avenue West \(R19\).docx](#)
[02%20Zoning%20Amendment.pdf](#)
[03%20Development%20Permit.pdf](#)

May 4, 2022

Attn: Luke Sales, Director of Planning

Town of Qualicum Beach
660 Primrose Street
Qualicum Beach, B.C.
V9K 1S7

**Re: Zoning Amendment Application for 365 First Avenue West
Lot 8, Block 3, District Lots 54 and 55, Newcastle District, Plan 2005, PID 001-947-257**

On behalf of the property owners, I am making a Zoning Amendment application for 365 First Avenue West. Please find below a brief overview and design rationale for the proposed development.

Context & Land Use

The site is located at the northwest corner of First Avenue West and Pine Street. It is accessible by vehicle on three sides and it backs onto a developed laneway. The surrounding land use is single family residential, except to the east where there is a currently undeveloped parcel.

The site is located within walking distance of the village core, reducing vehicle dependence. This is a sustainable location for infill development.

The site is currently zoned Residential 14 (R14) and is located within the Town of Qualicum Beach 'Village Neighbourhood'. The OCP land use designation is Mixed Residential 1. This is a location where development, redevelopment, and densification are encouraged under the OCP.

Development Proposal

The development proposal is to rezone the property to Residential 19 (R19) and subdivide it into two parcels to allow for the construction of a duplex on the south half of the property, while retaining the existing single family home on the north half of the property. The duplex will subsequently be stratified.

Form and Character

Careful design work has been done to ensure that each unit in the new duplex provides a highly functional indoor living environment along with a comfortable, private, outdoor living space.

Both units in the duplex will be family-oriented with three bedrooms on the upper floor. This reduces the footprint, leaving larger yard spaces for the occupants to enjoy.

This project will increase the diversity of housing options in a way that is both complementary and compatible with the scale and character of the surrounding neighbourhood.

The project supports the Housing Needs Assessment and the top goal in the Town's 2019-2022 Strategic Plan, to "support a diversity of housing for all ages and incomes".

The landscape plan includes private patios and planted areas. Six trees will be planted to replace the three that need to be removed during construction

Parking

The west unit will have one off-street parking space in the attached garage. The east unit will have one off-street parking space in the attached garage and another in the driveway. Both units will benefit from additional lay by parking on the boulevard. Additionally, the existing house will retain two off-street parking spaces in its two driveways.

Civil Works

This infill project will connect to existing water and sewer located under First Avenue West and Pine Street.

A consulting civil engineer has been retained to provide a stormwater management plan and is confident we can achieve a satisfactory solution. At this early stage, we are looking at including either an infiltration pit or a rain garden with specifics to be coordinated with the Town.

Sustainable Features

A stacked building form that is inherently more sustainable and energy efficient than a single story form. The new duplex will be constructed to meet or exceed Step 2 of the British Columbia Step Code. Rough-ins will be provided for optional electric vehicle charge points and solar panels. The south-facing roof design includes dedicated areas for solar panels.

Enclosures

In support of this application, please find enclosed:

- Application Form
- \$4,000 Cheque for Application Fee
- Current Title Search
- Existing survey plan.
- Building and Landscape concept plans prepared by Skookum Design Services

Thank you for your time and consideration of this application. Please feel free to contact me if you have any questions or require any additional information.

Yours truly,



Niklas Andersson



3 VIEW FROM LANE



4 VIEW FROM FIRST AVE. WEST



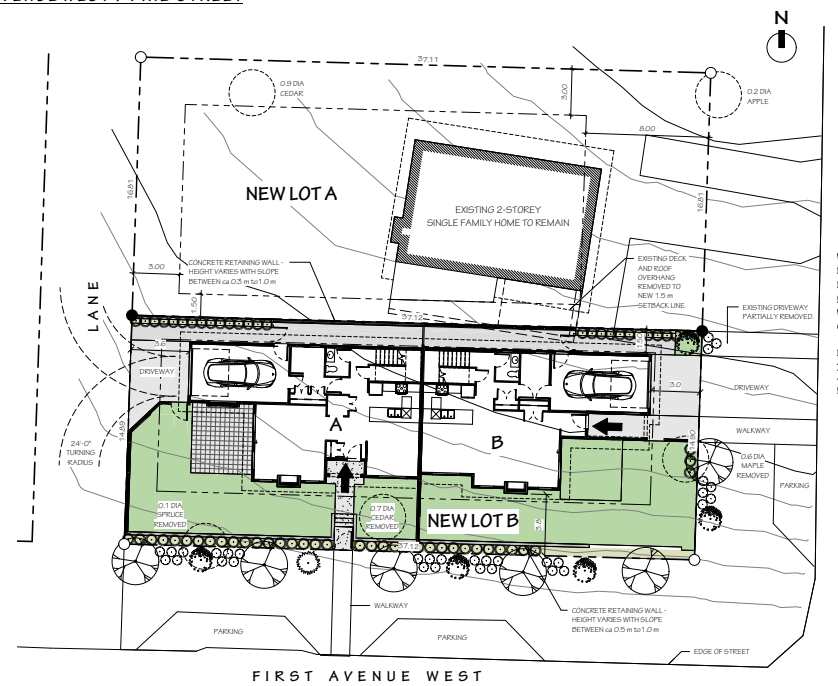
5 BIRDEYE PERSPECTIVE



2 VIEW LOOKING NORTH-WEST AT FIRST AVENUE WEST / PINE STREET

SUSTAINABILITY FEATURES	
- DENSIFICATION, MAKING USE OF EXISTING LAND BASE.	
- DUPLEX TYPE AND COMPACT TWO STOREY MASSING.	
- SITE FOOTPRINT REDUCED.	
- BETTER FLOOR AREA TO EXTERIOR WALL RATIO, INCREASED EFFICIENCY.	
- LARGE SOUTH FACING ROOFS - ADVANTAGEOUS TO SOLAR PANEL INSTALLATION.	
- LOWER ROOF OVERHANGS AID IN SUMMER SHADING, REDUCED COOLING LOADS.	
- COMMITMENT TO B.C. STEP CODE "STEP 2" OR BETTER, HIGHER THAN REQUIRED BUILDING ENERGY EFFICIENCY - REDUCED HEATING AND COOLING LOADS.	
- PROVIDE FOR FOR ELECTRIC VEHICLE CHARGING AND PHOTOVOLTAIC SOLAR, DECREASED RELIANCE ON GRID-GENERATED POWER.	

SITE & PLANNING SUMMARY			
CIVIC ADDRESS: 3605 FIRST AVENUE WEST PID: 001-047-207 LEGAL DESCRIPTION: L.6 BK.3 DLS 54 & 55 NEWCASTLE DISTRICT PL 2005			
OFFICIAL COMMUNITY PLAN DESIGNATION: VILLAGE NEIGHBOURHOOD, MIXED RESIDENTIAL 1			
CURRENT ZONING: K-14 PROPOSED ZONING: K-19			
LOT SIZE: NEW LOT A - 623.8 m ² NEW LOT B - 552.8 m ²			
HEIGHT	K-19	PROPOSED	NOTES:
INTERIOR HEATED SPACE:	7.5 m	6.5 m	BUILDING DRAWN AT 5.6 m RIDGE
ROOF OF CHABLE ROOF:	9.0 m	9.0 m	HEIGHT FROM AVERAGE GRADE.
PARCEL COVERAGE	50%	225.3 m ² (41%)	TO FACE OF EXTERIOR WALLS AND POSTS.
SETBACKS:			
FRONT:	3.0 m	3.0 m	ROOF OVERHANG, EAVE, CORNICE OR
REAR:	2.0 m	3.6 m	GUTTER MAY PROJECT UP TO A
SIDE - EXTERIOR:	3.5 m	3.6 m	MAXIMUM OF 0.6 M TO ANY
SIDE - INTERIOR:	1.5 m	1.5 m	REQUIRED SETBACK AREA.
SIDE - INTERIOR AT LANE:	2.0 m	N/A	
OFF-STREET PARKING:		2	SINGLE CAR GARAGES PROVIDED. BOULEVARD PARKING ADDED.
UNIT A - GROSS FLOOR AREAS		UNIT B - GROSS FLOOR AREAS	
MAIN FLOOR:	84.3 m ² (908 SF)	MAIN FLOOR:	80.2 m ² (860 SF)
UPPER FLOOR:	87.9 m ² (946 SF)	UPPER FLOOR:	85.4 m ² (918 SF)
TOTAL:	172.1 m ² (1,855 SF)	TOTAL:	165.6 m ² (1,781 SF)
GARAGE:	25.4 m ² (275 SF)	GARAGE:	25.4 m ² (275 SF)



1 PROPOSED SITE PLAN
1:150

NOTES

SKOOKUM DESIGN SERVICES
Tel: (250) 702 3744
@: niklas@skookumdesigns.com
web: www.skookumdesigns.com

ALL WORK SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE
BUILDING CODE ENACTED BY THE AUTHORITY HAVING JURISDICTION.
DO NOT SCALE DRAWINGS BY THE AUTHORITY HAVING JURISDICTION.
CONTRACTOR TO VERIFY ALL DIMENSIONS OF WORK AND REPORT ANY
DISCREPANCIES TO OWNER BEFORE PROCEEDING.

THIS DRAWING IS PROVIDED AS A REPRESENTATION OF SERVICES AND IS NOT
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PERMISSION TO REPRODUCE OR TRANSMIT IN ANY FORM OR BY ANY MEANS
AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION
OF THE DESIGNER.

ISSUES & REVISIONS

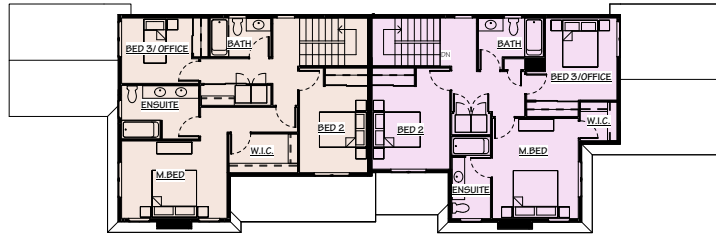
1	FOR CONSIDERATION	DATE
NO.	DESCRIPTION	DATE

NEW DUPLEX
ISAAC & JENNIFER MORGAN
3605 FIRST AVE. WEST, QUALICUM
BEACH V9K 2H6

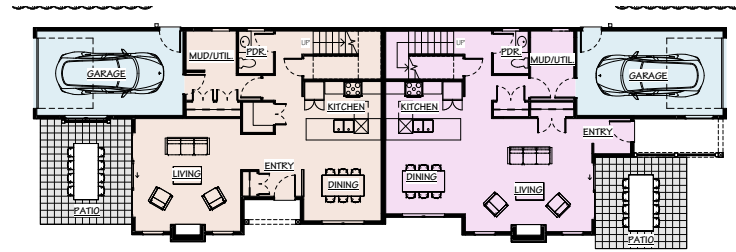
SITE PLAN & SUMMARY

PROJECT
2120
DATE
OCT. 24, 2022
SCALE
As Indicated

A101



6 2ND FLOOR PLAN
1:100



5 MAIN FLOOR PLAN
1:100



2 NORTH ELEVATION
1:100



3 EAST [PINE ST.] ELEVATION
1:100



4 WEST [LANE] ELEVATION
1:100



1 SOUTH [FIRST AVE.] ELEVATION
1:100

NOTES

SKOOKUM DESIGN SERVICES

tel. (250) 702 3744
@. niklas@skookumdesigns.com
web. www.skookumdesigns.com

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CONTRACTOR TO VERIFY ALL DIMENSIONS OF WORK AND REPORT ANY
DISCREPANCIES TO OWNER BEFORE PROCEEDING.

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ISSUES & REVISIONS

NO.	DESCRIPTION	DATE
1	FOR CONCEPTUAL REVIEW	2022-07-04

NEW DUPLEX

ISAAC & JENNIFER MORGAN
365 FIRST AVE. WEST, QUAAQUIM
BEACH V9K 2H6

TITLE
CONCEPTUAL
BUILDING
ELEVATIONS &
FLOOR PLANS

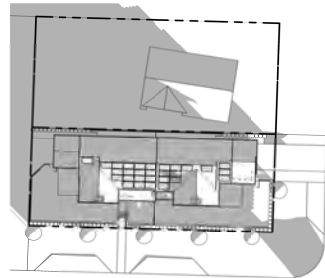
PROJECT
2120

DATE
OCT. 24, 2022

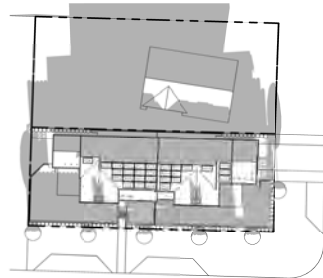
SCALE
1:100

A102

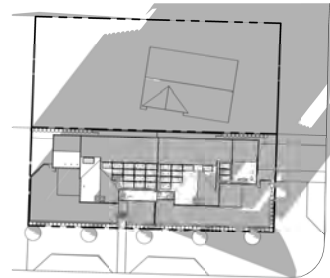
NOTE: SHADOW STUDIES ACCOUNT FOR BUILDINGS ON THE SUBJECT PROPERTY ONLY.
EXISTING TREES AND SURROUNDING BUILDINGS MAY CAST SHADOWS NOT INDICATED IN THESE STUDIES.



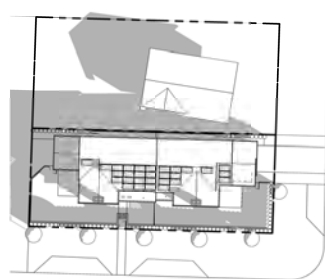
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1:350



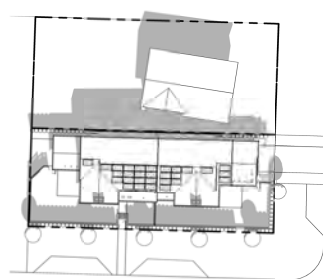
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1:350



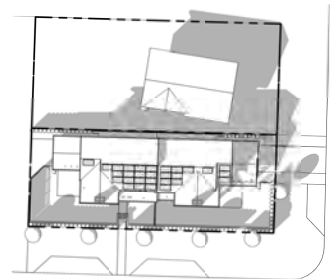
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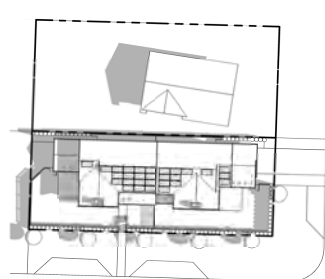
7 SPRING EQUINOX 9:00 AM
1:350



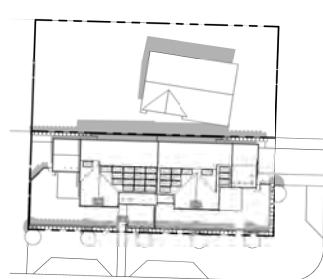
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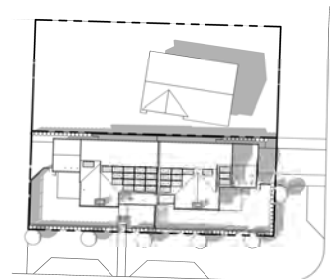
9 SPRING EQUINOX 3:00 PM
1:350



4 SUMMER SOLSTICE 9:00 AM
1:350



5 SUMMER SOLSTICE 12:00 PM
1:350



6 SUMMER SOLSTICE 3:00 PM
1:350



3 VIEW FROM LANE



2 VIEW FROM EXISTING HOME BACKYARD



1 VIEW FROM PINE ST.

NOTES

SKOOKUM DESIGN SERVICES

tel. (250) 702 3744
@. niklas@skookumdesigns.com
web. www.skookumdesigns.com

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ISSUES & REVISIONS

NO. DESCRIPTION DATE

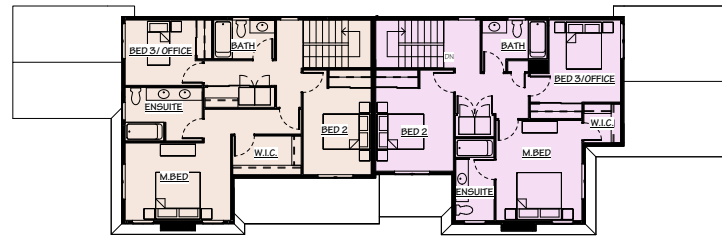
NEW DUPLEX

ISAAC & JENNIFER MORGAN
365 FIRST AVE. WEST, QUALICUM
BEACH V9K 2H6

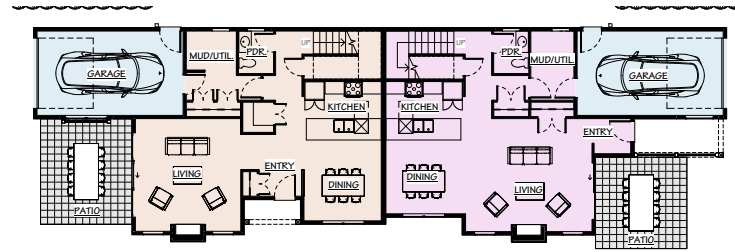
TITLE
PERSPECTIVES AND
SHADOW STUDIES

PROJECT
2120
DATE
OCT. 24, 2022
SCALE
1:350

A103



6 2ND FLOOR PLAN
1:100



5 MAIN FLOOR PLAN
1:100



2 NORTH ELEVATION
1:100



3 EAST [PINE ST.] ELEVATION
1:100

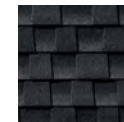


4 WEST [LANE] ELEVATION
1:100



1 SOUTH [FIRST AVE.] ELEVATION
1:100

EXTERIOR FINISHES



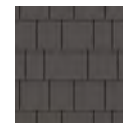
ASPHALT ROOF SHINGLES
GAF TIMBERLINE
"CHARCOAL"



WINDOWS
PREFINISHED VINYL BLACK
WITH MATCHING MUNTINS



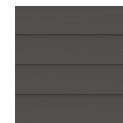
SHINGLES
FIBERCEMENT PAINTED
LIGHT BEIGE



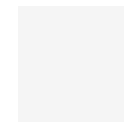
SHINGLES
FIBERCEMENT PAINTED
CHARCOAL GRAY



VERTICAL BOARD & BATTEN
FIBERCEMENT PANEL &
WOOD BATTENS PAINTED
LIGHT BEIGE



HORIZONTAL SIDING
FIBERCEMENT PAINTED
CHARCOAL GRAY



TRIM AND ACCENTS
WOOD PAINTED
BRIGHT WHITE



TIMBER ACCENTS
FIR STAINED NATURAL

NOTES

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ISSUES & REVISIONS

NO.	DESCRIPTION	DATE
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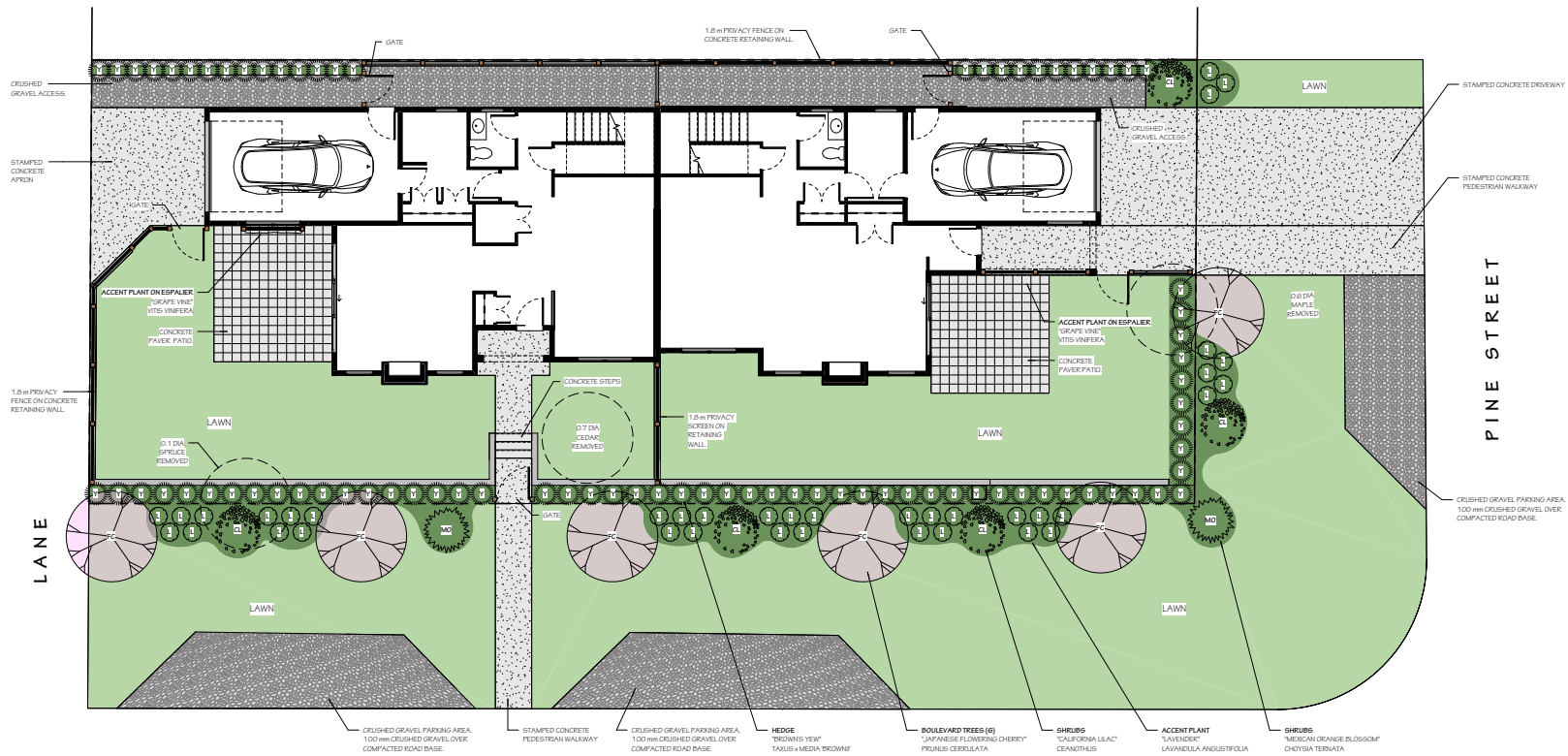
NEW DUPLEX

ISAAC & JENNIFER MORGAN
365 FIRST AVE. WEST, QUALICUM
BEACH V9K 2H6

TITLE CONCEPTUAL BUILDING ELEVATIONS & FLOOR PLANS

PROJECT
2120
DATE
JAN. 03, 2022
SCALE
As Indicated

A102



FIRST AVENUE WEST

1 LANDSCAPING



FLOWERING CHERRY



BROWN'S YEW HEDGE



CALIFORNIA LILAC



MEXICAN ORANGE BLOSSOM



LAVENDER

PLANTING SCHEDULE				
SYMBOL	LABEL NO.	SCIENTIFIC NAME	COMMON NAME	REMARKS
TREES				
	FC 16	PRUNUS CERRULATA	JAPANESE FLOWERING CHERRY	
SHRUBS				
	Y 02	TAXUS x MEDIA 'BROWNII'	BROWN'S YEW	NON-TOXIC MALE VARIETY
	CL 5	CEANOTHUS	CALIFORNIA LILAC	
	MO 2	CHOYSIA TERNATA	MEXICAN ORANGE BLOSSOM	
ACCENT PLANTS				
	L 36	LAVANDULA ANGUSTIFOLIA	LAVENDER	

NOTES

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ISSUES & REVISIONS

NO. DESCRIPTION DATE

NEW DUPLEX

ISAAC & JENNIFER MORGAN
 365 FIRST AVE. WEST, QUALICUM
 BEACH V9K 2H6

TITLE LANDSCAPING

PROJECT

2120

DATE

OCT. 24, 2022

SCALE

As Indicated

L-1

Assignment

Assess the trees for a potential development and provide pre, during and post construction measures, if required.

Observations

On June 30, 2022, I assessed five trees located on the property at 365 First Avenue West in Qualicum Beach.

Tree 1 is a 3 cm diameter, 1-meter-tall Colorado blue spruce located at the front edge of the property, see Picture 1. This tree can be easily moved to another location on the property.



Picture 1

Tree 2, a western red cedar, at the front center of the property. Diameter is 65 cm, height of 17 meters. It is in good health, see Picture 2. Previously, it was topped resulting in multiple stems to grow, the red arrows in Picture 3 indicates five stems.



Picture 2



Picture 3

Tree 3 is a big leaf maple located on the front edge of the property. It has a tree house built in it. 71 cm in diameter and 9 meters tall. See Picture 4. It has been topped more than once with regrowth. Picture 5 shows the location of decay cavities in several stems.



Picture 4



Picture 5

Tree 4 is a apple tree (Picture 6) and Tree 5 a western red cedar, Picture 7. Both are located outside the development area and within the yard of the existing home.



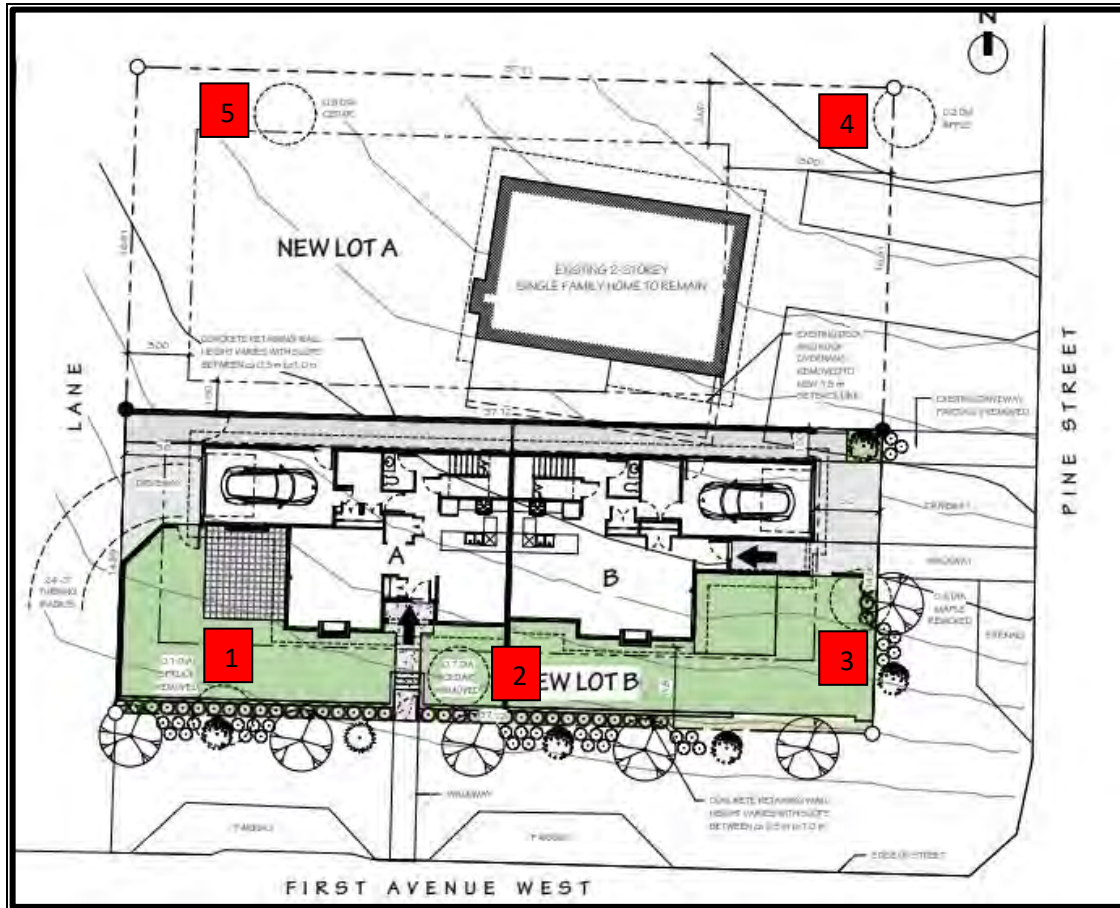
Picture 6



Picture 7

Discussion

The development site plan indicates trees #1, 2 and 3 will be impacted by the construction. Tree #1 can be moved. Trees #2 and 3 are within the footprint of the development. Tree #2 has a poor upper canopy structure due to the topping and not viable to retain. Tree #3, the maple has upper canopy decay in a number of the stems and not viable to retain.



Tree 4 should not be impacted by the construction. Tree 5, being a large western red cedar located in a low area of the yard is presently obtaining some groundwater due to natural drainage. I ask the development to ensure this natural drainage is not changed by the construction. Cedars do not tolerant changes to hydrology.

Next to the property are two large Douglas fir trees, both over 24 meters tall, see Picture 8. The lane is in the foreground of the photo. This lane is outside the construction zone and on the neighboring property however, bear in mind the structural roots of these Douglas fir trees are located under the dripline of the tree. If, there any reason excavation must occurs within the dripline of the tree, a certified arborist must be on site to confirm the impacts to the trees root zone.



Picture 8

Conclusion

Of the 5 trees located on the property, tree #1 can be moved, trees #2 and #3 are not viable for retention and should be removed. Trees #4 and #5, located near the existing house will be minimally impacted by the construction.

The landscape design indicates a 2:1 replacement for the trees and the installation of pollinator shrubs. This is an attractive and useful landscape design.

ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist or seek additional advice. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period. Likewise, remedial treatments, like any medicine, cannot be guaranteed. Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures. Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk.

The only way to eliminate all risks is to eliminate all trees. I further certify that I am a member in good standing of the American Society of Consulting Arborists and the International Society of Arboriculture. I have been involved in the field of Arboriculture in a full- time capacity for a period of more than twenty years.

July 06, 2022

Attn: Luke Sales, Director of Planning

Town of Qualicum Beach
660 Primrose Street
Qualicum Beach, B.C.
V9K 1S7

**Re: Access rationale for 365 First Avenue West
Lot 8, Block 3, District Lots 54 and 55, Newcastle District, Plan 2005, PID 001-947-257**

The property in question is in a well-established part of west Qualicum Beach. The site is a corner property bounded by First Avenue West to the South and Pine Street on the East. There is a partially developed lane to the West, the lane is surfaced with gravel and used by neighbours to access off-street parking. The existing house, while addressed on First Ave. West is oriented and accessed from Pine St.

First Avenue West is identified in the Official Community Plan as a *Major Collector Road* connecting West Qualicum Beach to the Village core.

Our proposal continues the established patterns of site access with a side-by-side building layout.

Positive aspects to this proposal include:

- Driveways are accessed from Pine St. and the lane rather than directly from busier First Ave. West.
- A pleasant and continuously landscaped streetscape on the longest and most prominent frontage.
- Emphasis on a sunny, green, and usable outdoor space suitable for all ages.

See figures 1-6 below for a sample of preliminary access studies with short viability commentaries.

Yours truly,



Niklas Andersson

Fig 1. – Existing conditions. Accessed from Pine St and lane.

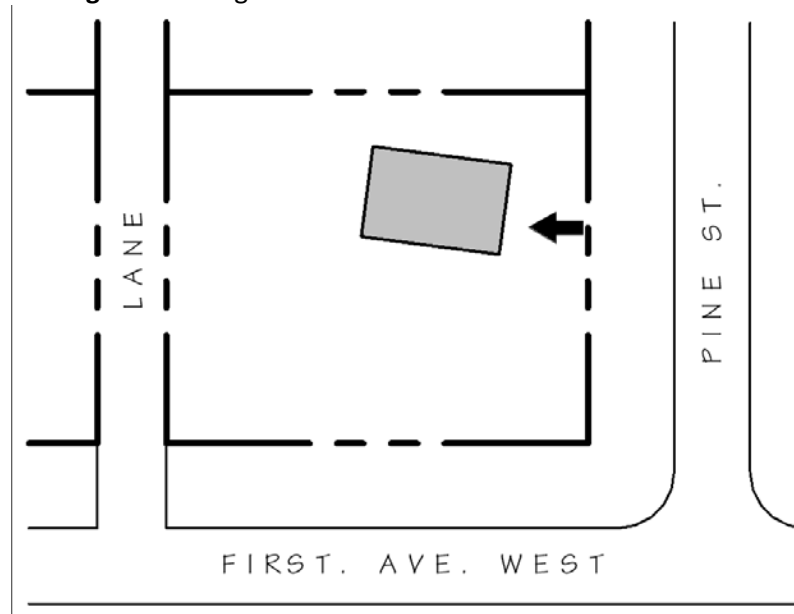


Fig 2. – Proposed site plan. See rationale above.

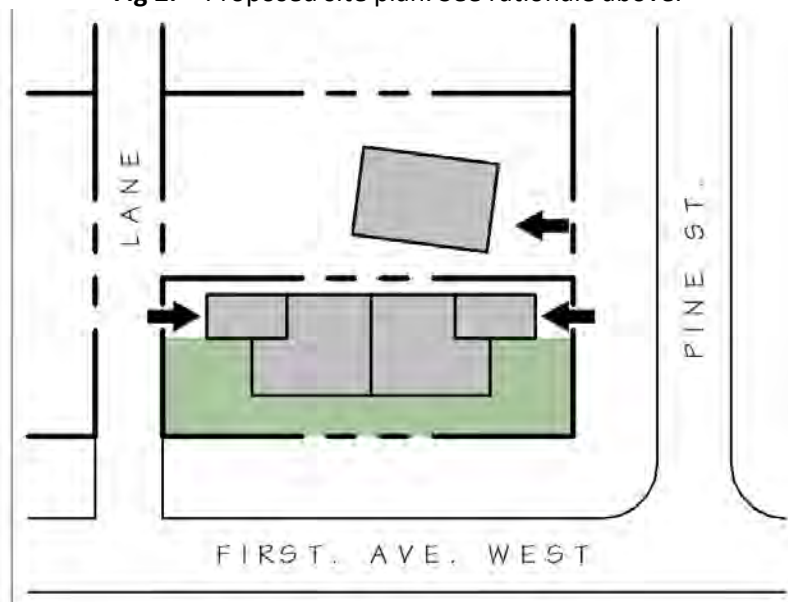


Fig 3. – Lane access only. Not considered viable due to floor plan and yard impact.
Similar issues with Pine St. access only.

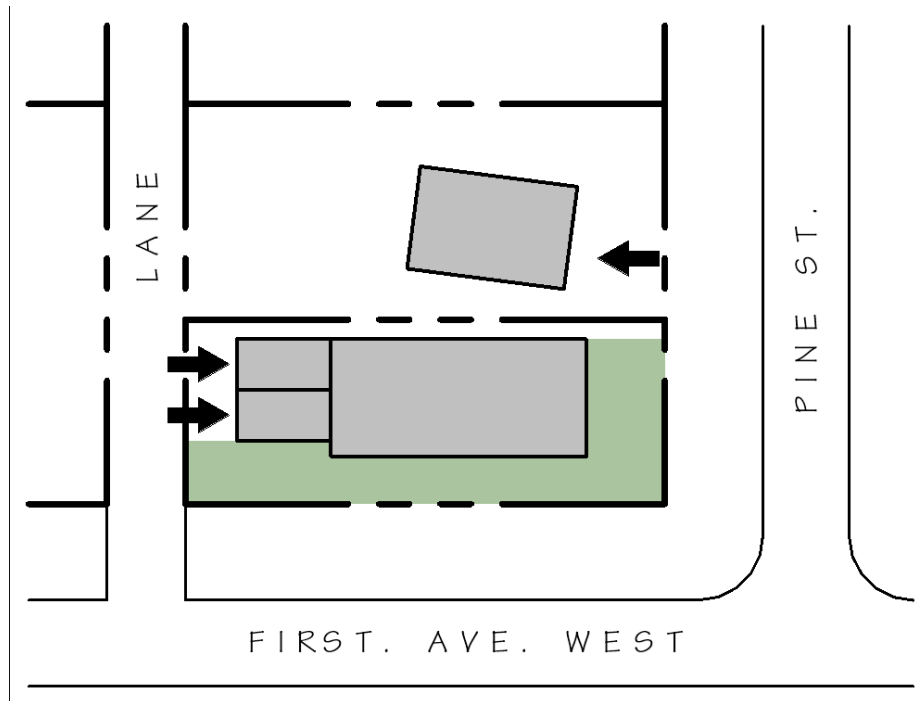


Fig 4. – Access from First Ave West. Not considered viable due to existing traffic patterns and yard impact.

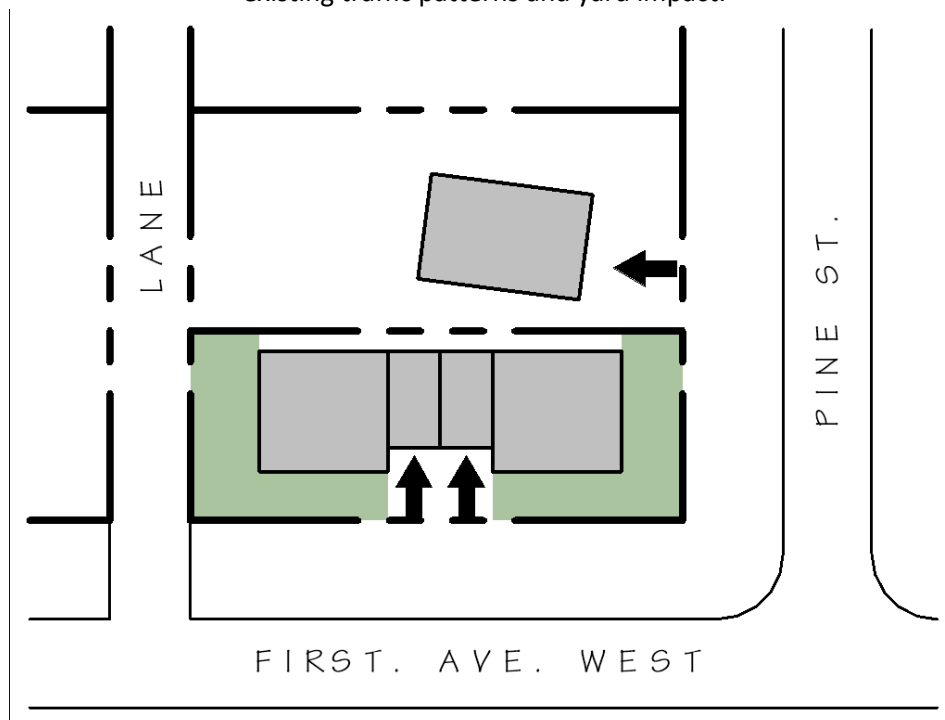


Fig. 5 – Access off First Ave. West and lane. Not considered viable due to traffic and impact to yard space and landscaping.

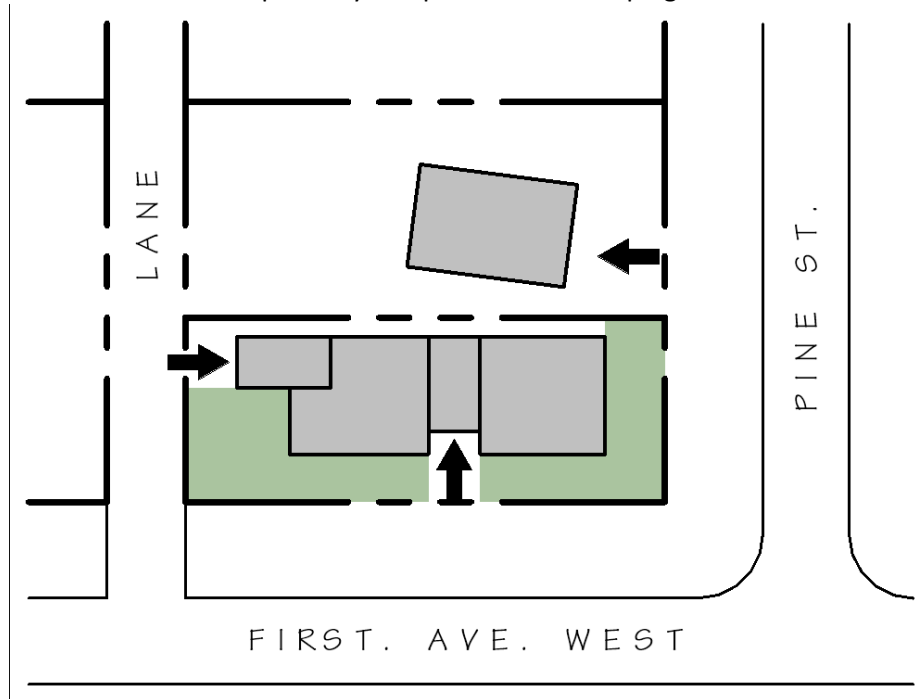
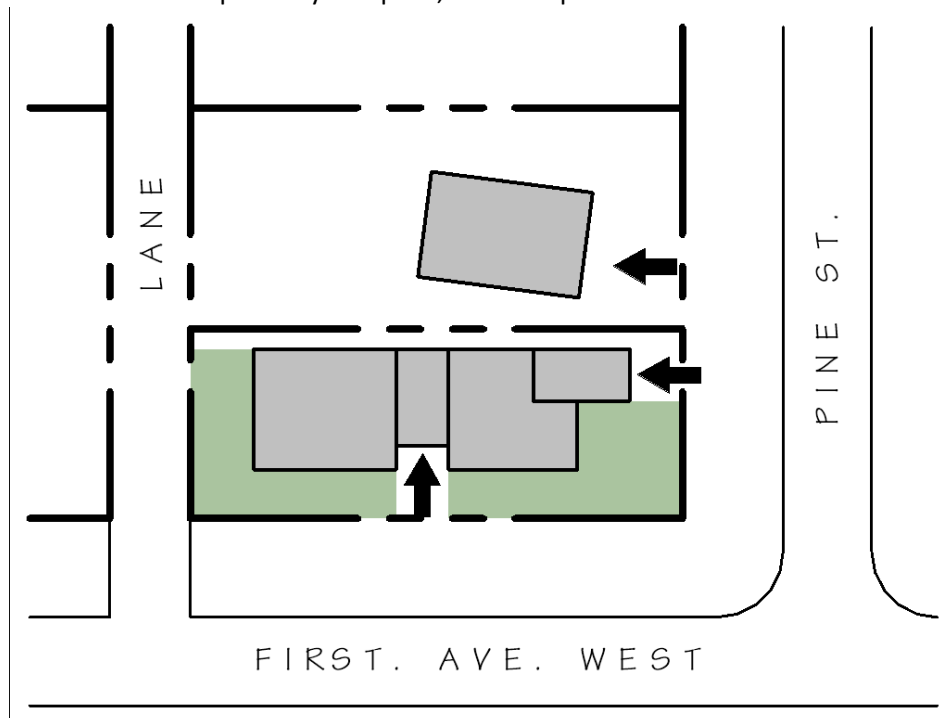


Fig. 6 – Access off First Ave. West and Pine St. Not considered viable due to traffic, impact to yard space, and suboptimal use of lane.



TOWN OF QUALICUM BEACH
BYLAW NO. 580.135

A BYLAW TO AMEND THE TOWN OF QUALICUM BEACH
LAND USE AND SUBDIVISION BYLAW NO. 580, 1999

WHEREAS the Council may, under Section 479 of the *Local Government Act*, divide the municipality into zones, regulate within a zone the use of land, buildings and structures, the density of use of land, buildings and structures, and the siting, size and dimensions of buildings and structures and may, under Section 482 of the *Local Government Act*, establish different density regulations for a zone depending on whether conditions relating to the provision of amenities or affordable or special needs housing are met, and may designate an area within a zone for particular types of housing, and

WHEREAS the owner of the land described in this Bylaw has consented to the designations set out in the Bylaw;

The Council of the Town of Qualicum Beach, in open meeting lawfully assembled, hereby enacts as follows: "Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999" is hereby amended as follows:

1. "Schedule 6A – Zoning Map" is hereby amended by changing the zoning designation of Lot 8, Block 3, District Lot 54 and 55, Newcastle District, Plan 2005 (365 First Avenue West) from Residential 14 Zone (R14) to Residential 19 Zone (R19) as shown outlined in heavy black line on Schedule 'A' which is attached to, and forms part of, this Bylaw.
2. "Schedule 7A – Subdivision District Map" is hereby amended by changing the designation Lot 8, Block 3, District Lot 54 and 55, Newcastle District, Plan 2005 (365 First Avenue West) from Subdivision District 'D' to Subdivision District 'J' as highlighted and outlined in a heavy black line on Schedule 'A' which is attached to, and forms part of, this Bylaw.
3. This bylaw may be cited as "Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999 Amendment (365 First Avenue West) Bylaw No. 580.135, 2022."

INTRODUCED FOR FIRST READING this 8th day of June, 2022.

READ A SECOND TIME this 21st day of September, 2022.

Notice published pursuant to Section 466 of the *Local Government Act* on the day of, 2022 and the day of, 2022.

PUBLIC HEARING held this day of, 2022.

READ A THIRD TIME this day of, 2022.

ADOPTED this day of, 2022.

Teunis Westbroek, Mayor

Heather Svensen, Corporate Administrator

Schedule 'A' - BYLAW NO. 580.135

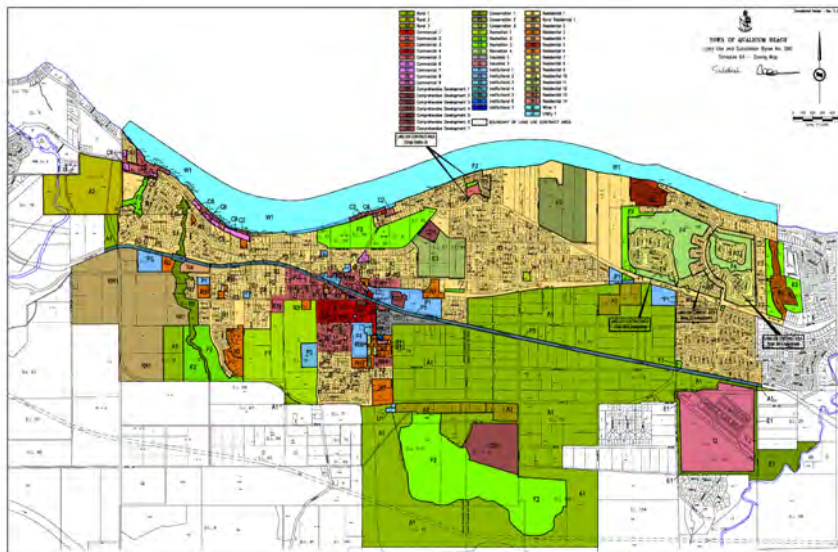
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398		619		622		621		348		336		620	
629		633		630		629		628		629		628	
637		637		636		637		636		637		636	
393		377		365		347		335		321			

2. ZONING AMENDMENT

WHAT IS ZONING?

Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999, divides the Town into zones, with specific uses, densities, setbacks, and other regulatory guidelines for each zone. When an application for a building permit is received, it is compared to the regulations in the zoning bylaw. If the plans conform to the zoning regulation, then the plans are reviewed by the building inspector for conformance to the BC Building Code.

Each property has a legal zoning classification that controls building types and activities, lot coverage, lot size, setbacks, building height, landscaping and parking. Uses that are not listed in the zone classification are not permitted.



WHAT IS REZONING?

If the existing zoning on a property does not permit a desired land use, density or siting, the property owner (or agent) may apply to change the zoning of that property. Rezoning applications may also require an OCP amendment, Development Permit, or other approvals.

Zoning is changed through amendments to "Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999". Amendment applications are considered by Council through the approvals process outlined on the reverse side of this sheet.

HOW LONG DOES IT TAKE?

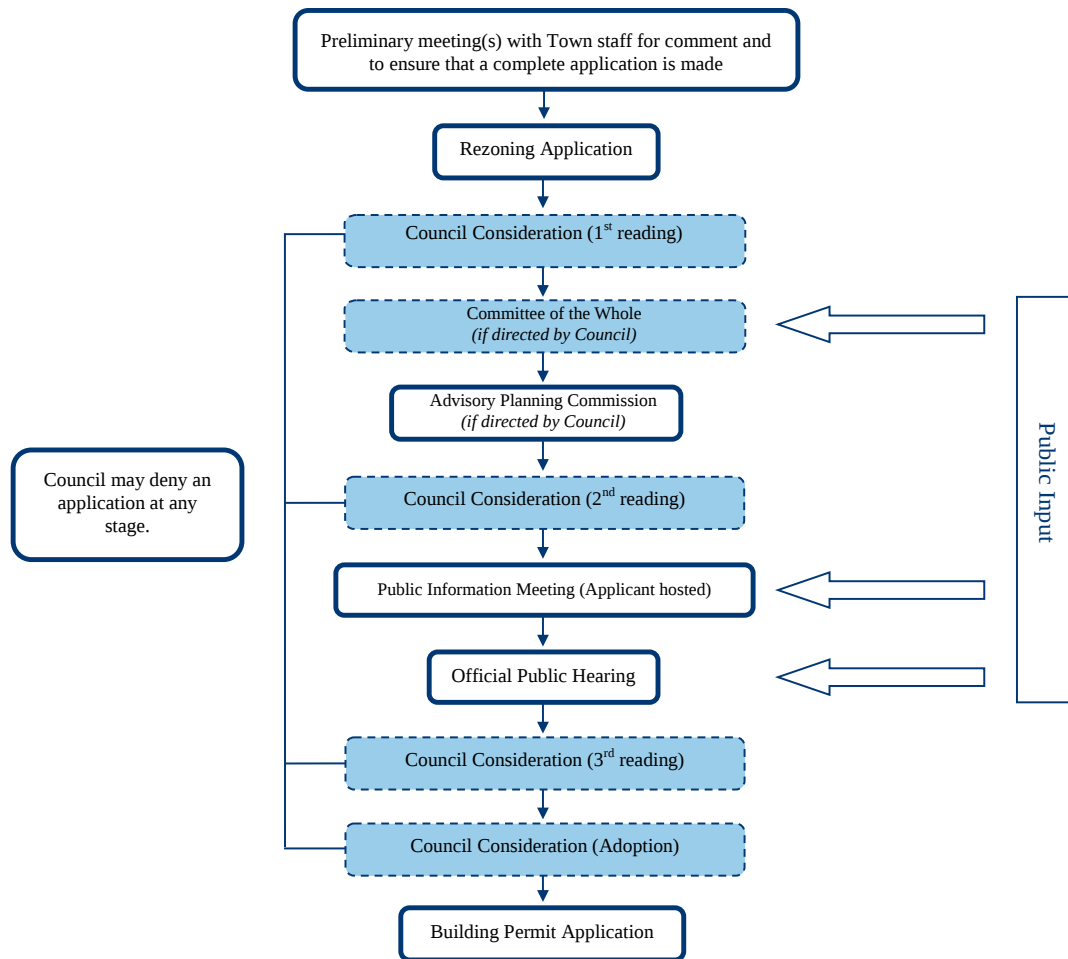
Zoning amendments generally take four to six months from submission of a complete application. This includes a Public Information Meeting and four bylaw readings. Processing times vary widely based on application completeness, complexity and compliance with other legal requirements.

WHAT DOES IT COST?

Rezoning Application Fee: \$4,000

ZONING AMENDMENTS (cont.)

WHAT'S THE PROCESS?



HOW DO I APPLY?

Applications are available on the Town website, www.qualicumbeach.com, and printed copies are available at the Town Hall.

REFERENCES

- Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999
- Town of Qualicum Beach Development Applications Procedures & Fees Bylaw No. 605, 2007

For questions or to schedule appointments please contact:

Luke Sales, Director of Planning

Phone: 250.752.6921

Email: lsales@qualicumbeach.com

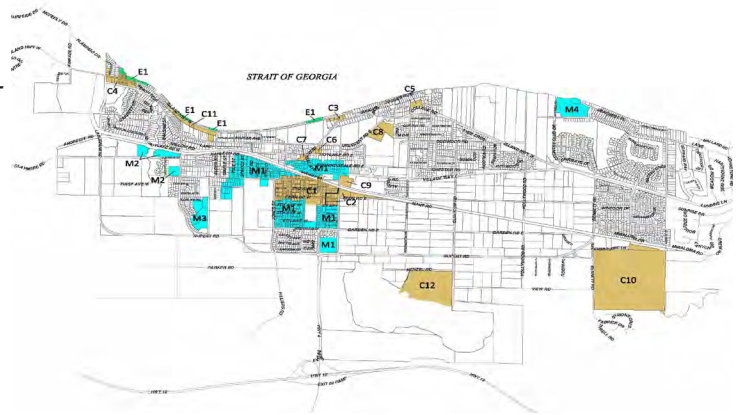
**This document is provided as a summary guide for public convenience only. It should not be considered by any applicant as a guarantee or right for development approval if the steps outlined are followed.*

3. DEVELOPMENT PERMIT

A Development Permit (DP) is required for construction, subdivision or alteration of the land on properties within “Development Permit Areas” designated by “Town of Qualicum Beach Official Community Plan” (OCP) Section 3.2.

Section 488(1) of the *Local Government Act* gives municipalities the authority to create Development Permit areas to:

- Protect the natural environment, its ecosystems and biological diversity (e.g., Ecological Greenways Development Permit Area)
- Protect development from hazardous conditions (e.g. Hazard Land Development Permit Area)
- Protect Farmlands
- Encourage the revitalization of an area in which commercial uses are permitted (e.g. Village Neighbourhood Development Permit Area)
- Establish objectives and guidelines for the form and character of commercial, industrial, and multi-residential development
- Establish objectives to promote energy conservation, water conservation and the reduction of greenhouse gas emissions.



WHAT IS A DEVELOPMENT PERMIT?

Development Permits are a type of development approval given when Council or staff determines that the Development Permit Area “guidelines”, as established in the Official Community Plan, have been met. Some types of Development Permits can be issued by staff, but most require approval from Council. If Council or staff approves a Development Permit, the applicant may still require other approvals such as a building permit.

HOW LONG DOES IT TAKE?

The amount of time required to review a Development Permit application depends on the type of Development Permit and the complexity of the application.

WHAT DOES IT COST?

DP that is not combined with a zoning or OCP

amendment bylaw process: \$500 plus

\$1.50 per square metres of new gross floor area of a building to a maximum of \$4000; or \$500 plus \$50 per lot in a subdivision to a maximum of \$4,000

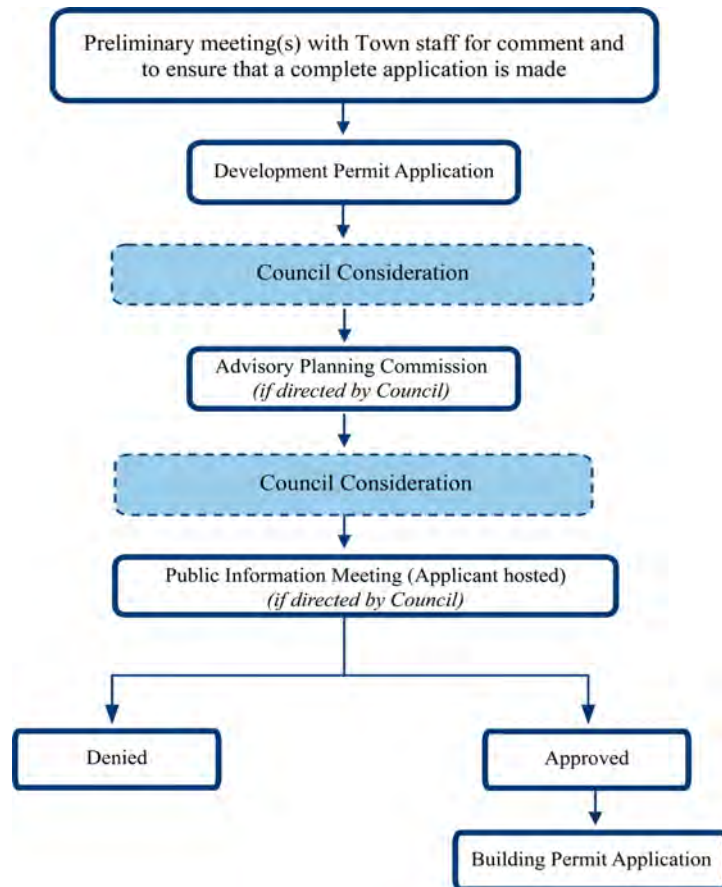
DP combined with zoning of OCP amendment process:

\$100 plus \$0.50 per square metres of new gross floor area of a building to a maximum of \$2,000; or \$100 plus \$10 per lot in a subdivision to a maximum of \$2,000

DP for facade improvements with no additional floor area: \$100

DEVELOPMENT PERMIT (cont.)

WHAT'S THE PROCESS?



HOW DO I APPLY?

Applications are available on the Town website, www.qualicumbeach.com, and printed copies are available at the Town Hall.

REFERENCES

- Town of Qualicum Beach Development Application Procedures and Fees Bylaw No. 605, 2007
- Town of Qualicum Beach Official Community Plan Bylaw No. 800, 2018

The following maps in the Official Community Plan Bylaw No. 800 identify the DPA designations:
Schedule 2.3 Form and Character Development Permit Areas
Schedule 2.4 Ecological Development Permit Areas
Schedule 2.5 Hazardous Lands Development Permit Areas

For questions or to schedule appointments please contact:

Luke Sales, Director of Planning

Phone: 250.752.6921

Email: lsales@qualicumbeach.com

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Town of Qualicum Beach
M E M O R A N D U M

To: Lou Varela, CAO **For:** January 18, 2023 Regular Council Meeting

From: Peter Cornell, Fire Chief
Kevin Goldfuss, Director of Operations

RE: Engine 2 Permanent Storage and Maintenance Funding

RECOMMENDATION:

THAT Council allocates up to \$20,000 in the 2023 budget for the repairs and acquisition of storage space for Engine 2;
AND FURTHER THAT Council allocates up to \$3000 annually for the maintenance and display of Engine 2.

PURPOSE

The purpose of this report is to request funding in 2023 for the acquisition of storage space and repairs for Engine 2, and the annual funding required for the show and repair of the vehicle.

BACKGROUND

Engine 2 served the Town of Qualicum Beach from 1962 until 1990, when it was retired from service. From its retirement until 1998, the Engine was placed out in the weather at the Public Works Yard. In 1998 the Engine moved back inside for eight years to a spot in the newly constructed bay at the Harlech Rd Fire Station. With the delivery of a new tender apparatus in 2006, Engine 2 was placed outside in the Public Works Yard. In 2018 the Engine needed major repairs and refurbishing and was disposed of to a hobbyist that restores vehicles. A collector, after purchasing the refurbished truck, put it up for sale in August of 2020 for \$6000, with a Community Initiative GoFundMe page raising the \$6000 required to purchase it.

The Community Initiative subsequently donated the refurbished Engine 2 back to the Town in the summer of 2022. It has been stored in a bay at the fire station until a permanent place to house it can be found. With the delivery of the New Aerial Platform apparatus in the summer of 2023, the current bay space being used to house Engine 2 will be required to protect frontline apparatus.

At the August 8, 2022, Council meeting, staff was directed to draft a policy regarding the control, operation, and usage of Engine 2. That policy cannot be drafted until funding for maintenance, and storage is determined.

DISCUSSION

Since being refurbished, Engine 2 has been out in the weather before being donated back to the Town, which has allowed some of the chrome and other exterior finishes to diminish. The weather also has affected the mechanical systems, which doesn't allow the vehicle to be safely operated on public roads. The Town of Qualicum Beach Mechanic estimates it will cost approximately \$15,000 to get the mechanical systems and exterior finishes repaired; once repaired, an annual budget of \$3,000 is required for maintenance and upkeep.

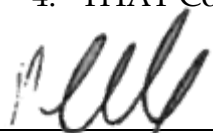
Since being donated to the Town in the summer of 2022, Engine 2 has been stored in a bay at the Rupert Rd Fire Station. As previously mentioned, this bay will be required to accommodate the new Aerial Platform and existing frontline apparatus. It is recognized that if Engine 2 is stored outside in either the summer or winter environment, its mechanical systems and exterior finishes will diminish even further.

The two storage options that provide the best value in the next five years are to modify the storage building next to the Berwick Water Reservoir at a one-time cost of \$5000 or rent a commercial storage unit at an annual cost of \$3600. The Berwick Road option provides a covered and secured location with no monthly fees but is not temperature controlled. The commercial storage unit does provide a secure and dry environment with a reasonable degree of temperature control, but it does have monthly fees and requires the vehicle to be driven back into town for public events.

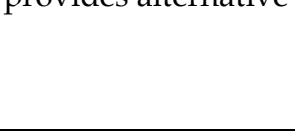
If Council directs staff to proceed with the repairs and storage arrangement for Engine 2, funding is required for staff wages to move and show the vehicle at public events and parades. The funding needed to move and show the vehicle will depend on the number and type of requests and will be included in an Engine 2 use Policy and reflected in the annual budget accordingly.

ALTERNATIVES

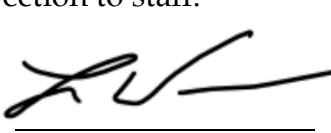
1. Council provides funding in the 2023 budget for immediate repairs, insurance, storage (town storage or private storage) and staff wages for special events.
2. Council authorizes staff to create a separate line item for annual budgets, that allows for the maintenance, repairs, insurance, storage, and staff wages to show case engine 2 at special events.
3. Council authorizes staff to sell engine 2 through the BC BID auction process, with subsequent direction for budget allocation of sale proceeds.
4. THAT Council provides alternative direction to staff.



Peter Cornell
Fire Chief
Report Writer



Kevin Goldfuss
Director of Operations
Concurrence



Lou Varela
CAO
Concurrence



Genelle Conn
Interim Director of Finance
Concurrence

**Town of Qualicum Beach
M E M O R A N D U M**

TO: Luke Sales, Director of Planning

FOR: Regular Council Meeting, January 18, 2023

FROM: Mark Eshpeter, Building Inspector

SUBJECT: **Registry of Section 57 *Community Charter* Notice against Land Title
345 Burnham Rd – LOT 1, DL 63, LD 35, PLAN EPP61122, PID 029-902-762**

RECOMMENDATION:

THAT Council directs the Corporate Administrator to register a notice in the Land Title Office, under Section 57 of the *Community Charter*, stating that a resolution relating to **345 Burnham Rd – LOT 1, DL 63, LD 35, PLAN EPP61122, PID 029-902-762**, has been made;

AND FURTHER THAT the matter be referred to a solicitor for further action to correct and/or remove all non-compliant uses and alterations to the structure.

PURPOSE:

To consider a Section 57 Notice Against Land Title regarding non-compliant structures and uses at 345 Burnham Rd.

A Notice against Land Title is an enforcement tool used by local governments in British Columbia. It involves the local government placing a notice on the title of a property at the Land Title Office to notify anyone searching the title of a property that the property in question may be in breach of local government bylaws or regulations.

BACKGROUND:

- On May 2, 2022 a complaint was received regarding this property's encroachments and use. A site visit was performed and it was noted that construction had occurred to create livable space within an attached garage without a valid Building Permit or approvals from the Town.
- On May 6, 2022 a letter was sent via registered mail to the owner of the property regarding the concern and the violation of the Towns Building and Zoning Bylaws, with an inspection date set for May 19, 2022.
- An onsite inspection was conducted, and it was observed that the existing non-conforming structure with attached garage had been altered and its use had been changed from a storage space to become a habitable dwelling unit. The alterations included plumbing for washrooms, installation of windows, and conversion of the garage into conditioned sleeping rooms.
- On June 14, 2022 an update letter was sent specifying the violations and the process and procedures that needed to be followed to bring the structure into compliance. As the structure has changed to residential use, the non-conforming siting of the structure requires a variance. The construction which was completed without a permit would need approvals, inspections, and alterations to comply with the BC Building Code.

DISCUSSION:

This property was originally part of a larger parcel with 357 Burnham Rd. The original parcel included a dwelling and detached garage that were constructed prior to 1967. In 1991, an application was approved to add a small studio to the non-conforming sited detached garage (southwest corner), with the addition complying with the required setbacks.

At an unknown date, the studio and garage was subdivided from the larger lot to create Lot 14 and Lot A. In 2016, an amendment was made to enlarge Lot 14 to an equal size of Lot A, creating new Lots 1 and 2. The survey supplied at the time of subdivision showed a garage encroaching and located on the property line at the southwest corner, with an attached structure labeled as 'house' and deck with a very small connecting wall, which is consistent with the permit issued in 1991.

Ownership of this property changed hands in 2016 at the same time as the subdivision. It appears that the changes and additions that caused the non-conforming siting and uses occurred after the change in ownership.

The Building Inspector has given the Corporate Administrator a copy of this report and the recommendation in writing. The registered owner was sent a letter giving notice that Council will consider this issue on January 18, 2023 and that the owner has an opportunity to be heard by Council at the January 18, 2023 regular meeting of Council. A copy of the letter is attached.

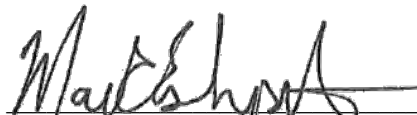
The Section 57 Notice on Title, if approved by Council, will be filed at the Land Title Office and will remain on title until such time as the situation is corrected, the property owner requests removal, and notice cancellation is authorized. The Town's Miscellaneous Rates Bylaw No. 638, 2009, Amendment Bylaw No. 638.02, 2010 currently sets the fee of \$300 to the property owner to have a Notice on Title removed/cancelled.

SUMMARY:

The Town's Land Use and Subdivision Bylaw, Building Bylaw, and the BC Building Code are in place to regulate the use, siting, construction, alteration, repair, and demolition of structures for reasons of Health, Safety and the Protection of persons and property.

ALTERNATIVES

1. THAT a Notice on Title be placed on the property for contravention of bylaws.
2. THAT the matter be referred to a solicitor for further action to correct or remove all non-compliant and encroaching structures and habitable spaces constructed after December 2, 2015.
3. THAT staff be provided alternative direction.


Mark Eshpeter, Building Inspector
Report Writer


Luke Sales,
Director of Planning
Concurrence


Heather Svensen, Corp. Admin
Concurrence


Lou Varela, MCIP, RPP
CAO
Concurrence



TOWN OF QUALICUM BEACH

INCORPORATED 1942

201 – 660 Primrose St.
P.O. Box 130
Qualicum Beach, BC
V9K 1S7

Telephone: (250) 752-6921
Fax: (250) 752-1243
E-mail: qbtown@qualicumbeach.com
Website: www.qualicumbeach.com

December 1, 2022

Sent via registered mail

Building Code Violation – Non-compliant Structures and Uses 345 Burnham Road – LOT 1, DL 63, LD 35, PLAN EPP61122, PID 029-902-762

Further to the Town's previous correspondence between yourself and the Town's Building Inspector, I am writing to you today regarding the non-compliant structures and uses at the above noted property. You are invited to attend the January 18, 2023 regular meeting of Council to SHOW CAUSE as to why the Town Council should not direct me to file a Notice Against Title of the above referenced property pursuant to Section 57 of the *Community Charter*.

This public meeting is scheduled to take place on January 18, 2023 at 10:00 am in the Council Chamber, 660 Primrose Street, Qualicum Beach, BC.

If the issues identified by the Building Inspector are brought into conformance, and certified by our Building Inspector, prior to the January 18, 2023 regular Council meeting, the recommendation to file the Notice Against Title will be withdrawn.

For your convenience, I have enclosed relevant extracts of the *Community Charter*, and a copy of the staff report which will be considered by Council. I would encourage you to seek legal counsel for a full explanation of how your interests in the subject property could be affected by this proposed action.

If you require any clarification on the process required to bring the building into conformance, please contact the Building Inspector, Mark Eshpeter, at 250-752-6921 or building@qualicumbeach.com. If you have questions regarding appearing at the Council meeting, please contact my Deputy, Weslie Gould, at 250-738-2190 or wgould@qualicumbeach.com.

Sincerely,

Heather Svensen
Corporate Administrator

n:\0100-0699 administration\0110 administration-general\0110-20 convenience files\letters\2022\notice on title - 345 burnham road.docx

**Town of Qualicum Beach
M E M O R A N D U M**

TO: Luke Sales, Director of Planning **FOR:** Council Meeting, January 18, 2023

FROM: Rebecca Augustyn, Planner

SUBJECT: Development Variance Permit: 864 Royal Dornoch Drive

RECOMMENDATION

THAT Council directs staff to fulfill statutory notification requirements so that Council can consider issuance of a Development Variance Permit for 864 Royal Dornoch Drive at the Council Meeting on February 8, 2023.

PURPOSE

To consider a Development Variance Permit for the property located at 864 Royal Dornoch Drive that would vary the minimum interior lot line setback and minimum rear lot line setback to permit an accessory building (art studio).

BACKGROUND

A Development Variance Permit has been requested for 864 Royal Dornoch Drive. The property is zoned Residential 7 (R7) and is under Land Use Contract Authorization Bylaw No. 350, 1978. To the east of the property is a large Town-owned forested lot. To the south is a residential lot. The minimum rear lot line setback is 3.0m and the minimum interior lot line setback is 2.1m for parcels that have over 23m of frontage. The owner is planning to build an art studio located on the southeast corner of the parcel. Given the proximity to the interior lot line and rear lot line, a variance is required.



Figure 1: Subject Property

DISCUSSION

The owner of 864 Royal Dornoch Drive has applied to vary the minimum rear lot line setback and minimum interior lot line setback to accommodate an art studio. The proposal is to vary rear setback from 3.0m to 0.15m, which requires a 2.9m variance. As well, the interior lot line setback is proposed to be varied from 2.1m to 0.15m, which requires a 2.0m variance. In similar residential zones in other parts of Town, including Residential 1 and Residential 14, if an accessory building has an area less than 10m² and is less than 3m in height, the interior lot line setback and rear lot line setback are reduced to 0m. Given the proposed art studio will be no more than 3m in height and is 14m² in area, staff find it supportable to consider a variance as it would not be substantially different than other residential zones.

SUMMARY

A Development Variance Permit application has been received for 864 Royal Dornoch Drive. The proposed variance for 864 Royal Dornoch Drive would vary the minimum rear lot line from 3.0m to 0.15m and the minimum interior lot line from 2.1m to 0.15m. Staff recommend Council consider the issuance of a Development Variance Permit at a future meeting of Council.

ALTERNATIVES

1. Refuse the Development Variance Permit for 864 Royal Dornoch Drive; or
2. Provide alternative direction to staff.



R. Augustyn, MCIP, RPP
Planner
Report Writer



Luke Sales, MCIP, RPP
Director of Planning
Concurrence



Lou Varela, MCIP, RPP
CAO
Concurrence

Attachments

[PLANS.864RoyalDornochDrive.Jan182023.pdf](#)

Development Variance Permit Application December 11, 2022

864 Royal Dornoch Drive Qualicum Beach BC V9K 2J9

Schedule 1

We wish to build a 156 sq. foot art studio in the southeast corner of the property. The studio would be for wood carving and sculpting. It would have electricity and heat. It is not designed for and will not be used for habitation.

Out lot is 8,712 sq. feet. The house is 1695 sq. feet, the attached garage is 480 sq feet. There is an 80 sq. foot garden shed. The studio would be 12' x 13' = 156 sq. feet. The combined developed total is 2411 sq. feet which is 27.64 % of the property.

There are no developments or neighbours on either side of our property; adjacent to where the studio would be. To the east is city property, a narrow green space leading to a larger green space: PT Lot 126. Next to that is the property of Ian and Diana Blaikie Lot 43, 870 Royal Dornoch Drive: they support the variance and development. To the south is lot 136 which is vacant, next to that lot 135 the property of Shirley and Dave, 538 Sandwedge Close; they support the application for variance and the development.

A boundary survey was completed on October 13, 2022. The confirmation of the property boundaries allowed us to ensure the fence we built, and the proposed studio are within our property boundaries. Photo 1: the fence we built along the east side of the property. Photos 2 & 3 show the location of the proposed studio.

A second survey and building diagrams was completed on December 2, 2022; see the attached survey. The studio would be 156 sq feet sitting 0.3048 meters (12") inside of the east and south property lines. It is my understanding that we would be able to build a building up to 108 sq. feet in this location. The requested variance would allow an extra .914 meters (36") of building along the south property line and an extra .6096 meters (24") of building along the east property line.

Steve Boechler and Karen Sterner.

PLAN OF LOT 137, DISTRICT LOT 122, NANOOSE DISTRICT, PLAN VIP59818.

SHOWING PROPOSED BUILDING THEREON (FOR DEVELOPMENT VARIANCE PERMIT APPLICATION).

SCALE 1:200

ALL DISTANCES ARE IN METRES.

FOR BUILDING INSPECTION ONLY.

AS PER BUILDING PLANS RECEIVED NOVEMBER 28, 2022.

JURISDICTION: TOWN OF QUALICUM BEACH

PID NO: 018-951-538

CIVIC ADDRESS: 864 ROYAL DORNOCH DRIVE,
QUALICUM BEACH, BC

NOTES:

PROPOSED PARCEL COVERAGE: 30.5%

BUILDING SETBACKS DERIVED FROM
"LAND USE CONTRACT AUTHORIZATION
BYLAW NO. 350, 1978"

2.0m VARIANCE REQUIRED FOR SOUTH LOT LINE

2.9m VARIANCE REQUIRED FOR EAST LOT LINE

INSPECTED THIS 2ND DAY OF DECEMBER, 2022.

Neil Bauder
D3K5I3

Digitally signed by Neil
Bauder D3K5I3
Date: 2022.12.02
15:28:32 -08'00'

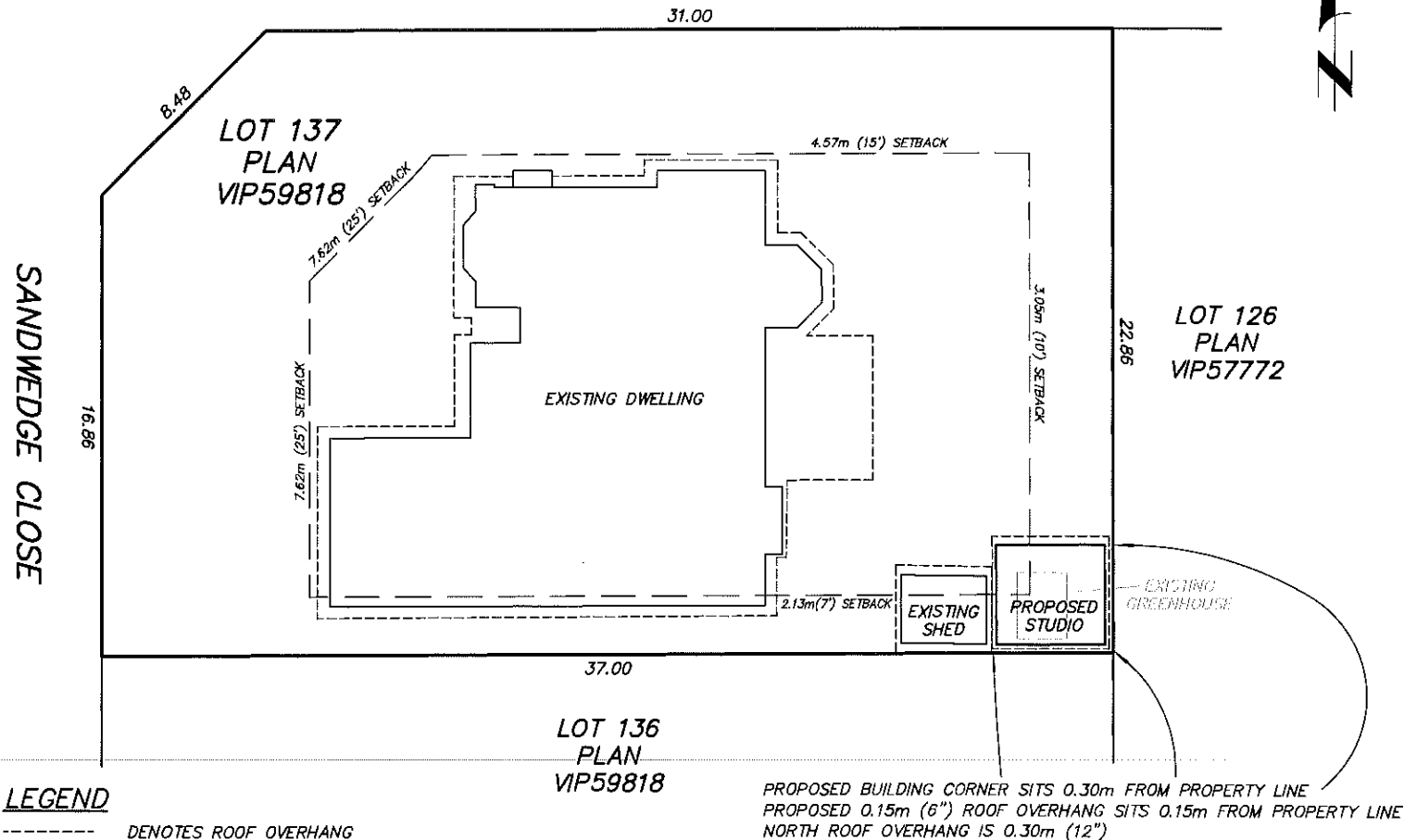


223 FERN ROAD W.
QUALICUM BEACH, B.C. V9K 1S4
PHONE: 250-752-9121
FAX: 250-752-9241
FILE NUMBER: 22-164-BL
DRAWING FILE: 22-164 BL1.dwg
DATE: 2022-12-02

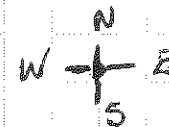
LEGEND

----- DENOTES ROOF OVERHANG

ROYAL DORNOCH DRIVE



864 Royal Darnoch Dr.
Qualicum Beach



31 m

22,860 m

18,860 m

↑ 1.676 m.
↓

37 m

Proposed
Studio

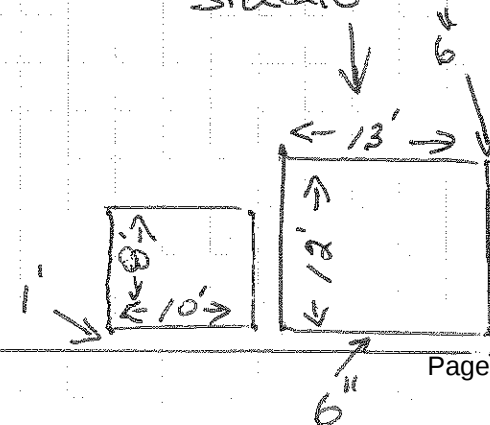


Photo #1



Photo #2

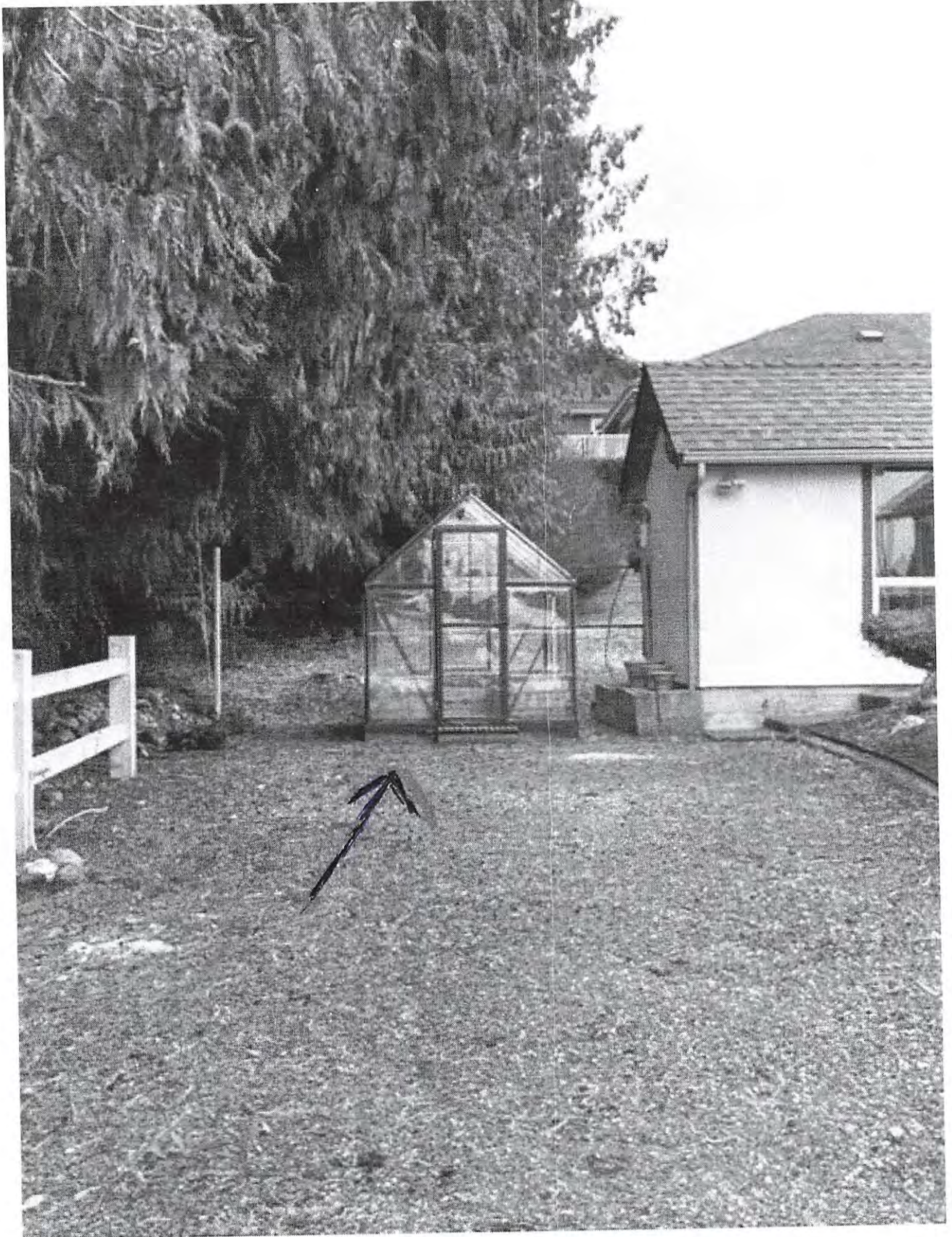


Photo #3



Town of Qualicum Beach
M E M O R A N D U M

TO: Luke Sales, Director of Planning

FOR: Council Meeting, January 18, 2023

FROM: Rebecca Augustyn, Planner

SUBJECT: Agricultural Land Reserve Exclusion Application: 230/250/270 Rupert Road East

RECOMMENDATION

THAT Council forwards the exclusion application for 230/250/270 Rupert Road to the Agriculture Land Commission for consideration, as detailed in the August 10, 2022 Planning memo to Council.

PURPOSE

The purpose of this agenda item is to consider public input on the exclusion application for 230/250 Rupert Road.

BACKGROUND

The Town has received an Agricultural Land Reserve (ALR) exclusion application and zoning amendment application to permit a single-family dwelling on 230 Rupert Road. The subject property is a strata subdivision and includes 230 Rupert Road, 250 Rupert Road and 270 Rupert Road. As well, both 230 Rupert Road and 250 Rupert Road are within the Agricultural Land Reserve. The proposal is to replace the garden centre at 230 Rupert Road with a single-family dwelling, which would result in a total of three single-family dwellings on the three strata parcels.

To permit the conversion of the garden centre to another use (farm use or non-farm use), both a zoning amendment and ALR exclusion application are required. The exclusion application is being advanced prior to the zoning amendment because the zoning amendment, if approved, would allow three single-family dwellings on the subject property, which would be in contravention of ALR policies and regulations. As such, the Town is only progressing with the exclusion application at this time. Due to the recent ALC policy changes, private landowners are no longer able to make an application for an ALR exclusion. Instead, the local government, or First Nation, or prescribed bodies may submit an application on their behalf.

On August 10, 2022, Council adopted the following motion:

- THAT the bylaw entitled “Town of Qualicum Beach Land Use and Subdivision Bylaw No. 580, 1999, Amendment (230/250/270 Rupert Road East) Bylaw 580.133, 2022” be introduced and read a first time;
- AND FURTHER THAT Council directs staff to initiate the Agriculture Land Reserve exclusion application process for 230 Rupert Road, as detailed in the August 10, 2022 Planning memo to Council.

On November 23, 2022 Council adopted the following motion:

- THAT Council hold a Public Hearing on January 18, 2023 at 10:00 am at the Qualicum Beach Town Hall, 660 Primrose Street, Qualicum Beach in regard to the Agricultural Land Reserve Exclusion Application for 230/250/270 Rupert Road East.



Figure 1: Subject Property

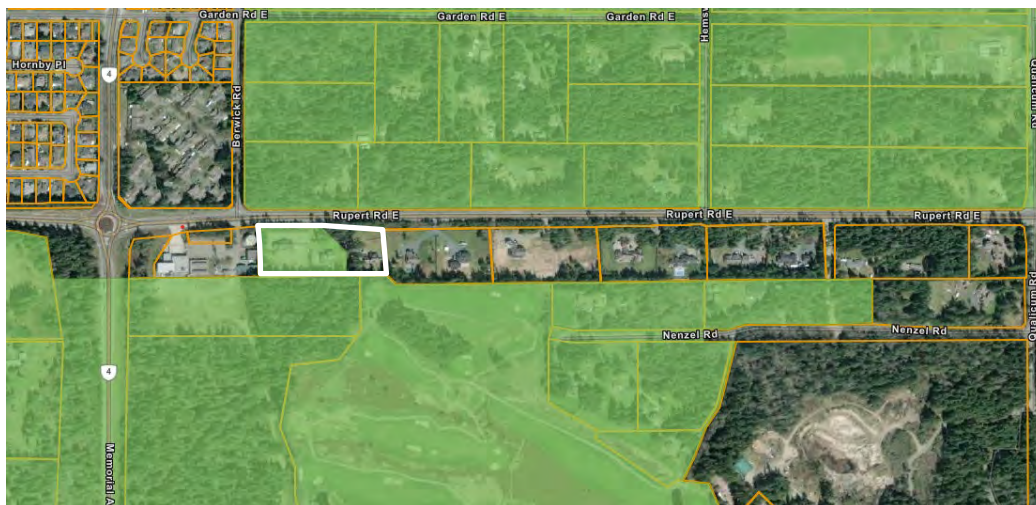


Figure 2: Subject Property in Relation to ALR Properties

DISCUSSION

As per Council direction, staff have initiated the ALR exclusion process. To date, an application has been initiated, and staff have been in contact with the ALC to advance the exclusion process. As part of the exclusion process, a Public Hearing, held by the Town, is required.

It is important to note that the ALR exclusion process is separate from the zoning amendment process, and as a result, the Public Hearing proposed for January 18, 2023 is for the exclusion process only. The public should comment on whether the property should be excluded from the ALR, and not on the Town's zoning bylaw or other matters. If the exclusion application were to be successful, at that time staff would bring the zoning amendment before Council, and as part of the zoning amendment process, a second Public Hearing would be held.

SUMMARY

The Town has received a zoning amendment and ALR exclusion application for 230/250/270 Rupert Road to convert the existing garden centre into a single-family dwelling. As per Council direction, staff have initiated the ALR exclusion process, and as part of this process, a Public Hearing is required. At this time, only the ALR exclusion process is being advanced. Without the benefit of public input on whether the land should be excluded from the ALR, staff recommend the application be forwarded to the Agricultural Land Commission for consideration.

ALTERNATIVES

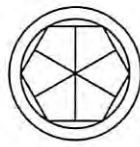
1. THAT the ALR exclusion application for 230/250/270 Rupert Road East be cancelled;
2. THAT Council provides alternative direction to staff.


R. Augustyn, MCIP, RPP
Planner
Report Writer
Luke Sales, MCIP, RPP
Director of Planning
Concurrence
Lou Varela, MCIP, RPP
CAO
Concurrence

Attachments:

[PLANS.230RupertRoad.Nov232022.pdf](#)
[exclusion_application_guide%20-%20excerpt.pdf](#)

/2023/01 18 Regular Council Meeting/memo.230RupertRoad.Jan182023.docx



PRISM
LAND SURVEYING LTD.



2022-03-10

Town of Qualicum Beach
201-660 Primrose Street
Qualicum Beach,
B.C. V9K 1S4

Date Received

MAR 14 2022

File No.

3900-20-580.133

Acknowledgement

Received

LS/RA/ME/BW/AS/Line

Attention: Luke Sales

Dear Luke:

**RE: Strata Lots 2, 3 and 4, District Lot 78, Newcastle District, Strata Plan VIS6641, Together with an Interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lot as Shown of Form V
230, 250 and 270 Rupert Road**

On behalf of our client, Craig Gooding, owner of the vacant garden centre on Strata Lot 4 (230 Rupert Road), we are applying for a zoning amendment. The purpose of this rezoning application is to convert the garden centre to a residence.

Strata Lots 2, 3 and 4 are individually owned. However, the three building strata lots are considered one parcel when applying the Rural 3 (A3) zone. All strata lots are zoned A3 and the boundary of Strata Lots 3 and 4 are in the Agricultural Land Reserve.

The A3 zone currently allows for 2 dwelling units on a parcel having an area of 2.0ha. In order to convert the garden centre to a residential use, a zoning amendment application is required to allow for 3 dwelling units on a parceling having an area of 2.0ha or more.

We have received letters of support for this zoning amendment from the owners of Strata Lots 2 and 3. Accordingly, 100 percent of the strata members are in favour.

The garden centre on Strata Lot 4 has been vacant since 2009. The conversion of the garden centre to a residence will ensure this building is inhabited and maintained. The conversion will be an asset to the surrounding neighbours, rather than a detriment that an unoccupied building can pose.

STRATA PLAN OF LOT 2, DISTRICT LOT 78, NEWCASTLE DISTRICT, PLAN VIP83148.**B. C. S. 92F.038****SCALE 1:750**

10 5 0 10 20 30 Metres

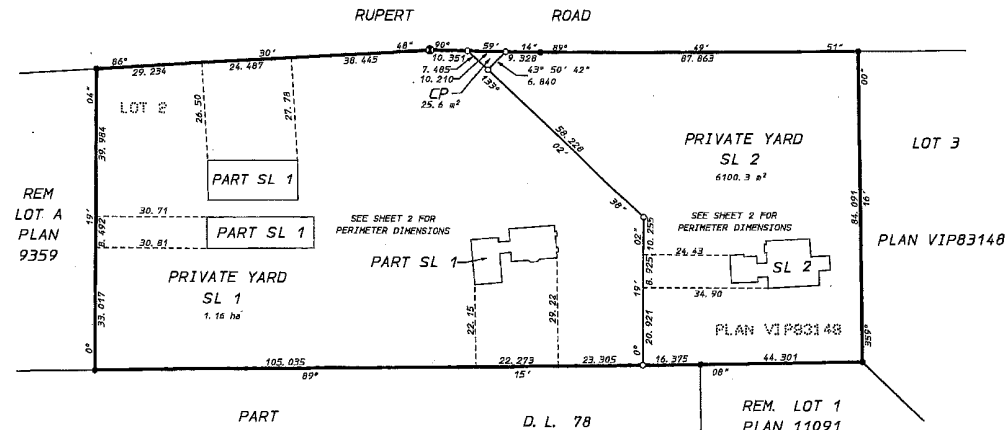
LEGENDAll distances are in Metres.
Bearings are Astronomic and derived from Plan VIP83148

- Denotes Standard Clipped Post found.
● Denotes Standard Iron Post found.
○ Denotes Standard Iron Post set.

LCP Denotes Limited Common Property.
CP Denotes Common Property.
SL Denotes Strata Lot.

Strata Lot boundaries are defined by exterior of floors, walls and ceilings, except where otherwise noted.
All decks and porches are defined as to height, by the centre of the floor above on its extensions or where there is no floor above, by the average height of a Strata Lot within the same building unless otherwise indicated.

Amended Pursuant to Section 259 Strata Property Act
this day December 10, 2013 See Amended Sheet 1 of 3
CA3499812

**SIMS ASSOCIATES**

LAND SURVEYING
223 FERN ROAD WEST,
QUILICUM BEACH, B.C.
V1K 1S4
PHONE: (250) 752-9121
FAX: (250) 752-9241
CELL: (250) 167-87
CONS. 06-192-181

Mortgage & Assignment of rents
V.V.B. CAPITAL CORP.
Owner of Charge Nos. CA651455, CA651456

Authorized Signatory

Authorized Signatory

Witness as to above Signatures

Occupation of Witness

Address of Witness

Mortgage
SUNRAY DEVELOPMENTS LTD.
Owner of Charge No. CA651490

Authorized Signatory

Authorized Signatory

Witness as to above Signatures

Occupation of Witness

Address of Witness

Mortgage
ALBERT HOLDINGS
Owner of Charge No. FB2924

Authorized Signatory

Authorized Signatory

Witness as to above Signatures

Occupation of Witness

Address of Witness

Manager - DFO
2402 Gilbert Crt. Burlington, ON L7R 4G4

Mortgage
ACREDIT MORTGAGE LTD.
Owner of Charge No. CA21777X

Jeffrey A. Moser
Authorized Signatory Jeffrey A. Moser

Authorized Signatory
A. Van Groenou

Witness as to above Signatures
A. Van Groenou

Occupation of Witness
4054 Knibbs Green
Victoria BC V8Z 6Y7

Address of Witness

Sheet 1 of 3 Sheets

STRATA PLAN VIS 6641

Deposited and Registered in the Land Title
Office of Victoria, B.C., this 15 day of
August 2008.

Registrar
F829273

Registered Owners
EHR LEONARDO ARIANAS DUYENVOORDE

Witness as to above Signatures
TERAH LEIGH DUYENVOORDE

Occupation of Witness
223 Fern Road West
Quilicum Beach V1K 1S4

Address of Witness

Witness as to above Signatures

Admin. Assistant
Occupation of Witness

223 Fern Road West

Quilicum Beach V1K 1S4

Address of Witness

I, Michael A. Sles, a British Columbia
Land Surveyor, certify that the buildings
shown on this strata plan are within the
external boundaries of the land that
is the subject of the strata plan.
Date JUNE 12th 2008.

Michael A. Sles B.C.L.S.

I, Michael A. Sles, a British Columbia
Land Surveyor, certify that the buildings
included in this strata plan have not, as of
MAY 3rd 2008,
been previously occupied.

Michael A. Sles B.C.L.S.

This plan lies within the Regional
District of Nanaimo and the
Part A/Albert Assessment District.

The civic address is 250 & 270
Rupert Road E. Quilicum Beach, BC

I, Michael A. Sles, a British Columbia
Land Surveyor, of the Town of Quilicum
Beach, in British Columbia, certify that
I was present at and personally superintended
the survey represented by this Plan and that
the survey and Plan are correct.
The field survey was completed on the
6th day of June 2008. The plan
was completed and checked, and the checklist
filed under No. 82497, on the 12th
day of JUNE 2008.

Michael A. Sles B.C.L.S.

**SUBDIVISION PLAN OF STRATA LOT 1 OF STRATA PLAN VIS6641,
DISTRICT LOT 78, NEWCASTLE DISTRICT**

AMENDED SHEET 1 OF 3 SHEETS

STRATA PLAN VIS6641

PURSUANT TO SECTION 259, STRATA PROPERTY ACT.

BCGS 92F.038

*Amended Pursuant to Section 263 Strata Property Act
This Day December 10, 2013 See Amended Sheet 1/3
CA3494818*

0 5 10 15 20 25 50 75

THE INTENDED PLOT SIZE IS 432mm IN HEIGHT AND 560mm IN WIDTH
(C SIZE) WHEN PLOTTED AT A SCALE OF 1:750

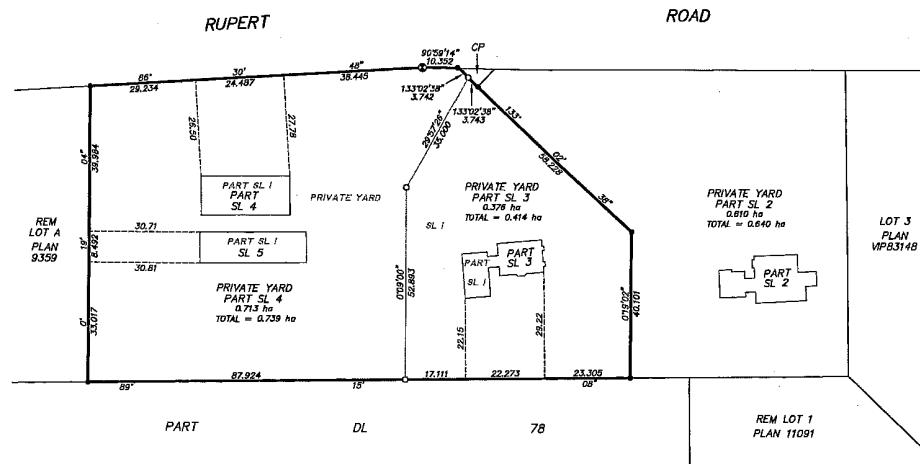
LEGEND

ALL DISTANCES ARE IN METRES AND DECIMALS THEREOF.
BEARINGS ARE ASTRONOMIC AND ARE DERIVED FROM PLAN VP83148.
● DENOTES A STANDARD CAPPED POST FOUND.
■ DENOTES A STANDARD IRON POST FOUND.
○ DENOTES A STANDARD IRON POST SET.

STRATA LOT BOUNDARIES ARE DEFINED BY EXTERIOR
OF FLOORS, WALLS AND CEILINGS UNLESS
OTHERWISE NOTED.
ALL DECKS AND PORCHES ARE DEFINED AS TO HEIGHT,
BY THE CENTRE OF THE FLOOR ABOVE OR ITS
EXTENSIONS OR WHERE THERE IS NO FLOOR ABOVE,
BY THE AVERAGE HEIGHT OF A STRATA LOT WITHIN
THE SAME BUILDING UNLESS OTHERWISE INDICATED.

THE BUILDINGS SHOWN HEREON ARE WITHIN THE
EXTERNAL BOUNDARIES OF THE LAND THAT IS
THE SUBJECT OF THIS STRATA PLAN.

THE BUILDINGS INCLUDED IN
THIS STRATA PLAN HAVE BEEN
PREVIOUSLY OCCUPIED.

**SIMS ASSOCIATES**

LAND SURVEYING LTD.
223 FERN ROAD W.
QUALICUM BEACH, B.C. V8K 1S4
PHONE: 250-752-9121
FAX: 250-752-8241
FILE NUMBER: 10-275-ST
DRAWING NUMBER: 10-275-1A-MD-ST.dwg

THIS PLAN LIES WITHIN THE JURISDICTION OF THE APPROVING
OFFICER FOR THE TOWN OF QUALICUM BEACH.

THIS PLAN LIES WITHIN THE REGIONAL DISTRICT OF NANAIMO
THIS PLAN LIES WITHIN THE AGRICULTURAL LAND RESERVE

THE FIELD SURVEY REPRESENTED BY THIS PLAN WAS
COMPLETED THE 29TH DAY OF NOVEMBER, 2012.
MICHAEL A. SIMS, BCLS

**REFERENCE PLAN TO ADD SL 5 TO THE COMMON PROPERTY OF STRATA PLAN VIS6641,
DISTRICT LOT 78, NEWCASTLE DISTRICT.**

**PURSUANT TO SECTION 263, STRATA PROPERTY ACT,
BCGS 92F.039**

SECOND AMENDED SHEET 1 OF 3 SHEETS
STRATA PLAN VIS6641



THE INTENDED PLOT SIZE IS 432mm IN HEIGHT AND 580mm IN WIDTH
(0.585) WHEN PLOTTED AT A SCALE OF 1:750

LEGEND

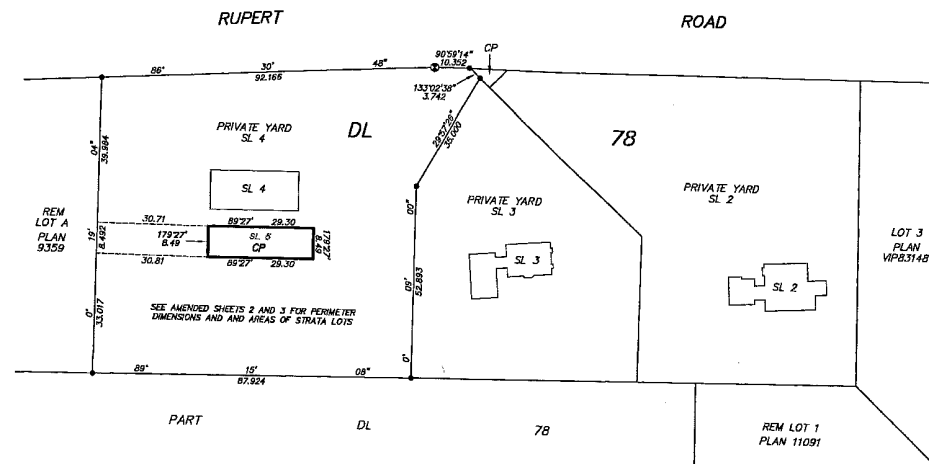
ALL DISTANCES ARE IN METRES AND DECIMALS THEREOF.
BEARINGS ARE ASTRONOMIC AND ARE DERIVED FROM PLAN VP83148.

- DENOTES A STANDARD CAPPED POST FOUND.
- DENOTES A STANDARD IRON POST FOUND.

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THE BUILDINGS INCLUDED IN
THIS STRATA PLAN HAVE BEEN
PREVIOUSLY OCCUPIED.



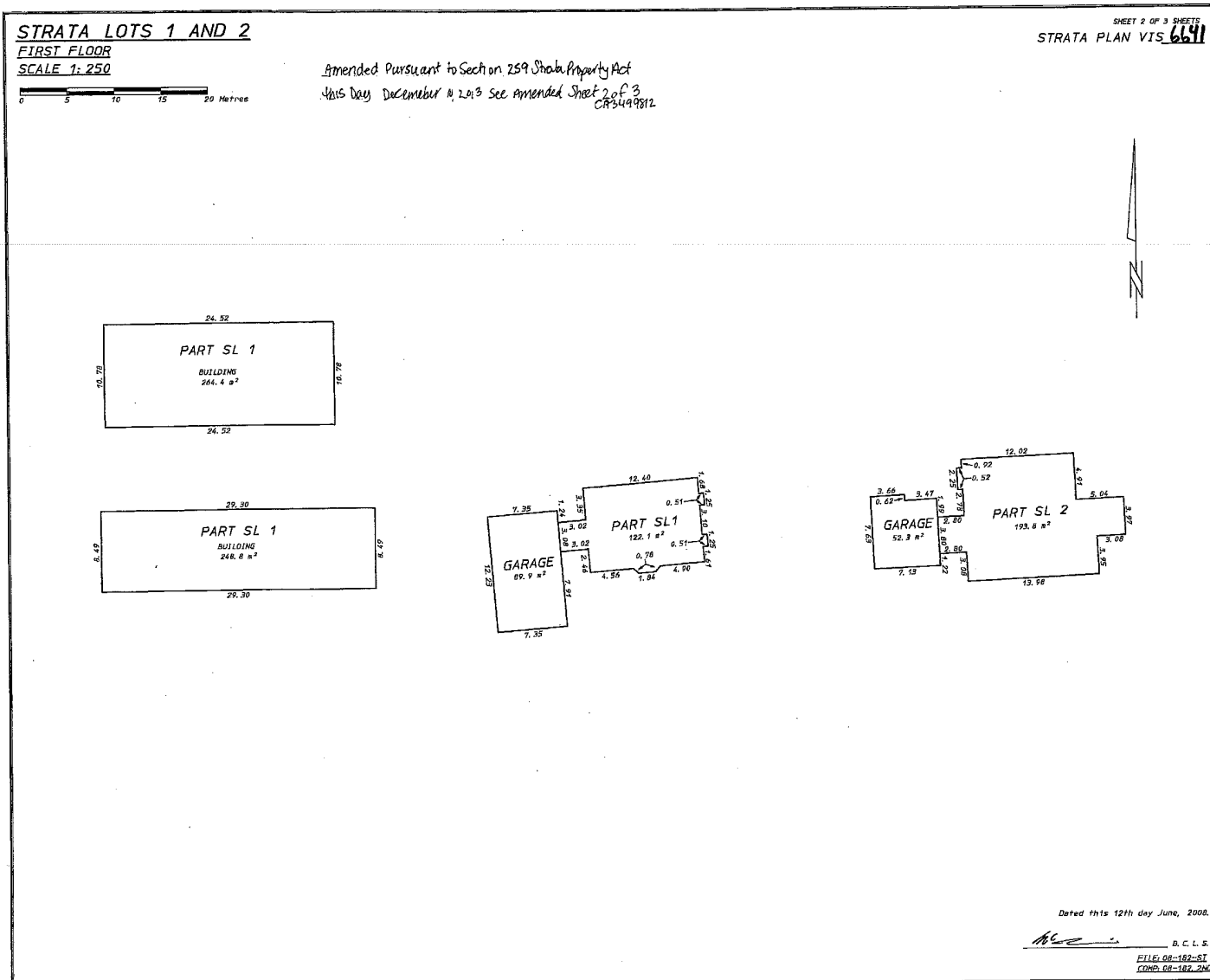
SIMS ASSOCIATES

LAND SURVEYING LTD.
223 FERN ROAD W.
QUALICUM BEACH, B.C. V1K 1S4
PHONE: 250-752-0121
FAX: 250-752-0241
FILE NUMBER: 10-275-ST
DRAWING NUMBER: 10-275-2ND-AMEND-ST.dwg

THIS PLAN LIES WITHIN THE JURISDICTION OF THE APPROVING
OFFICER FOR THE TOWN OF QUALICUM BEACH.

THIS PLAN LIES WITHIN THE REGIONAL DISTRICT OF NANAIMO
THIS PLAN LIES WITHIN THE AGRICULTURAL LAND RESERVE

THE FIELD SURVEY REPRESENTED BY THIS PLAN WAS
COMPLETED THE 28TH DAY OF NOVEMBER, 2012.
MICHAEL A. SIMS, BOLS

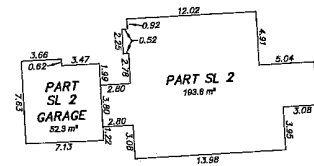
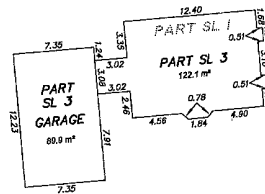
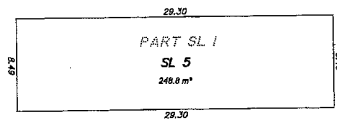
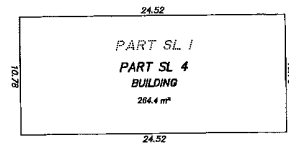


STRATA LOTS 2, 3, 4 AND 5**FIRST FLOOR**

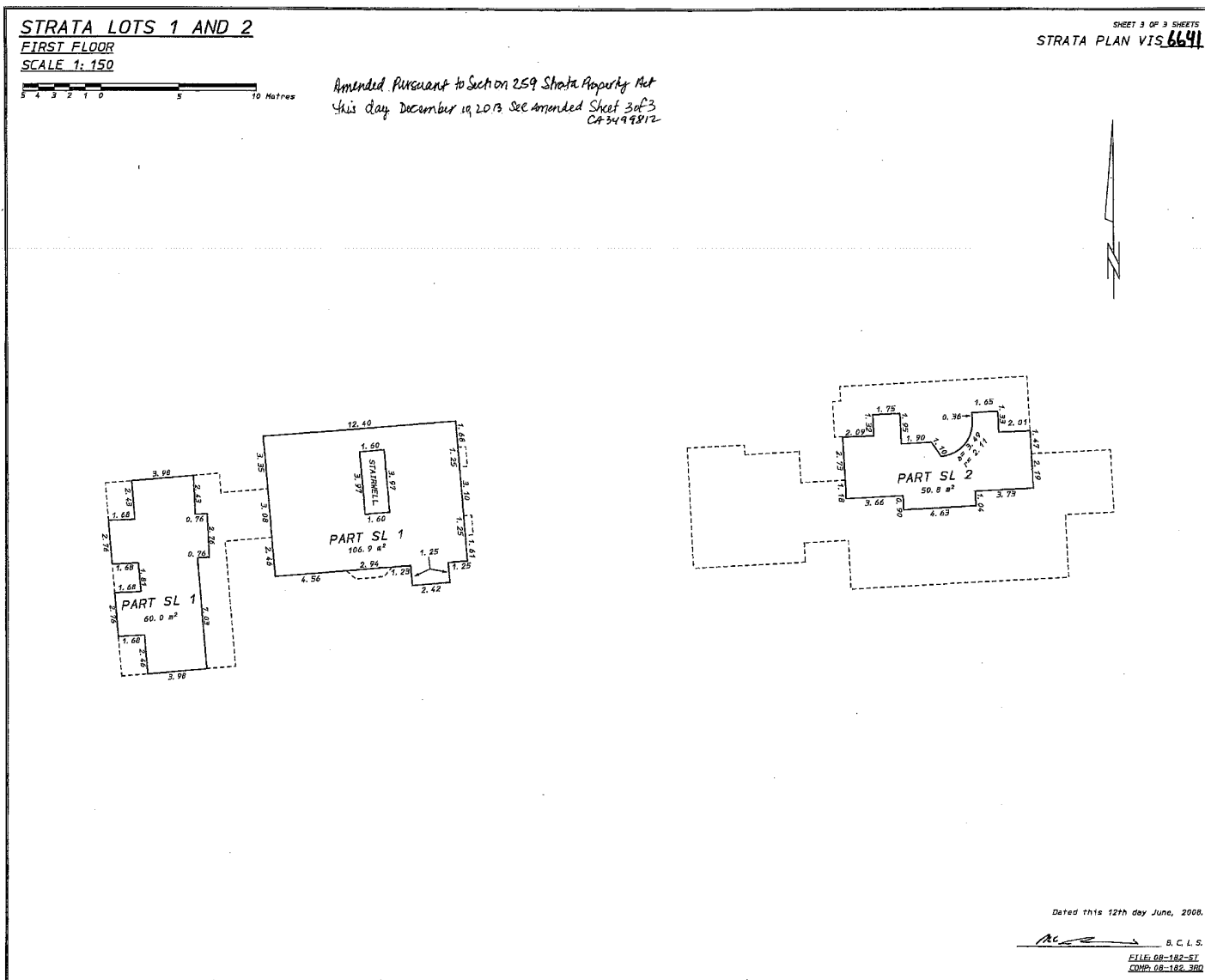
THE INTENDED PLOT SIZE IS 432mm IN HEIGHT AND 550mm IN WIDTH
(C SIZE) WHEN PLOTTED AT A SCALE OF 1:250

*Amended Pursuant to Section 263 Strata Property Act
This day December 10, 2013 See Amended Sheet 2 of 3
CNS499818*

AMENDED SHEET 2 OF 3 SHEETS

STRATA PLAN VIS6641**DL 78****STRATA PLAN
VIS6641****SIMS ASSOCIATES**

LAND SURVEYING LTD.
223 FERN ROAD W.
QUALICUM BEACH, B.C. V9K 1S4
PHONE: 250-752-8121
FAX: 250-752-1241
FILE NUMBER: 10-275-ST
DRAWING NUMBER: 10-275-1AM0-S2.dwg

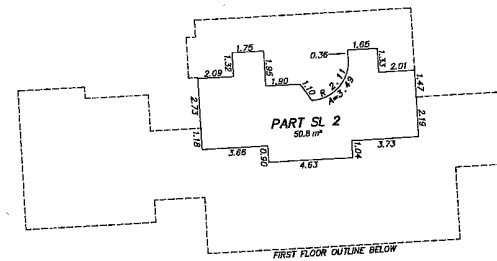
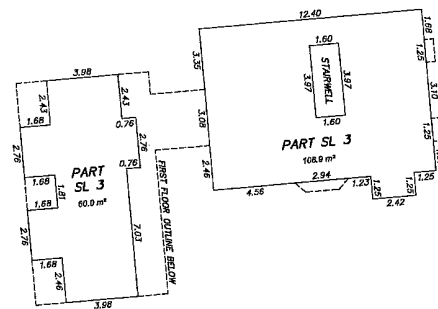


STRATA LOTS 2 AND 3**SECOND FLOOR**

THE INTENDED PLOT SIZE IS 432mm IN HEIGHT AND 560mm IN WIDTH
(C SIZE) WHEN PLOTTED AT A SCALE OF 1:150

Amended Pursuant to Section 2103, Strata Property Act
this Day December 19 2013 See Amended Sheet 3 of 3
CA3499818

AMENDED SHEET 3 OF 3 SHEETS

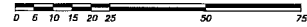
STRATA PLAN VIS6641**SIMS ASSOCIATES**

LAND SURVEYING LTD.
223 FERN ROAD #
QUALICUM BEACH, B.C. V9K 1S4
PHONE: 250-752-8121
FAX: 250-752-8241
FILE NUMBER: 10-275-ST
DRAWING NUMBER: 10-275-14MD-S3.dwg

REFERENCE PLAN TO DESIGNATE PART OF THE COMMON PROPERTY OF STRATA PLAN VIS6641,
DISTRICT LOT 78, NEWCASTLE DISTRICT TO LCP.

PURSUANT TO SECTION 257, STRATA PROPERTY ACT.

BCGS 92F.038



THE INTENDED PLOT SIZE IS 432mm IN HEIGHT AND 560mm IN WIDTH
(C SIZE) WHEN PLOTTED AT A SCALE OF 1:750

LEGEND

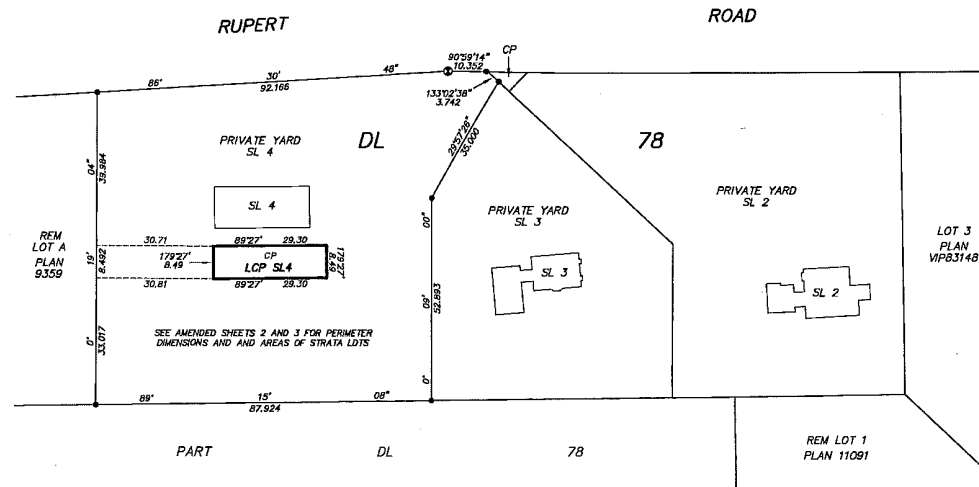
ALL DISTANCES ARE IN METRES AND DECIMALS THEREOF.
BEARINGS ARE ASTRONOMIC AND ARE DERIVED FROM PLAN VPB3148.

- DENOTES A STANDARD CAPPED POST FOUND.
- DENOTES A STANDARD IRON POST FOUND.

STRATA LOT BOUNDARIES ARE DEFINED BY EXTERIOR
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THE BUILDINGS INCLUDED IN
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SIMS ASSOCIATES

LAND SURVEYING LTD.
223 FERN ROAD W.
QUALICUM BEACH, B.C. V0K 1S4
PHONE: 250-752-9121
FAX: 250-752-9241
FILE NUMBER: 10-275-ST
DRAWING NUMBER: 10-275-3RD-AMEND-ST.dwg

THIS PLAN LIES WITHIN THE JURISDICTION OF THE APPROVING
OFFICER FOR THE TOWN OF QUALICUM BEACH.

THIS PLAN LIES WITHIN THE REGIONAL DISTRICT OF NANAIMO
THIS PLAN LIES WITHIN THE AGRICULTURAL LAND RESERVE

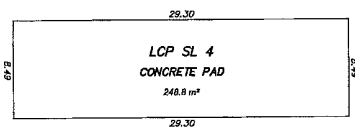
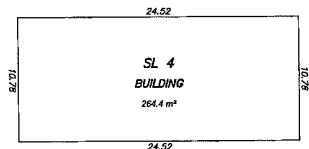
THE FIELD SURVEY REPRESENTED BY THIS PLAN WAS
COMPLETED THE 20TH DAY OF NOVEMBER, 2012.

MICHAEL A. SIMS, BCLS

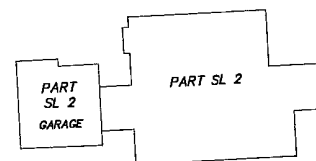
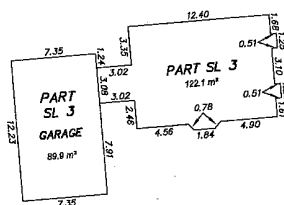
STRATA LOTS 2, 3 AND 4FIRST FLOOR

THE INTENDED PLOT SIZE IS 432mm IN HEIGHT AND 550mm IN WIDTH
(C SIZE) WHEN PLOTTED AT A SCALE OF 1:250

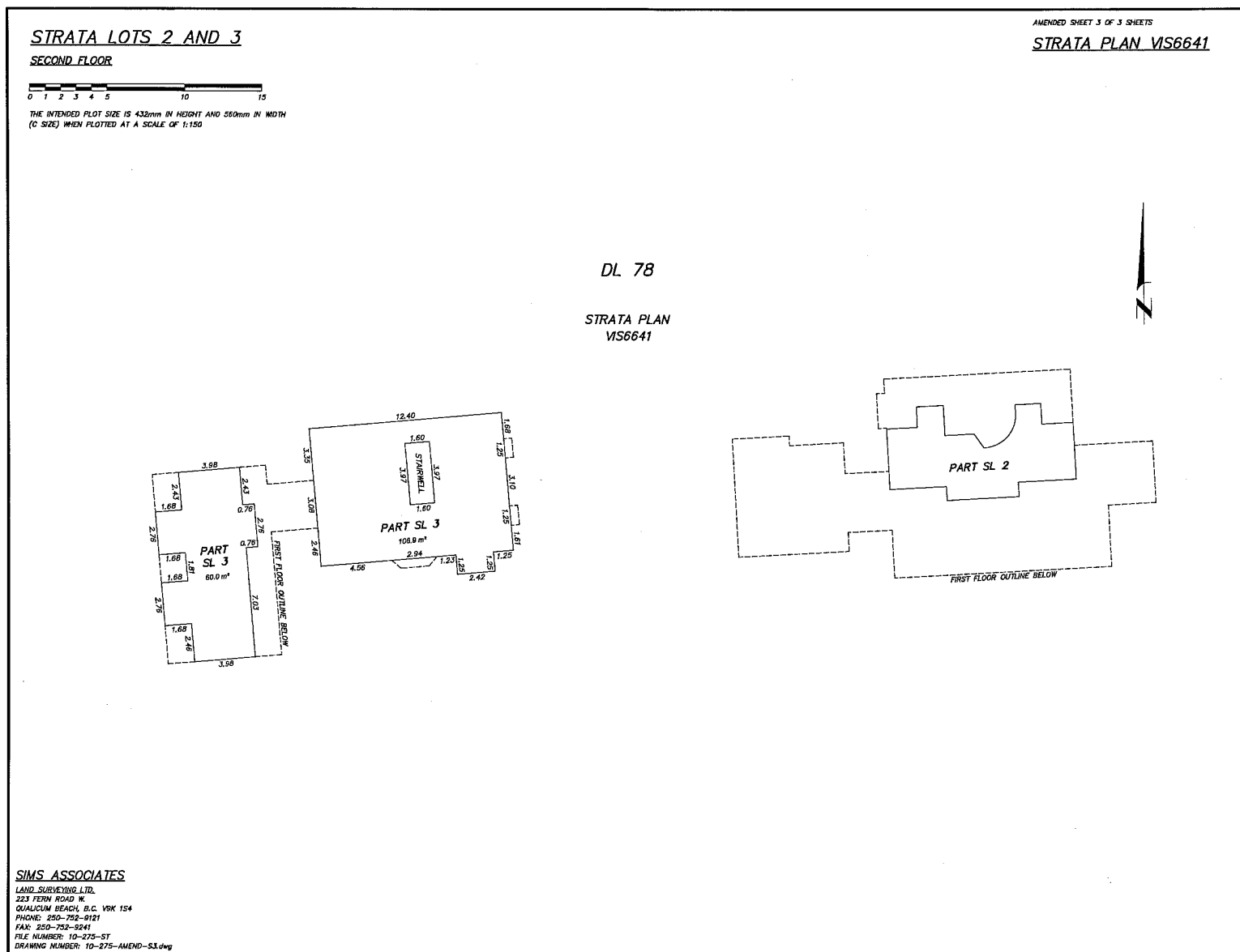
AMENDED SHEET 2 OF 3 SHEETS

STRATA PLAN VS6641

DL 78

STRATA PLAN
VS6641SIMS ASSOCIATES

LAND SURVEYING LTD.
223 FERRY ROAD W.
QUILICHNI BEACH, B.C. V9K 1S4
PHONE: 250-752-9121
FAX: 250-752-9241
FILE NUMBER: 10-275-ST
DRAWING NUMBER: 10-275-AMEND-S2.dwg





PRISM
LAND SURVEYING LTD.

Our file: 21-229-Z

2022-07-06

Town of Qualicum Beach
201-660 Primrose Street
Qualicum Beach, B.C. V9K 1S4

Attention: Luke Sales

Dear Luke:

**RE: Strata Lots 2, 3 and 4, District Lot 78, Newcastle District, Strata Plan VIS6641, Together with an Interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lot as Shown of Form V
230, 250 and 270 Rupert Road**

On behalf of our client, Craig Gooding, owner of the vacant garden centre on Strata Lot 4 (230 Rupert Road), we are applying for a zoning amendment. The purpose of this rezoning application is to convert the garden centre to a residence. All strata lots are zoned Rural 3 (A3) and the boundary of Strata Lots 3 and 4 are in the Agricultural Land Reserve (ALR). In conjunction with the rezoning application, we request that Council also consider an Agricultural Land Commission (ALC) exclusion application for Strata Lots 3 and 4.

Rezoning Application

Strata Lots 2, 3 and 4 are individually owned. However, the three building strata lots are considered one parcel when applying the Rural 3 (A3) zone.

The A3 zone currently allows for 2 dwelling units on a parcel having an area of 2.0ha. In order to convert the garden centre to a residential use, a zoning amendment application is required to allow for 3 dwelling units on a parcel having an area of 2.0ha or more.

We have received letters of support for this zoning amendment from the owners of Strata Lots 2 and 3. Accordingly, 100 percent of the strata members are in favour.

The garden centre on Strata Lot 4 has been vacant since 2009. The conversion of the garden centre to a residence will ensure this building is inhabited and maintained. The conversion will

223 FERN ROAD WEST, QUALICUM BEACH, BC, V9K 1S4

Tel: (250) 752-9121 Fax: (250) 752-9241

Email: rachel@prismlandsurveying.ca/kelly@prismlandsurveying.ca

be an asset to the surrounding neighbours, rather than a detriment that an unoccupied building can pose.

ALC Exclusion Application

In order to meet the density requirements for dwellings in the ALR, an ALC exclusion application must be approved for Strata Lots 2 and 3 before the rezoning application would receive final adoption.

This property has some history with the ALC. In 2008, the owners requested that the 1.2ha property be included in the ALR to facilitate the development of a Garden Centre. The Garden Centre was only open for 4 months and it remains vacant today.

Resolution #450/2011 was issued in 2011 to allow Strata Lot 1, which was 1.2ha, to be subdivided in two lots of 0.8ha and 0.4ha to create separate lots for a Garden Centre and the residential dwelling. This "subdivision" created Strata Lots 2 and 3. These two properties are still in the ALR.

However, the Resolution stated:

"The Commission noted that the subject property was small, had a number of structures and pavement on the property, and was adjacent to non-ALR small-lot residential development to the east and west. It was of the view that approval of this subdivision application would create two small lots within the ALR with very minimal agricultural capability and suitability due to the size of the proposed lots and structures on the property. Further, the Commission considered that the proposal had minimum impact on agriculture, and should be excluded. After some discussion relating to the pros and cons of requiring that an exclusion application be made, the Commission, after reflection, concluded that in this instance, bearing in mind the circumstances relating to the inclusion of the property in 2008, that, while desirable, it was unreasonable for the Commission to refuse the application and require that an exclusion application be made."

The Resolution concluded:

1. *That the subject property is not suitable for agricultural purposes*
2. *That the Commission considers this property should be excluded from the ALR, and would recommend an exclusion application be submitted for the Commission's review*

THAT the application to create two subdivisions be approved

AND THAT the approval is subject to the following conditions:

- *The preparation of a subdivision plan to delineate the area to be excluded per the drawing submitted with the application*
- *The subdivision must be completed within three (3) years from the date of this decision*

As a result, Strata Lot 1 was "subdivided" into Strata Lots 3 and 4 by means of an amended building strata plan under Section 259 of the *Strata Property Act* in 2012. Attached is Strata Plan VIS6641 showing this progression.

In order for the garden centre to be converted to a residence, and for the Town of Qualicum Beach to support a rezoning application, the property must be removed from the ALR. As per Resolution 450/2011, it was clear that the ALC would support and encourage the exclusion application.

Accordingly, we request that Council review the reasons for the exclusion and provide comments to the ALC.

ENCLOSURES

In support of this application, we enclose the following:

- Client's cheque in the amount of \$4000 for application
- Bylaw Amendment Application Form
- Letters of Authorization (rezoning application)
- Letters of Authorization (ALC exclusion application)
- Letters of Support regarding rezoning application from owners of Strata Lots 2 and 3
- Strata Plan VIS6641
- Title searches
- Covenant FB50802
- Statutory Building Scheme FB50804
- Easement CA3499824
- Easement CA3499829
- ALC Resolution #450/2011 dated December 6, 2011

We look forward to working with you on this project. We anticipate conversations regarding specifics for the new zone.

If you have any questions or comments, please feel free to contact me. Thanks for including this application on the next Council meeting agenda.

Best regards,



Rachel Hamling

RH:ka

Enclosures



Agricultural Land Commission
133-4940 Canada Way
Burnaby, British Columbia V5G 4K6
Tel: 604 660-7000
Fax: 604 660-7033
www.alc.gov.bc.ca

6th December, 2011

Reply to the attention of Jennifer Carson
ALC File: 52199

Helen MacPhail Sims
Fern Road Consulting Ltd
PO Box 405
Qualicum Beach, BC
V9K 1S9

Dear Ms. Sims:

Re: Application to Subdivide land in the Agricultural Land Reserve

Please find attached the Minutes of Resolution # **450/2011** outlining the Commission's decisions as they relate to the above noted application.

As proponent it is your responsibility to notify the applicant of the Commission's decision.

As reflected in the minutes the Commission has not required that an application for the exclusion of the property from the reserve be made as a condition of its approval. It would nevertheless prefer that an application be made and it is requested that consideration be given to this possibility.

Please send two (2) paper prints of the final survey plans to this office. When the Commission confirms that all conditions have been met, it will authorize the Registrar of Land Titles to accept registration of the plan.

Yours truly,

PROVINCIAL AGRICULTURAL LAND COMMISSION

Per:

A handwritten signature in black ink, appearing to read 'Brian Underhill', written over a horizontal line.

Brian Underhill, Executive Director

Enclosure: Minutes/Sketch Plan

cc: Town of Qualicum Beach (Ref. 3320-20-1256)
rc/
52199d1



PROVINCIAL AGRICULTURAL LAND COMMISSION

A meeting was held by the Provincial Agricultural Land Commission on November 24th, 2011 at the offices of the Commission located at #133 – 4940 Canada Way, Burnaby, B.C.

COMMISSION MEMBERS PRESENT:

Richard Bullock	Chair
Jennifer Dyson	Commissioner
Gordon Gillette	Commissioner
Sylvia Pranger	Commissioner
Jim Collins	Commissioner
Lucille Dempsey	Commissioner
Denise Dowswell	Commissioner
Jim Johnson	Commissioner
Bert Miles	Commissioner

COMMISSION STAFF PRESENT:

Colin Fry	Executive Director
Brian Underhill	Executive Director
Roger Cheetham	Regional Planner

APPLICATION ID: # 52199

APPLICANT: Paul & Emily Ferris

PROPOSAL: SUBDIVISION: to subdivide a 1.2 ha property into two lots of 0.8 and 0.4 to create a separate lot for a Garden Centre/Nursery from the existing residential dwelling.

The current owners are proposing to subdivide the residential dwelling from the nursery business in order to facilitate sale of the agricultural enterprise.

(Submitted pursuant to section 21 of the *Agricultural Land Commission Act*)

PROPERTY INFORMATION:

PID: 027-607-437

Legal Description: Strata Lot 1 District Lot 78 Newcastle District Strata Plan VIS6641 Together with an Interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lot as Shown on Form V

Civic Address: 250 Rupert Road E, Qualicum Beach

CURRENT LAND USE: Garden Centre/Nursery, one residential building

SITE INSPECTION MEETING:

A site inspection meeting was conducted on June 23, 2011 following which a report was prepared. The site inspection meeting report was approved by the agent on August 11, 2011.

Section 14(2) of the *Agricultural Land Commission Act* provides that a member of the Commission who was not present at a meeting to determine an application or other matter may vote on the application or matter only if a summary of the meeting is given to the member before the vote.

The site visit report constitutes a written record of the site inspection meeting and has been provided to all Commission members recorded above.

COMMISSION CONSIDERATION:

Section 6 of the *Agricultural Land Commission Act* identifies the purposes of the Commission are (1) to preserve agricultural land; (2) to encourage farming on agricultural land in collaboration with other communities of interest; and (3) to encourage local governments, first nations, the government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws and policies.

AGRICULTURAL CAPABILITY

Based on the information contained in Map 92F.038 (Scale 1:20,000) of the BC Land Inventory (BCLI), 'Land Capability Classification for Agriculture in B.C.' system, the agricultural capability ratings are identified as being:

Unimproved Rating: 5AP Improved Rating: (4P)

Note: These ratings cover approximately 60% of the subject property.

Unimproved Rating: 5AT Improved Rating: (4TP)

Note: These ratings cover approximately 40% (or 2.91 ha) of the subject property.

Class and Subclass Descriptions

Class 4 – Land in this class has limitations that require special management practices or severely restrict the range of crops, or both.

Class 5 – Land in this class has limitations that restrict its capability to producing perennial forage crops or other specially adapted crops.

A soil moisture deficiency
P stoniness
T topography

ASSESSMENT OF AGRICULTURAL SUITABILITY AND POTENTIAL IMPACT ON AGRICULTURE AND

The Commission considered that the property was originally not included within the ALR boundary. In 1986, a fine tuning review was conducted, and the property was not recommended for inclusion, based on its agricultural capability (ALC Resolution #528/1986).

The Commission also reviewed its 2008 decision to include the 1.2 ha subject property for inclusion, to facilitate the development of a Garden Centre/Nursery (Resolution #48/2008). The

Garden Centre/Nursery operation was built and in operation for only 4 months before personal circumstances of the owners' at the time resulted in the closing of the business.

The Commission noted that the subject property was small, had a number of structures and pavement on the property, and was adjacent to non-ALR small-lot residential development to the east and west. It was of the view that approval of this subdivision application would create two small lots within the ALR with very minimal agricultural capability and suitability due to the size of the proposed lots and structures on the property. Further, the Commission considered that the proposal had minimal impact on agriculture, and should be excluded. After some discussion relating to the pros and cons of requiring that an exclusion application be made, the Commission, after reflection, concluded that in this instance, bearing in mind the circumstances relating to the inclusion of the property in 2008, that, while desirable, it was unreasonable for the Commission to refuse the application and require that an exclusion application be made.

CONCLUSIONS:

1. That the subject property is not suitable for agricultural purposes.
2. That the Commission considers this property should be excluded from the ALR, and would recommend an exclusion application be submitted for the Commission's review.

IT WAS

MOVED BY: Commissioner Bullock

SECONDED BY: Commissioner Miles

THAT the application to create two subdivisions be approved

AND THAT the approval is subject to the following conditions:

- the preparation of a subdivision plan to delineate the area to be excluded per the drawing submitted with the application
- the subdivision must be completed within three (3) years from the date of this decision.

CARRIED

Resolution # 450/2011

LOCAL OR FIRST NATION GOVERNMENT INITIATED EXCLUSION APPLICATIONS

STEP 1: Local or First Nation Government Fills out the Application

- Log into the ALC Application Portal using your local or First Nation government's BCeID Business account, found here: <http://a100.gov.bc.ca/pub/oatasp/list?execution=e1s1>
 - Please contact the ALC if your local or First Nation government does not currently have an account registered with the Portal
 - The ALC must also assign a local or First Nation government 'role' to every local or First Nation government staff BCeID used to submit a local or First Nation government initiated application
- Create the exclusion application
- Complete the application up to Step 7 and save (do not submit the application). You can move between the steps, save and exit the application multiple times
- Download a copy of the application

STEP 2: Local or First Nation Government Gives Notice of the Application

❖ Sign:

- Post a sign on the affected parcel(s) advising of the exclusion application
 - Contact the ALC to confirm where to place signs if multiple parcels are involved
- The Sign must be:
 - at least 60 cm x 120 cm in size
 - located at the midpoint boundary of the parcel fronting a roadway
- Provide a summary of the application and a map showing the subject parcel(s)

Figure 1: Sample Sign

NOTICE TO MAKE APPLICATION TO EXCLUDE LAND FROM THE AGRICULTURAL LAND RESERVE

EXCLUSION APPLICATION INFORMATION:

Application ID: 68513
 Applicant: City of Smithton
 Posting Date: Sept 12, 2017
 Proposal: To exclude 11 hectares from 4 properties on Carbunkle Road for industrial needs as identified in ABC planning report.

Civic Address: 4512, 4518, 4588 & 4620 Carbunkle Road
 PID: 123-456-789, 123-123-321, 456-789-123 & 987-654-321

TO SUBMIT COMMENTS:

Local Government: City of Smithton
 Phone: 1-800-555-1234 Email: planning@smithton.ca
 Local Government File Number: 88D-2017

Insert Map Here

NOTE: ALL CORRESPONDENCE RECEIVED WITH RESPECT TO THIS APPLICATION FORMS PART OF THE PUBLIC RECORD, AND IS DISCLOSED TO ALL PARTIES, INCLUDING THE APPLICANT

❖ Notice of Public Hearing:

- Provide notice of the public hearing in at least two issues of a local newspaper, with the last notice appearing not less than 3 days and not more than 10 days before the public hearing. Should your area not have a local newspaper, please contact the ALC to discuss alternative notice options
- Notice must identify:

- Time and place of the public hearing
- Parcel(s) affected
- Intent of the application
- When and where application will be reviewed

❖ **Notice of Application:**

- Provide a copy of the application to adjacent or affected local or First Nation governments, where applicable

STEP 3: Local or First Nation Government Holds the Public Hearing

- Hold the public hearing in accordance with s. 465 of the *Local Government Act*
 - At the public hearing:
 - All persons must be afforded an opportunity to speak
 - Public hearing may be adjourned from time to time
 - A Council/Board member who did not attend public hearing may vote on the application if provided with a written or oral report of public hearing

STEP 4: Local or First Nation Government Passes a Resolution on the Application

- Council/Board passes a resolution to forward or not forward the application to the ALC
 - If forwarded, the application proceeds to the ALC for consideration (see Step 5 below)
 - If not forwarded, the application is refused.
- Local or First Nation government will update the application status in the ALC Application Portal to reflect the outcome of the Council/Board's resolution

STEP 5: Local or First Nation Government Submits the Application

- Proof of notice must be submitted with your application including a copy of the newspaper advertisement and photographs of the sign showing the location of posting in relation to the road or other public access
- Upload public hearing report and any other public comments received
- Upload a copy of the local or First Nation government Council/Board resolution
- Include any other application materials

STEP 6: Local or First Nation Government Pays the Application Fee

- Submit the \$750 application fee to the ALC
 - Fees can be paid by cheque (made out to the Minister of Finance) or by credit card over the phone or in person

STEP 7: ALC Holds the Exclusion Meeting

- Once a completed application and prescribed fee is received, ALC processing of the application will begin

- The ALC must offer an exclusion meeting with written notice to the local or First Nation government not more than 30 days before the meeting
- If the ALC considers it advisable, the ALC may notify adjacent or affected landowners of the parcel(s) subject to the application
- In advance of the exclusion meeting, the ALC must give notice of the materials that will be considered at the meeting, and any new information received
- At the exclusion there may be:
 - representations from the local or First Nation government (e.g. a presentation)
 - written submissions and other forms of evidence to be considered by ALC
 - representations, evidence, opinions of any person present at meeting
- Following the exclusion meeting, the ALC will provide a draft summary of the exclusion meeting proceedings (the “exclusion meeting report”) for verification and sign-off by the local or First Nation government

STEP 8: ALC Makes a Decision on the Application

- The ALC must make a decision on the application taking in consideration its mandate under s. 6(1) and the priorities it must consider in doing so under s. 6(2) of the ALC Act. More information about what the ALC generally considers when making a decision on applications can be found here: <https://www.alc.gov.bc.ca/alc/content/applications-and-decisions/what-the-commission-considers>
- The ALC must provide a decision in writing, whether to refuse, approve (with or without conditions), or approve as an alternate use, such as a non-farm use
- The ALC strives to communicate most of its decisions, in writing (electronic or mail), within 60 business days of an application being received and the majority of its decisions in 90 business days. Please be advised that the 60 and 90 business day application process timeline may not be consecutive given the specifics of an application; the ALC may “pause” the business day timelines should any of the following be required:
 - The exclusion meeting
 - A site visit
 - A request for additional information (from the local government or any other person considered appropriate)

Town of Qualicum Beach
M E M O R A N D U M

TO: Luke Sales, Director of Planning

FOR: Council Meeting, January 18, 2023

FROM: Rebecca Augustyn, Planner

SUBJECT: Community Climate Change Adaptation Plan (CCCAP) Update

RECOMMENDATION

1. THAT Council adopts the Community Climate Change Adaptation Plan, as attached to the January 18, 2023 Planning report to Council.

PURPOSE

To consider adopting an updated draft of the Community Climate Change Adaptation Plan that integrates the priorities endorsed by Council as well as key points from the community feedback received in 2021.

BACKGROUND

In collaboration with ICLEI Canada and local stakeholders, the Town developed a draft Community Climate Change Adaptation Plan intended to build local capacity for climate change resilience and to advance efforts on adaptation.

On January 12, 2022, Council adopted the following motion:

THAT the Town of Qualicum Beach Community Climate Change Adaptation Plan be referred to the Select Committee on Environment and Sustainability for consideration and recommendation to Council on which areas should be prioritized and how best to advance the Town's goals and objectives, in alignment with our Sustainability Plan.

On September 26th, 2022, the Select Committee on Environment and Sustainability considered a memo that was prepared by its members for Council consideration. The memo includes a substantial list of recommendations, some of which are changes to the draft CCCAP and others that are to be considered during the 2023 Strategic Planning process.

On December 7, 2022 Council adopted the following resolution:

THAT Council directs staff to present Council with an updated draft of the Community Climate Change Adaptation Plan (CCCAP) to state that the Town will prioritize the climate change adaptation objectives in the following order:

1. Integrate climate change thinking into all planning and decision making.
2. Improve public health, safety and preparedness to climate-related events.
3. Effectively manage and support a healthy urban forest.
4. Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.
5. Continue to prioritize the supply of clean water including: improve coordinated watershed management and planning and increase water conservation practices and policies.
6. Sustainable Development Policies - Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.

7. Continue to manage invasive species throughout the community.

DISCUSSION

The prioritization of the Climate Change Objectives, as directed by Council, is now included in the draft CCCAP on page 7.

This draft also integrates a number of minor changes recommended in feedback received in 2021 when the Town solicited public feedback. Following is a summary of changes based on previous resident feedback (primarily in 2021):

- The energy and water conservation section now references the use of energy efficient appliances and buildings as well as water storage and use.
- The Plan references the Urban Forest Master Plan (formerly the Tree and Vegetation Management Plan).
- The background section now mentions economic impact along with natural and human/social impacts.
- Action 3.1 includes enhancing groundwater levels.
- Action 4.3 references native drought-tolerant tree species.
- Action 7.1 includes the proper disposal of invasive species.
- Action 7.2 now references local plant nurseries as potential partners
- The document now mentions the need for water for agriculture, as well as protecting farmland.

Other comments from the Select Committee were not incorporated into this draft, as they would warrant further public engagement, consideration resource allocation and/or subsequent Council direction. Either the recommendations would diverge from other policy documents such as the Official Community Plan or Waterfront Master Plan, or the recommendations would be better integrated in another document (e.g. a plan focused on climate change *mitigation* rather than adaptation). As examples of changes that would require consideration and/or subsequent Council direction:

- “The Draft CCCAP lacks urgency and strong action, does not adequately address the global impacts of climate change, and implies that only minor adjustments to current practices are necessary.
- The Executive Summary lacks detail on policy implementation and review, is inconsistent with the Town's strategic plan, and is not adequately grounded in current planning processes.
- The Town should provide more examples of actions it is responsible for.
- The plan should encourage active transportation, electric vehicles, carpooling, and transit.

- Strengthen wording from *should* to *must*.
- Suggestions for improving watershed management should give examples of current efforts and promoting rainwater harvesting.
- The engagement and education section should provide education on the impacts of climate change and the steps individuals can take to reduce their carbon footprint, and should promote community involvement in decision-making processes."

SUMMARY

The Community Climate Change Adaptation Plan (CCCAP) has been updated based on Council direction provided at the December 7, 2022 Council meeting, as well as public feedback received during the 2021 comment period.

ALTERNATIVES

1. THAT Council consider a full review and update of the Community Climate Change Adaptation Policy during the 2023 Strategic Plan and Budget Process.
2. THAT Council consider the update and advancement of the Climate Change mitigation policies and actions during the 2023 Strategic Plan and Budget Process.
3. THAT Council provides alternative direction to staff.



R. Augustyn, MCIP, RPP
Planner
Report Writer



Luke Sales, MCIP, RPP
Director of Planning
Concurrence



Lou Varela, MCIP, RPP
CAO
Concurrence

Attachments:

[Qualicum Beach CCCAP 2023.pdf](#)

Town of Qualicum Beach

Community Climate Change Adaptation Plan

MARCH 2020

Revised January 2023



TOWN OF
QUALICUM BEACH

Acknowledgements

The Town of Qualicum Beach would like to thank the following stakeholders who attended meetings and contributed their valuable knowledge and expertise to the development of this Community Climate Adaptation Plan, including:

Vancouver Island University
Mount Arrowsmith Biosphere Region
Regional District of Nanaimo
Island Health
Department of Fisheries and Oceans
Mount Arrowsmith Biosphere Region
Qualicum Beach Streamkeepers
Gord Johns MP Office
Qualicum Beach Residents Association
Eaglecrest Residents Association
Qualicum Woods Residents Association
North Qualicum Beach Residents Association

Project Staff

Luke Sales, Director of Planning, Town of Qualicum Beach
Bob Weir, P.Eng., Director of Engineering and Capital Projects, Town of Qualicum Beach
Rebecca Augustyn, Planner, Town of Qualicum Beach
Summer Goulden, Climate Change Planner and BC Lead, ICLEI Canada

Land Acknowledgement

The Town recognizes that this land is within the traditional territories of the Coast Salish peoples and particularly the Qualicum First Nation, whom the Town works with on a regular basis.

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The preparation of this plan was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accepts no responsibility for them.

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Executive Summary

From rising seas to increased drought and heightened storm intensity, the Town of Qualicum Beach faces many challenges resulting from a changing climate. Together with ICLEI Canada, residents, and stakeholder groups, the Town has taken a proactive and visionary approach to climate adaptation planning that addresses a wide range of impacts. The result is this Community Climate Change Adaptation Plan (CCCAP).

Through the process of developing this climate adaptation plan, the Town worked with a variety of stakeholders in the community to mitigate the negative impacts of climate change, with the goal of maintaining a high quality of life for residents and visitors. By exploring a wide range of possible scenarios and potential hazards, the Town will be better equipped to handle challenging scenarios as they arise.

Innovative aspects of successful climate adaptation planning include:

- Policy development that builds on a strong foundation of rigorous analysis;
- A methodical process that tackles sensitive and political issues in a manageable way;
- A comprehensive, transparent and inclusive planning process; and
- A defensible decision-making tool based on community values and scientific analysis.

This CCCAP builds upon the existing Town policies and actions to address climate change and will allow the Town to proactively identify additional opportunities for action that advance the community further towards the climate resilience of its social, economic, built and natural systems. Preparing for potential hazards and adapting to changing conditions is key to the continuous provision of high-quality municipal services.



The intent of this plan is to help organizations, institutions, businesses, and individuals of all ages adapt to current and future climate-related risks and opportunities. Although the Town has a primary role for most actions outlined in the CCCAP, the actions rely on various stakeholders to further educate and implement climate change adaptation measures in the broader community.

Key vulnerabilities identified in this plan include impacts from sea level rise, increasing risk of wildfires, prolonged periods of hotter, drier conditions, more frequent and extreme weather events, and rising annual temperatures.

Introduction

As temperatures rise globally, the Town of Qualicum Beach has already experienced the increasing pressures of climate change. Extreme weather and changing climatic conditions have brought hotter and drier summers, the spread of invasive species and vector-borne diseases, and rising sea levels to Qualicum Beach and the surrounding region. If global emissions continue unabated, warming will persist, and the ensuing climate impacts will amplify, creating more frequent and intense climate events for the rest of the century. It is imperative to prepare for future climatic changes and adapt our community to this new normal.

The Town of Qualicum Beach has a long-standing commitment to climate change mitigation and adaptation; sustainability planning strategies are deeply embedded in the Town's planning documents, including the Official Community Plan, Waterfront Master Plan, and Sustainability Action Plan. At a regional level, the Town recently completed a comprehensive Hazard and Risk Vulnerability Assessment with the Regional District of Nanaimo in 2019.

and City of Parksville. Although there is no way of predicting the future, the Town continues to take steps to prepare for unavoidable current and future climate change impacts.

Some of the Town's greatest assets are also potential liabilities. For example, the waterfront is prized as one of the Town's most treasured assets, with rich ecological diversity and amazing recreational amenities. However, the waterfront is also subject to the increasing impacts of sea level rise, threatening all homes, businesses and amenities along the sea. For a detailed analysis of the Town's coastal conditions, refer to the 2016 Waterfront Master Plan





Additionally, the Town is part of a wide-ranging network of connected forests and riparian areas, a natural asset that has received worldwide recognition as a UNESCO biosphere region. However, the proximity to, and connectivity with healthy forest ecosystems also makes the Town vulnerable to wildfires.

The goal of this CCCAP is to build the adaptive capacity of our community, and to begin to integrate climate change considerations into long-term planning and day-to-day operations. The impacts and actions reflect priority climate change risks for the community's social, built, economic, and natural systems. Many climate-related risks extend beyond municipal jurisdiction, requiring the collaboration of important community service providers, local partnerships and other levels of government. As such, the climate actions presented in this Strategy were developed using the knowledge and experience of municipal staff, community partners, and consultant expertise.

The following nine objectives were identified as key overarching theme areas for the climate adaptation actions in this CCCAP. Implementing these adaptation actions will contribute towards achieving the high-level objectives below:

1	Proactively mitigate wildland urban interface fire risk at the community scale.
2	Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.
3	Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.
4	Effectively manage and support a healthy urban forest.
5	Improve coordinated watershed management and planning.
6	Increase water conservation practices and policies.
7	Continue to manage invasive species throughout the community.
8	Improve public health, safety and preparedness to climate-related events.
9	Integrate climate change thinking into future planning.

In terms of implementation, the Town will prioritize the climate change adaptation objectives in the following order:

- 1. Integrate climate change thinking into all planning and decision making.
- 2. Improve public health, safety and preparedness to climate-related events.
- 3. Effectively manage and support a healthy urban forest.
- 4. Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.
- 5. Continue to prioritize the supply of clean water including: improve coordinated watershed management and planning and increase water conservation practices and policies.
- 6. Sustainable Development Policies - Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.
- 7. Continue to manage invasive species throughout the community.

Adaptation Changemakers

The development of Qualicum Beach’s CCCAP was facilitated by the Town’s participation in ICLEI (formerly known as the International Council for Local Environmental Initiatives) Canada’s Adaptation Changemakers project. Supported by technical guidance from ICLEI and regional experts, Adaptation Changemakers was a two-year collaboration between eight communities across Canada to build local capacity for climate change resilience and to advance efforts on adaptation. This project brought together the participating communities multiple times over the course of the project, gathering at three national workshops to network, learn, and share experiences about adaptation planning.

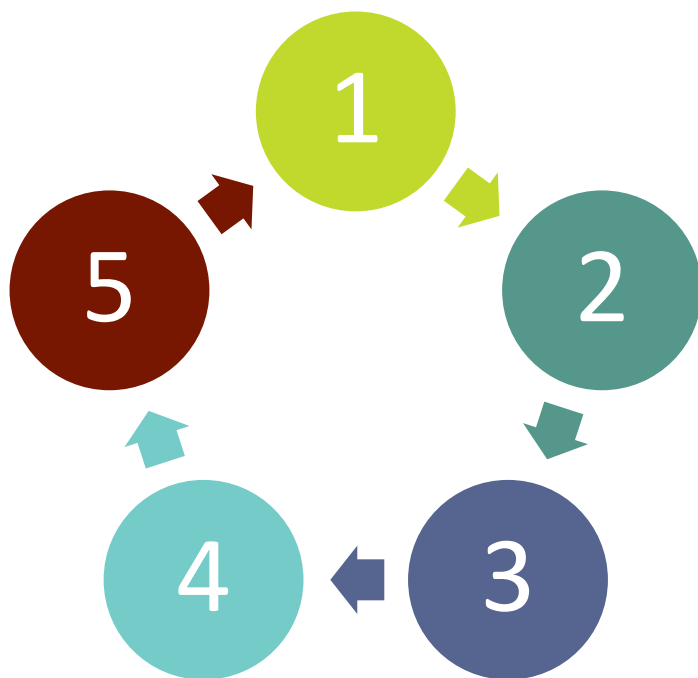
Table 1: Participating municipalities in ICLEI’s Adaptation Changemakers project

British Columbia	Town of Qualicum Beach District of Ucluelet City of Prince George
Newfoundland and Labrador	Town of Conception Bay South Town of Portugal Cove-St. Philip’s
Ontario	City of Windsor City of Peterborough Town of Caledon

Each Changemakers municipality followed Milestones 1– 3 of ICLEI Canada’s Building Adaptive and Resilient Communities (BARC) program – a five milestone planning framework that supports the development and implementation of a Community Climate Change Adaptation Plan. The process involved identifying local climate change projections and impacts, facilitating a risk and vulnerability assessment, and identifying community actions to increase resilience to projected changes. Milestones 4 and 5 focus on implementation and monitoring and will be ongoing for many years.

The adaptation planning process was community-focused, and each participating municipality convened a wide range of community stakeholders, allowing for collaborative co-development of adaptation plans that address climate risks across multiple sectors and systems. The municipality acts as a coordinator and champion of the plan, and various actions and risks within the plan are owned and implemented by non-municipal stakeholders. This collaborative co-governance model allows the burden of responsibility to be shared amongst key partners and increases resilience in areas outside the corporation of the Town.

ICLEI Canada's Building Adaptive and Resilient Communities Framework



MILESTONE ONE - INITIATE

Within this milestone, communities identify stakeholders to review and understand existing knowledge on how the regional climate is changing, followed by a brainstorming exercise to identify potential climate change impacts.

MILESTONE TWO—RESEARCH

The second milestone is meant to further develop a community's understanding of climate change impacts and the major service areas which are likely to feel these impacts most acutely. Within this milestone, a municipality will scope the climate change impacts for the region and conduct both a vulnerability and risk assessment.

MILESTONE THREE - PLAN

The third milestone provides guidance on how to establish a vision, set adaptation goals and objectives, identify adaptation options, and examine possible constraints and drivers to various actions. From there, a community will draft a Local Adaptation Strategy. Baseline data is collected and recorded, financing and budget issues are addressed, an implementation schedule is drafted, implementation responsibilities are determined, and progress and effectiveness indicators are identified in the Plan.

MILESTONE FOUR - IMPLEMENT

In the fourth milestone, communities work to ensure that they have the approval and support of council, municipal staff and the community in order to move forward on implementation. Communities will also make sure they have the appropriate implementation tools to ensure the ongoing success of the Strategy.

MILESTONE FIVE – MONITOR & REVIEW

The fifth and final milestone serves to assess whether the goals and objectives of the Strategy have been achieved, and helps communities identify any problems that have been encountered and develop solutions. Additionally, the fifth milestone helps communities communicate their progress to council and the general public.

Adaptation vs. Mitigation

Climate change adaptation refers to any initiative or action that seeks to reduce the vulnerability of social, economic, built, and natural systems to changing climate conditions. Adaptation efforts may focus on changing individual behaviour, updating by-laws and policies, enhancing the capacity of physical infrastructure, and improving ecological services. For example, The Town's 2016 Waterfront Master Plan includes many policies and recommendations to help the Town's waterfront adapt to the many changes underway.

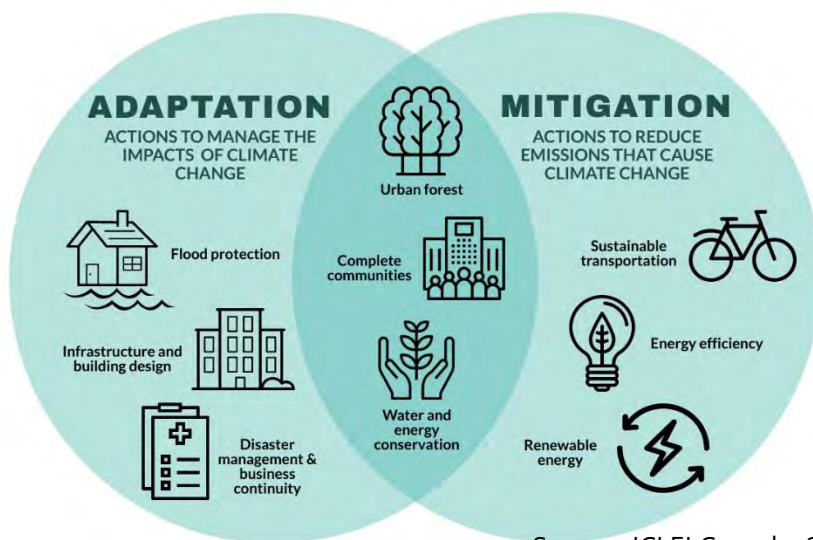
Climate change mitigation refers to the implementation of policy, regulatory and project-based measures that contribute to the

stabilization or reduction of greenhouse gas concentrations in the atmosphere. These include anti-idling by-laws, building retrofits to conserve energy, and transitioning to low-carbon transportation and energy sources.

The effects of climate change are wide ranging and will require a diversity of responses. While mitigation efforts work to contain the long-term impacts of global warming, adaptation measures are needed to address the climate change impacts that are already happening. Adaptation is not meant to replace or undermine mitigation efforts, rather adaptation complements local government efforts to protect and improve their long-term sustainability.

ADAPTATION = managing the unavoidable

MITIGATION = avoiding the unmanageable



Source: ICLEI Canada, 2019

Global and National Climate Change

Since the late 1800s, the Earth's temperature has risen by 1°C, largely due to human activities (IPCC, 2014). As fossil fuel extraction and consumption continues around the world, warming is accelerating at a faster rate. Earth's average surface temperature in 2018 was the fourth hottest year on record since record-keeping began in the 1880s (NASA, 2019). As of 2019, the five warmest recorded years had occurred during the past five years, and the 20 warmest years on record had occurred over the past 22 years (NASA, 2019). July 2019 was the hottest month ever recorded, shrinking Arctic and Antarctic sea ice to historic lows 19.8% below average (NOAA, 2019).

Similar to global trends, Canada has been warming over the last six decades, with average temperatures over land increasing by 1.5°C between

1950 -2010 (Bush et.al, 2014). This rate of warming is almost double the global average reported over the same period, meaning an increase of 2°C globally could result in a 3-4°C change in Canada. The years 2011 and 2012 were found to be 1.5°C and 1.9°C warmer than the 1961-1990 average in Canada, with 2018 now standing as the warmest year on record globally.

Canada has also generally become wetter over the past several decades, with average annual precipitation across the country increasing by approximately 16% between 1950-2010. This increase is dominated by large changes in British Columbia and Atlantic Canada. Extreme precipitation events are also likely to become more intense and more frequent – recent studies show that a 1-in-20-year storm event are likely to become 1-in-10-year storm events by the 2050s.



Federal Policy Direction on Climate Adaptation

Canada was one of 195 countries to sign the Paris Agreement in December 2015. The Agreement aims to keep the global temperature to well below two degrees Celsius, and to drive efforts to limit the temperature increase even further to 1.5 degrees Celsius above

pre-industrial levels. In terms of adaptation, the Agreement has a goal to enhance adaptive capacity, strengthen resilience and reduce vulnerability to global climate change, in line with the temperature goal (Government of Canada, 2016).

The Government of Canada has also produced several policy documents that support and guide the country's position on climate change adaptation. For example, in 2016, the Government of Canada released its [Pan Canadian Framework on Clean Growth and Climate Change](#), which includes adaptation considerations and actions to improve climate resiliency. Major focus areas include building climate resilience through infrastructure, protecting and improving human health and well-being, and reducing climate-related hazards and disaster risks. The framework recognizes the important role that Canadian municipalities will play in implementing climate solutions locally.

The Government of Canada has also taken a number of steps in recent years to help Canadians adapt to a changing climate, including:

- Developing the Expert Panel on Climate Change Adaptation and Resilience Results in August 2017. The Expert Panel was tasked with providing advice to the federal government on how to measure progress on adaptation and climate resilience.
- Creating the Federal Adaptation Policy Framework, which brings the consideration of climate change risks into federal decision-making.
- Creating the Canadian Centre for Climate Services, which provides public information on understanding and adapting to climate change.

Provincial Policy Direction on Climate Adaptation

In 2019, the Province of British Columbia completed a Preliminary Strategic Climate Risk Assessment for B.C. as a first step in better understanding climate-related risks in B.C. and to help the government develop appropriate measures to address those risks.

The assessment is being used to inform a provincial climate preparedness and adaptation strategy to help protect people, communities and businesses from the impacts of climate change (set to be released in late 2020). While the risk assessment is not intended to be used as a prediction of future events, it can act as a tool to evaluate the likelihood and potential consequences of each event

happening in the future to understand the degree of risk each poses for the province to help prepare.

Key Findings of the Provincial Assessment:

- The greatest risks to B.C. are severe wildfire season, seasonal water shortage, heat wave, ocean acidification, glacier loss, and long-term water shortage.
- Other risks that have the potential to result in significant consequences include severe river flooding and severe coastal storm surge.
- Nearly all risk event scenarios (except moderate flooding and extreme precipitation and landslide) would have major province-wide consequences in at least one category.



While Federal and Provincial governments provide strategic focus, standards, and potential funding streams for adaptation, it will be up to local governments to tailor climate change adaptation strategies to their local circumstances and to the unique set of climate change impacts they expect to face.

Climate change is defined as any change in global or regional climate patterns. While the Earth's climate has naturally fluctuated for millions of years, changes in climate from the mid-to-late 20th century onwards are largely attributed to increases in human activity. Human activities affect the climate system through two means – changes to land surface (e.g. deforestation) and altering the composition of the atmosphere through increasing atmospheric concentrations of GHGs through the burning of fossil fuels.

Climate Science

The United Nations Intergovernmental Panel on Climate Change (IPCC) is the UN body tasked with assessing the science related to climate change, its impacts and potential future risks, and possible response options. In its Fifth

Assessment report, the IPCC declared, with certainty, the widespread impact of human-caused climatic changes. The report stated: “Human influence on the climate system is clear, and recent anthropogenic emissions of

greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems” ([IPCC, 2014](#)).

In October 2018, the IPCC released its most urgent report to date, stating that, the global community may have as little as 10 to 12 years to slow greenhouse gas emissions and limit global temperature increase to 1.5°C ([IPCC Special Report for Policymakers, 2018](#)). To limit warming, there must be “rapid and far-reaching” transitions in how we use our lands, energy, industry, buildings, transportation and design our cities ([IPCC, 2018](#)). The IPCC recommends a mix of adaptation and mitigation options to limit global warming to 1.5°C, implemented in a participatory and integrated manner ([IPCC, 2018](#)).

It is important to note that uncertainty is an integral part of the study of climate change. Uncertainty is factored into climate change scenarios, models, and data, and reflects the complex reality of environmental change and the evolving relationship between humans and the planet. While it is not possible to anticipate future climactic changes with absolute certainty, climate change scenarios create plausible representations of future climate conditions. These conditions are based on assumptions of future atmospheric composition and on an understanding of the effects of increased atmospheric concentrations of greenhouse gases (GHG), particulates, and other pollutants.

Climate Change Projections for Qualicum Beach

Climatic changes in BC during the twentieth century vary significantly by region. Recent events in Qualicum Beach, including sea-level rise, coastal flooding, and other occurrences of extreme weather over the past several decades, have highlighted the need to be prepared for ongoing challenges.

The following data highlights the projected impacts of climate change on the Town of Qualicum Beach. The Climate Atlas and Canadian Climate Data and Scenarios tools were used to access downscaled climate data for the Town, as well as models and scenarios from the IPCC’s Fifth Assessment Report. The parameters included in this report are temperature, precipitation, and sea level rise. Key findings include increased temperature, increased precipitation in fall, winter, and spring, and increased intensity of rainfall. In addition, sea levels and ocean and stream temperatures are expected to rise. These climate variables are represented in Table 1 and summarized further in Figure 2 below. These changes are also addressed in detail in the Town’s 2016 Waterfront Master Plan.

Table 1: Summary of Climatic Changes for Qualicum Beach under RCP8.5

RCP 8.5			
Climate indices	Baseline	2021-2080	2051-2080
Mean annual temperate	9.7°C	11.3°C	13.0°C
Days over 30°C	1.4 days/year	6.1 days/year	15.7 days/year
Freeze-thaw days	31.3 days/year	12.4 days/year	4.9 days/year
Mean annual precipitation	1188 mm	1223 mm	1264 mm
Sea level rise	Average 1.7 ±0.2 mm/year	Rise by 1 meter by 2100	
Water temperatures	Increasing at varying degrees in ocean and streams		

Temperature

Temperatures in the Town of Qualicum Beach are expected to rise in congruence with provincial changes. The Climate Atlas of Canada tool was used to collect downscaled climate projections, using a baseline of 1976-2005. In Qualicum Beach, the average annual temperature is expected to increase between 1.4°C and 3.1°C from the baseline mean, depending on the selected scenario and timeframe.

Hot Days

The Town can expect a significant increase in hot days (days where the temperature exceeds 30°C) compared to historical data for the region.

Freeze-Thaw

A freeze-thaw cycle is any day where the minimum temperature is below 0 °C and the maximum temperature is above 0 °C. The RCP 8.5 ensembles project that freeze-thaw cycles will decrease significantly due to overall warmer temperatures.

Precipitation

Precipitation in Qualicum Beach is expected to rise in congruence with provincial changes, with decreased precipitation during the summer months. The Climate Atlas provides information from a weather station located within the Town of Qualicum Beach. In a high emissions scenario, Qualicum Beach can expect to experience an average annual precipitation increase of 35 mm during 2021-2050 and 76 mm during 2051-2080.

Heavy or Extreme Precipitation

Extreme and heavy rain events are expected to become more intense and more frequent. The West Coast receives 20–25% of its annual precipitation in heavy rainfall resulting from “atmospheric rivers” (relatively long, narrow regions in the atmosphere that transport most of the water vapor outside of the tropics) The frequency of atmospheric river events is expected to increase for coastal BC during the period 2041–2070 under a high-emissions scenario (Lemmen et al., 2016).

Sea Level Rise

Sea levels vary widely depending on several temporal, atmospheric, and oceanographic factors. Climate variabilities such as El Niño/La Niña Southern Oscillation contribute to extreme water levels, temperatures and storm surge flooding. Climate change impacts such as melting glaciers, warmer temperatures (thermal expansion), and changes in salinity have also contributed to changing sea levels. Between 1900–2009, the trend of global sea-level rise was on average 1.7 ± 0.2 mm/year. This is expected to rapidly increase. The IPCC projects a range of global sea-level rise of 26–98 cm by the year 2100, based on the RCP emissions scenarios (Lemmen et al., 2016).

On the British Columbia coast, the projected amount of sea level rise is not uniform. Variation in sea level change between B.C. sites is largely explained by different amounts of vertical land movement. Land along the southwest coast of Vancouver Island is rising at about 25 centimetres per century, while vertical land motion along the northern coast is negligible (Lemmen et al., 2016). Global projections of relative sea level rise by 2100 for the 95th percentile under RCP8.5

indicate an increase of 80-90 cm for Qualicum Beach and surrounding areas. Figure 1 depicts the range of projected sea level rise along the coast.

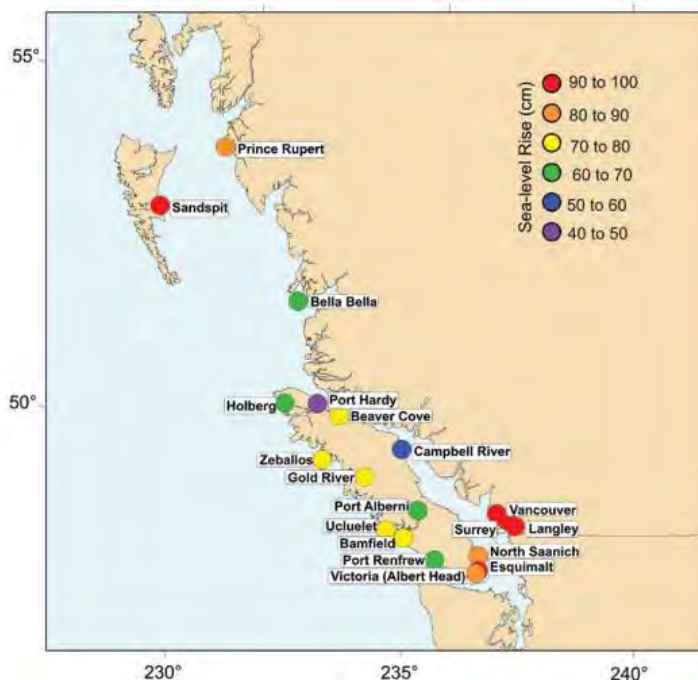


Figure 1: Projections of relative sea-level rise by 2100 for the 95th percentile under RCP 8.5
Source: Canada's Marine Coasts in a Changing Climate

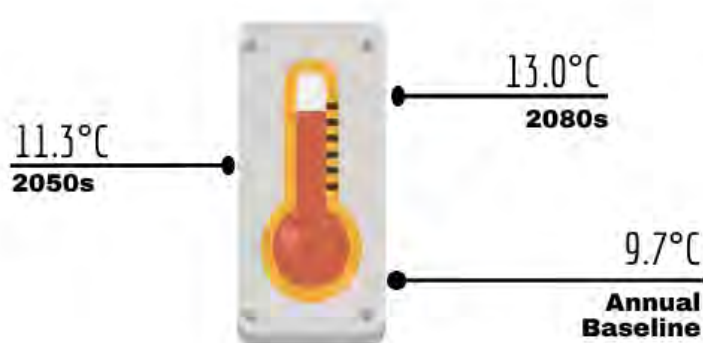
Water Availability

Many regions in British Columbia are expected to experience increasing water shortages (Lemmen et al., 2008). Loss of snowpack and glaciers, as well as precipitation changes, are expected to limit water supply during peak demand periods during summer (Harford, 2008). Saltwater intrusion resulting from sea level rise can also impact groundwater. In addition to water supply, reduced summer stream flows will affect aquatic ecosystems such as critical salmon habitat.

Water Temperatures

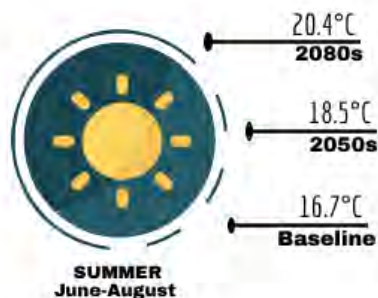
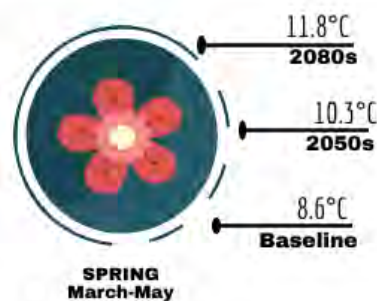
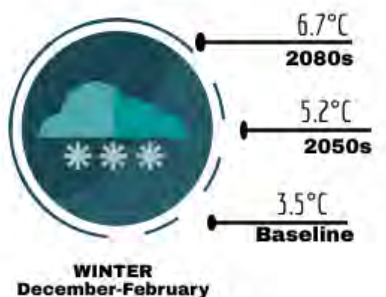
Sea surface temperatures have warmed significantly in British Columbia. Similar to sea level rise, sea surface temperature change varies across the region. Stream temperatures could rise by up to 2°C, and when coupled with lower flow levels, can have a significant impact on fisheries (Harford, 2008).

Qualicum Beach Future Climate Change Projections

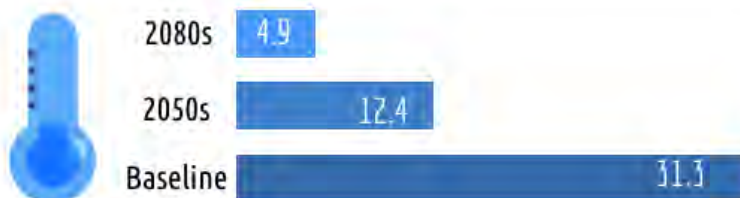


ANNUAL MEAN TEMPERATURES

Mean, minimum & maximum daily temperatures are projected to increase in every season.

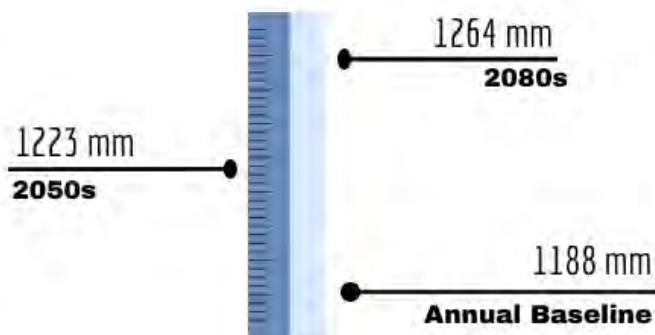


SEASONAL MEAN TEMPERATURES



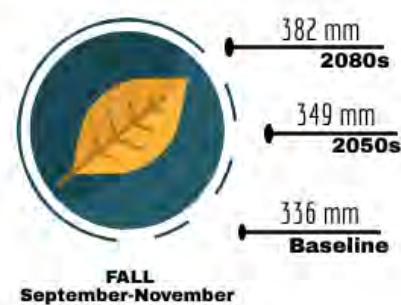
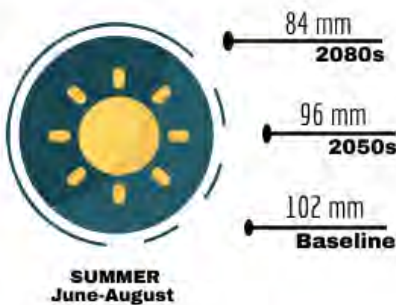
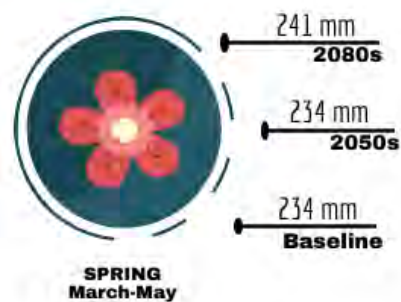
FREEZE-THAW CYCLES

Freeze-thaw days are expected to significantly decrease over the long-term.



ANNUAL MEAN PRECIPITATION

Annual precipitation is expected to increase. Winter, Spring and Fall are projected to get wetter.



SEASONAL MEAN PRECIPITATION



Precipitation will fall at a faster rate (mm/h)



Shorter storms will have an increasingly high intensity



Return periods of heavy storms will shorten, meaning increased frequency

HEAVY PRECIPITATION EVENTS

Precipitation events in general are projected to become more intense and extreme.

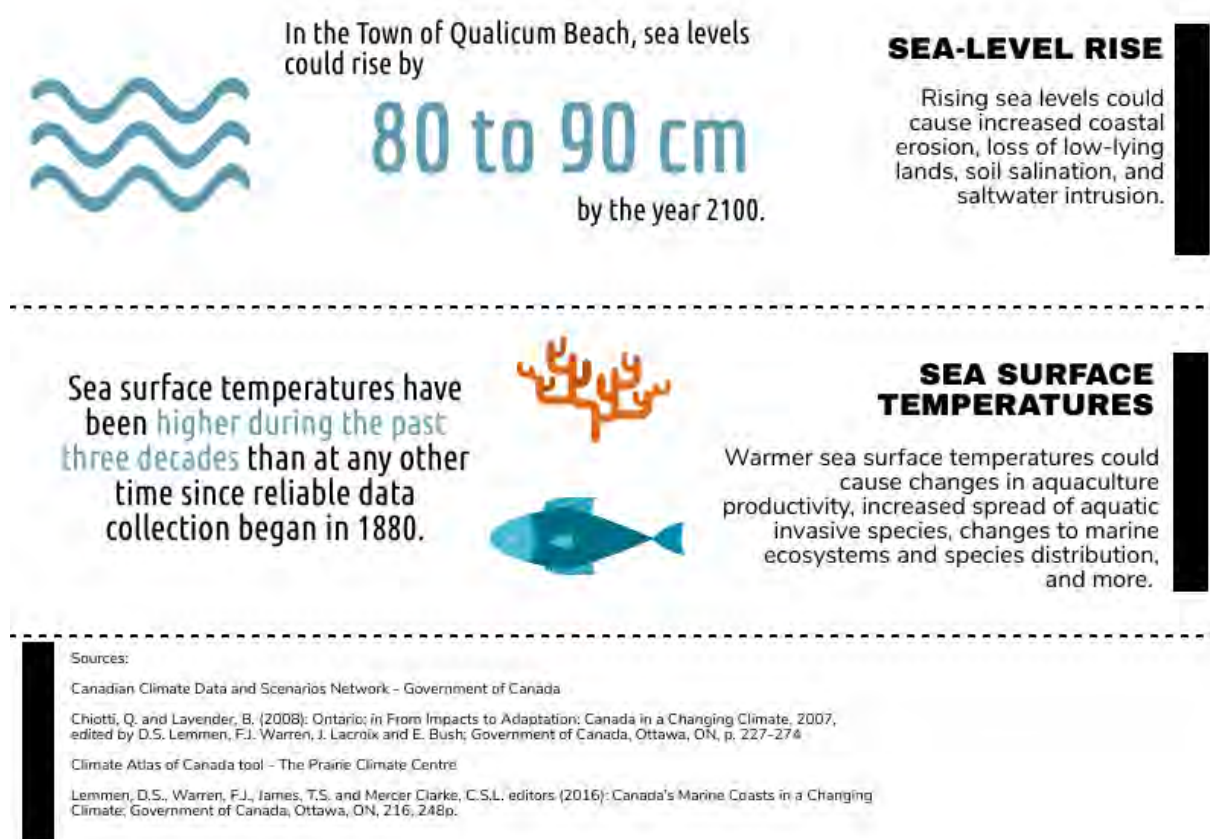


Figure 2: Climate change projections for the Town of Qualicum Beach

Impacts and Issues

Impact statements consider the projected climatic changes and their effects on built, natural, economic, and human/social systems. A workshop was held in September 2018 where participants were divided into groups and asked to develop impact statements for each system, thinking about the specific changes Qualicum Beach could experience. The group identified 47 impacts that were later used to inform a vulnerability and risk assessment, where they were further refined and prioritized.

Impact statements are intended to capture:

- A climatic threat/change (e.g. rising temperatures)
- The outcome of the climatic change (e.g. extreme heat event)
- The consequences associated with this outcome (e.g. heat stress)

Vulnerability and Risk Assessment

Vulnerability, or the degree to which a system is susceptible to the impacts of climate change, is a function of both sensitivity and adaptive capacity. Sensitivity is defined as the degree to which a system is affected by climatic conditions (e.g. temperature increases) or a specific climate change impact (e.g. increased flooding). Adaptive capacity is defined as the ability of built, natural and social systems to adjust to climate change, to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

In other words, a vulnerability assessment determines how susceptible we are to changes to our climate (e.g. heatwaves, extreme storms, sea level rise), and how prepared we are for those changes. For example, our trees may be affected by hotter and drier summers, but if most of the species are not susceptible to damage, and we have a plan to affordably replace those species that are, our vulnerability is low. Conversely, our vulnerability to poor air quality from wildfires is higher because we are susceptible and there is only so much that we can do to limit the impact on human health.

In February 2019, an online questionnaire was sent to 22 local stakeholders to assess the vulnerability of Qualicum Beach to the climate change impacts that were identified in the second local meeting; these impacts related to the built, natural, economic, and human/social systems within the Town. As a result of the vulnerability assessment, 18 low-vulnerability impacts were removed or combined with pre-existing impacts to create an updated list of 28 impact statements, from the original list of 47 impacts, to move onto the risk assessment process.

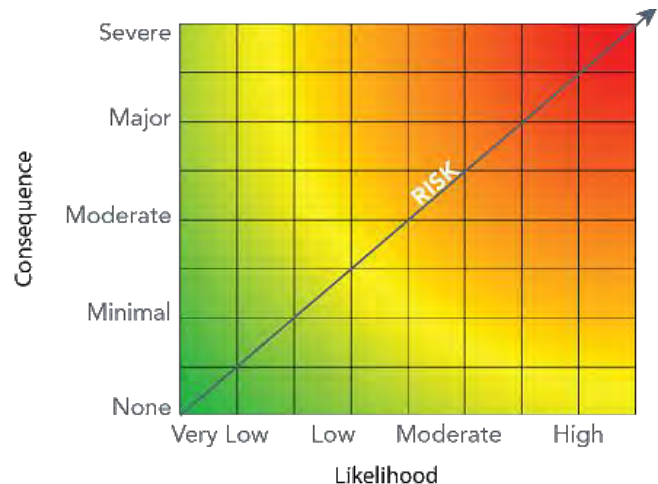
Analyzing risk is a key step in adapting to climate change and planning for a future in which the climate will be different than it is today. A local workshop involving a variety of stakeholders and local experts was held to determine the risk of Qualicum Beach to the 28 impact statements that were identified in the vulnerability phase. The risk assessment was used as a way to further prioritize which risks are most pertinent. In the risk assessment workshop, participants were asked to assess the consequences of each climate impact statement using the following 12 criteria:

Table 2 Risk assessment consequence criteria

Social	Economic	Environmental
Public Health & Safety	Property Damage	Air
Displacement	Local Economy & Growth	Water

Loss of Livelihood	Community Livability	Soil
Cultural Aspects	Public Administration	Ecosystem Function

Risk is a function of likelihood and consequence. A likelihood score was pre-determined for each impact statement by the project team, and participants were asked to review these scores at the workshop. The focus of the working session was to assign consequence scores for each of the social, economic, and environmental factors above to determine the overall risk score for each impact statement.



While climate change projections tell us how the climate is expected to change over time, it is important to also evaluate how those changes will affect the community. How will Qualicum Beach be affected by increased precipitation? By more extreme heat days? By sea level rise? What impact will these projected changes have on the Town's social, economic, built, and natural systems?

Following an extensive stakeholder engagement process and subsequent risk and vulnerability assessment, the Town identified the 12 highest priority risks (from the previous list of 28). These impacts are listed on the following page, organized by climate hazard or driver. Additional risks to monitor were evaluated as lower priorities but should be re-evaluated at five-year intervals.

Town of Qualicum Beach Priority Risks

Drier summer conditions and rising annual temperatures:

	Hotter and drier summers increasing wildland-urban interface fire risk, affecting infrastructure, ecosystems, and people. [Medium-high risk]
	Hotter and drier summers increasing PM 2.5, ground-level ozone, allergens, and smoke, leading to poor air quality. [Medium risk]
	Rising annual temperatures creating more favourable conditions for invasive species, pests, and diseases (e.g., pine beetle, knotweed, Scotch broom). [Medium risk]
	Rising annual temperatures increasing invasive species and plant diseases, threatening native species. [Medium risk]
	Rising annual temperatures increasing the quantity and variety of pathogens and vector borne diseases. [Medium-low risk]
	Rising annual temperatures will decrease snowpack, affecting water flow in streams and fish spawning [Medium-low risk]
	Hotter, drier summers affecting health and vitality of ecosystems and biodiversity (e.g. urban trees, wetlands, pollinators). [Medium-low risk]
	More extreme heat events and smoke from wildfires affecting safety of outdoor workers and vulnerable populations. [Medium-low risk]

Sea level rise and rising ocean temperatures:

	Sea level rise causing damage to infrastructure and coastal property from flooding, overtopping and erosion. [Medium risk]
	Rising ocean temperatures and acidification impacting local marine life and lifestyles reliant on shellfish harvesting. [Medium risk]

Extreme weather events:

	Increase in extreme wind and rainfall events causing damage to private property and public infrastructure (e.g. damage to power lines). [Medium risk]
	Increase in extreme wind and rainfall events causing disruption and delays in transportation network (e.g. access for emergency vehicles, BC ferries). [Medium risk]

Future Directions

The actions and objectives presented in the remainder of this plan have been developed with Town staff and community stakeholders to address Qualicum Beach's priority climate impacts and risks. Detailed action implementation tables including roles and responsibilities, current practice, action timelines, priority, costing, monitoring, and next steps can be found in Appendix A.

Vision

Qualicum Beach stakeholders spent time coming up with a vision for their community by picturing what the Town would look like in the future if this adaptation planning process was tremendously successful. The following statement summarizes their views.

Qualicum Beach Vision Statement

Qualicum Beach will proactively adapt and respond to climate change and embrace new opportunities to remain a vibrant, healthy, and sustainable waterfront community. Sustainability planning will be integrated into all spheres of activity using an approach that integrates Indigenous knowledge and values with current science in order to foster inherent resilience to the impacts of climate change.

Objectives and Actions

The following nine objectives were identified as key overarching theme areas for the climate adaptation actions in this plan. Implementing these adaptation actions will contribute towards achieving the high-level objectives below:

1	Proactively mitigate wildland urban interface fire risk at the community scale.
2	Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.
3	Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.
4	Effectively manage and support a healthy urban forest.
5	Improve coordinated watershed management and planning.
6	Increase water conservation practices and policies.
7	Continue to manage invasive species throughout the community.
8	Improve public health, safety and preparedness to climate-related events.
9	Integrate climate change thinking into future planning.

Implementation Schedules

While the Town of Qualicum Beach has made strides in adaptation through the development of the CCCAP, it is through implementation that the Town will improve its adaptive capacity. To ensure the implementation is prompt and effective, implementation schedules were developed for each adaptation action (see Appendix A).

The implementation schedules are intended to be living documents and will be further refined as implementation progresses. Updates may be made to accommodate changes in policies, staff or financial resources, and unexpected extreme weather events. This flexibility will ensure the Town and its community partners are not constrained to certain parameters should new opportunities for implementation arise. The implementation schedules include the following information for each action:

- Action Name – The name of the identified action
- Supporting Actions – Steps that need to be taken to achieve the overarching action
- Lead Organization – The organization(s) that will lead implementation
- Potential Partners – The organization(s) that could support implementation
- Current Practice – Description of any related ongoing initiatives or policies, exploring alignment and coordination with the current action.
- Cost – Costs of implementing the action.
 - o Low (<\$100,000)
 - o Med (\$100,000-\$1M)
 - o High (>\$1M)
- Timeline – Anticipated timing for how long implementation would take
 - o Short (<2 years)
 - o Med (2-5 years)
 - o Long (5+ years)
- Priority – Rated as high, medium, or low, this score takes cost and timeline into consideration, as well as the overall urgency of the action and its importance to maintain community resilience

-
- Monitoring Metric – Indicators that illustrate progress on implementation or on achieving the identified objectives. Suggested indicators can be used to evaluate progress.
 - Next Steps – Immediate next steps that the community can take to pursue this action.

OBJECTIVE 1 | Proactively mitigate wildland urban interface fire risk at the community scale

Description: The wildland urban interface is the zone where structures and other human developments meet and/or intermix with wildland fuels (vegetation). The threat of fire in the interface zone stems from two sources – fires can move from the forest, bush, or grassland areas into a community, or, vice versa, from the community into adjacent wildlands (Strathcona Forestry Consulting, 2007).

Human encroachment onto forested lands exacerbates the threat of wildfire in the interface zone. The presence of people near wildland areas has resulted in aggressive fire suppression activities to protect life and limit property damage. As a result, the natural pattern of frequent low-intensity fires has been disrupted. Increasing population density at the wildland urban interface has led to a rising number of anthropogenic causes of fires (Strathcona Forestry Consulting, 2007).

The United Nations Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment report declared with certainty the widespread impact of human-caused climatic changes. The report stated: “Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems”, (IPCC, 2014). Climate change is linked to a pattern of warmer, drier summers in many areas and is predicted to extend the duration of fire seasons in fire-prone locales. As a result, the number of wildfires is expected to increase dramatically. Regions with mild climates (i.e., southeast coast of Vancouver Island) are particularly vulnerable (Strathcona Forestry Consulting, 2007).

- Action 1.1 Maintain buffer area and continue work expanding and improving fire protection. Consider inclusion of vulnerable infrastructure within this area.
- Action 1.2 Manage vegetation, landscaping, and general maintenance around buildings following FireSmart principles and guidelines for both private and public property.

Action 1.3 Communication to the public of wildfire evacuation protocol and procedures (e.g. evacuation route signage).

Objective 2 | Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.

Description: The Qualicum Beach waterfront is integral to the identity of the Town and vital to the health of the local community, environment and economy. The community, as well as visitors and other stakeholder groups, care deeply for the Qualicum Beach waterfront and are deeply invested in its future. Sea level rise is expected to dramatically change the existing landscape of the Qualicum Beach waterfront and reduce the amount of available land.

Faced with the reality of sea level rise and uncertainty over the waterfront's changing conditions, the Town engaged in a comprehensive exercise to understand the existing coastal conditions, the impact of sea level rise and the community's vision for the waterfront. Building on the results from the 2016 Waterfront Master Plan, the Town should continue long-term planning for sea level rise, integrating any new climate data or mapping as it becomes available. Flood risk mapping is a crucial element of flood risk management, and an essential tool to avoid or minimize damage to life and property caused by floods (Flood Resilience Portal, 2020).

Action 2.1 Update coastal vulnerability assessments as more information is available, to evaluate future sea-level rise, flooding, and erosion risks to the community.

Action 2.2 Create policies or bylaws to address long-term planning for sea level rise using nature-based systems where possible.

Action 2.3 Work with organizations like Green Shores to protect coastal infrastructure and homes at risk from sea level rise and storm surge.

Action 2.4 Create communications plan to share information about preparing for sea level rise with Qualicum Beach residents and businesses.

Objective 3 | Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.

Nature-based solutions and Low Impact Development are highly recommended approaches to addressing climate change impacts and ongoing urbanization. Nature-based solutions provide mitigation co-benefits such as carbon sequestration, improve risk management and resilience, enhance sustainable urbanization, support climate adaptation and mitigation, and help achieve healthy, liveable cities where ecosystem services and a resilient natural environment are valued and incorporated into planning and decision making. Nature based solutions offer a range of social, ecological and economic benefits, and should be integrated into the development planning process wherever possible.

Nature-based solutions and natural asset management is a way to protect, sustainably manage, and restore natural or modified ecosystems, which addresses societal challenges such as climate change, water security, water pollution, food security, human health, and disaster risk management, while providing human well-being and biodiversity benefits.

Organizations like the Municipal Natural Assets Initiative (MNAI) work with local governments to identify, value and account for natural assets in their financial planning and asset management programs to develop leading-edge, sustainable and long-term climate resilient infrastructure at substantial savings.

Action 3.1 Increase permeable surfaces on both private and public property to manage impacts from extreme rainfall events and support aquifer health.

Action 3.2 Investigate feasibility of Natural Asset Management Plan development.

Action 3.3 Explore best practices from other communities and organizations and support businesses and organizations practicing LID.

Objective 4 | Effectively manage and support a healthy urban forest.

Urban forests are an essential asset in dealing with climate change. In recent years, cities have increasingly recognized the importance of a healthy urban tree canopy as a fundamental and valuable part of urban life. There are many practical and tangible benefits to a healthy urban tree canopy, including the prevention of riverbank erosion, reduced cooling costs, reduced energy costs, lowering the urban heat island effect, managing stormwater runoff, and reducing demands on drainage infrastructure (Climate Atlas of Canada, 2019).

In the face of rising heat and the threat of more extreme weather hazards, urban forests and green spaces can improve health and well-being, provide a buffer against heat extremes and dangerous weather events, and promote community resilience, all while helping us save money on costs such as air conditioning and municipal infrastructure (Climate Atlas of Canada, 2019). Protecting the health of urban forests requires long-term planning for resilience as well as short-term crisis management. Community groups and residents' associations have long taken a keen interest in tree health and maintenance and are an important way for citizens and Town staff to collaborate on education and action.

Action 4.1 Implement an Urban Forest Strategy and accompanying bylaws and/or policies to manage trees and vegetation.

Action 4.2: Monitor urban trees for hazards caused by extreme wind or rainfall events.

Action 4.3: Research into how to create a resilient urban forest, including desirable and strategic species (e.g. drought-tolerant native trees, pollinator-friendly).

Objective 5 | Improve coordinated watershed management and planning.

Qualicum Beach and the surrounding region have already undertaken initiatives to address watershed health, conservation, and coordinated planning. As climate pressures grow, it will become increasingly important to integrate up-to-date climate science into planning processes, accounting for future changes to the intensity, frequency, and duration of precipitation events.

Action 5.1 Protect forested lands in environmentally-sensitive areas in order to provide ecosystem service benefits (e.g. biodiversity, and watershed, and aquifer protection).

Action 5.2 Produce valuation (in accounting terms) for local watersheds, water retention, water purification, flood control, cleaner air.

Action 5.3: Monitor aquifer health and assess climate risk.

Objective 6 | Increase water conservation practices and policies.

Action 6.1 Increase education and incentives around water conservation (e.g. rain barrels, cisterns, rebates, and efficient appliances).

-
- Action 6.2 Improve use of drought resistant plants in the region, both on private and public property.
- Action 6.3 Explore tough issues before emergency situations arise (e.g. securing additional water sources, low flow in rivers and conflict between Department of Fisheries, agriculture and other water uses.
- Action 6.4: Conduct impact monitoring in two fish bearing streams.

Objective 7 | Continue to manage invasive species throughout the community

Both climate change and invasive species pose extraordinary ecological challenges to the world today. The impact of climate change and rising average temperatures can have a profound influence on species' geographical ranges that are often set primarily by climate and consequently the host environment (Szyniszewska, 2010). Many scientists agree that climate change will alter destination habitat and increase vulnerability to invasion because of resource scarcity and increased competition among native fauna and flora.

Invasive plant species can be both the result of global changes and the drivers of change. They may be harmful to crops, industries, the environment and public health. Ecologically, species invasions are very problematic for biodiversity conservation and may lead to native species extinction (Szyniszewska, 2010).

Preventing the spread of invasive species into more susceptible environments requires an awareness of the types of species that pose a threat to a particular ecosystem. They must be distinguished from various native plants forced to migrate in order to survive. It is also important to know which ecosystems are especially vulnerable to invasion in the face of climate change. As it is still hard to project the final result of these interactions, the best option for management at this point seems to be monitoring, early detection and rapid response.

Action 7.1 Create an invasive species action plan and coordinate with existing initiatives (e.g. Broombusters).

Action 7.2: Create a public facing communications plan and involve community to help manage invasive species.

Objective 8 | Improve Public Health, Safety and Preparedness to Climate-Related Events

Climate readiness and emergency preparedness is a moving target, and the Town must continue to integrate up-to-date hazards, mitigation measures, and response protocols across all its operations. With increasing frequency and severity of extreme weather, risks to Qualicum Beach are expected to grow, and the community has a significant role to play in mitigating these risks and contributing to the overall resiliency of the Town. Education around risks and how to either prevent or address them is crucial in supporting a healthy, resilient community.

Action 8.1 Increase public awareness and access to information on air quality and heat events.

Action 8.2: Explore potential locations of community cooling centres including HEPA air filters for smoke events.

Action 8.3 Incorporate climate change considerations into emergency management planning.

Action 8.4: Explore new policy to replace air filters during or after smoke events.

Action 8.5 Strengthen communication with key suppliers (e.g. BC Hydro, fuel supplier for emergency equipment, and health providers).

Objective 9 | Integrate Climate Change Thinking into Future Planning

Climate change is a lens that can be applied to all planning procedures to maximize opportunities for adaptation and mitigation action. Documents like the Strategic Plan and Official Community Plan should incorporate climate considerations, and all new plans should integrate adaptation and mitigation into them wherever possible. Climate adaptation and resilience standards should also be integrated into Town procedures such as urban and strategic planning, design, and development approval processes moving forward.

- Action 9.1 Educate and involve youth in climate change adaptation planning.
- Action 9.2: Share results of Qualicum Beach's Climate Change Adaptation Project with Town staff and community.
- Action 9.3: Explore opportunities with Town staff to oversee all climate-related initiatives.
- Action 9.4: Support conversations around the mental health impacts associated with climate change and consider if PTSD-CTSM (Critical Incident Stress Management) services are required after extreme events.

Implementation and Governance

The CCCAP is intended to help the Town of Qualicum Beach and community partners prepare for the impacts of climate change. As such, a strong focus on implementation, governance, and monitoring is essential to the Plan's success.

Changes to federal and provincial legislation and regulations, as well as technological advances, are anticipated over the plan horizon; this will impact the long-range strategies, underscoring the importance of periodic review and adjustments to the CCCAP.

Oversight and Governance

It is intended that the CCCAP will be "municipally-led and community supported". The benefits of this model are that it enables the Town to play a leadership role, while also sharing the responsibility for plan implementation. It also potentially allows for the leveraging of community capital for those actions that are beyond municipal responsibility.

Town Council

Council will be responsible for the endorsement of the Community Climate Change Adaptation Plan, and to receive and review annual progress reports on implementation actions and outcomes. The approval of subsequent implementation plans developed by the Working Group will also rely on Council's approval.

Community Stakeholder Working Group

It is suggested that the community stakeholders that came together for the development of this Plan, continue to meet, and for a Community Stakeholder Working Group to guide the implementation of the CCCAP. The group would be composed of representatives from lead and supporting organizations, community partners, stakeholders, and Municipal staff. The working group would represent the interests of the partner organizations outlined in the Plan, and would welcome members of the wider community and interested staff members.

Coordination

It is recommended that a coordinator be established as a main point of contact for the CCCAP. This person would act as a liaison between lead and supporting organizations, Town Council, Municipal staff and the community. This person would convene, facilitate and lead working group meetings as well as oversee the

development of the annual report to Council. The coordinator would also be responsible for the preparation of funding applications and the facilitation of education and outreach campaigns related to the CCCAP. In other municipalities, the coordinator is usually a member of staff, though the coordination could potentially be done by an outside party.

Funding

It is recommended that the Town continue to maximize available funding opportunities to advance the implementation of adaptation actions. There are multiple funding avenues that align with the implementation guidelines outlined in the CCAP, including but not limited to:

- Federation of Canadian Municipalities (e.g. Green Municipal Fund);
- Canada Revenue Agency tax incentives for industrial investments in energy conservation and clean energy generation;
- Province of BC grants for climate adaption and mitigation.
- Infrastructure Canada (e.g. Investing in Canada Infrastructure Program, Disaster Mitigation and Adaptation Fund);
- The Federal Canadian Industry Program for Energy Conservation (CIPEC);
- Trees Canada (e.g. Community Tree Grants);
- Community Healthy Living Fund (e.g. healthy eating and physically activity programming grants);
- Impact Assessment Agency of Canada (e.g. environmental assessment funding);
- EcoAction Community Funding Program
- Infrastructure Canada's Smart Cities Challenge

As funding opportunities are constantly changing, it will be important for Town staff and community partners to continually research and monitor available opportunities to leverage for implementation.

Communication, Education and Outreach

The long-term success of the Plan hinges upon an informed and involved community taking part in ongoing conversations about climate impacts and the benefit of climate action. The conversation must translate to action on both the individual and community-level. Integrating climate awareness into the mainstream practices of all community groups, residents, visitors and municipal staff will be essential in successfully maximizing our resiliency potential.

Multiple mediums of communication and outreach should be utilized to ensure widespread community support and involvement. These range from visual mediums (e.g. infographics, advertisements) and written media (e.g. government publications, newspaper articles, brochures, websites) to oral communications (e.g. group dialogue, presentations). Both internal and external communication will help increase public awareness and buy-in surrounding the CCCAP.

It is recommended that the Town of Qualicum Beach, working with community partners, develop a communication strategy that keeps residents informed about the progress of the CCCAP and provides actions they can accomplish at home and in the community.

Monitoring and Review

Tracking progress is an important part of the monitoring and review process as it enables the Town and community to assess whether the actions outlined in this Plan are producing the desired results. It sets the stage for longevity, as it allows the Town and the community to build upon the networks created and lessons learned throughout the Plan development. Since adaptation is a moving target, a monitoring framework also ensures that the community can assess whether local risks and vulnerabilities are changing and make required adjustments to the adaptation actions.

At a minimum the climate change projections, vulnerability and risk assessment should be reviewed every 5 years. In the event that new impacts, vulnerabilities or risks are identified, a formal review of the Climate Change Adaptation Plan will occur. An implementation update report to Council will occur on a bi-annual basis once implementation begins.

As implementation progresses, it will be important for the Town and its community stakeholders to develop indicators that measure if actions are succeeding in reducing vulnerability to climate change.

Next Steps

The next steps will be for the Town of Qualicum Beach to implement actions of the CCCAP according to the implementation schedule. Priority will be given to actions

that can be mainstreamed into current planning schedules and existing operations. Planning for the mid-to-longer term actions will also begin.

APPENDIX A – Climate Action Implementation Tables

OBJECTIVE 1 Proactively mitigate wildland urban interface fire risk at the community scale		
What has been completed so far? • Establish plan for water infrastructure looping • FireSmart education through Fire Department • Existing signage and fire patrols during summer • Established communication with stakeholders and community associations with education and training • 2007 Community Wildfire Protection Plan		
Action 1.1: Maintain buffer area and continue work expanding and improving fire protection. Consider inclusion of vulnerable infrastructure within this area.		
Lead Organization(s)	Town of Qualicum Beach – Fire Department	
Cost	Timeline	Priority
Medium	Medium	Low
Action 1.2: Manage vegetation, landscaping, and general maintenance around buildings following FireSmart principles and guidelines for both private and public property.		
Supporting Actions	Removal of dead trees in community green spaces.	
Lead Organization(s)	Ministry of Forests, Lands, Natural Resource Operations and Rural Development; Town of Qualicum Beach	
Potential Partners	FireSmart; Residents Association	
Cost	Timeline	Priority
Medium	Ongoing	Medium
Action 1.3: Communication to the public of wildfire evacuation protocol and procedures (e.g. evacuation route signage).		
Supporting Actions	Increase no smoking signage on trails and in parks to raise awareness and reduce fire risk.	

Lead Organization(s)	Town of Qualicum Beach – Fire Department; Regional District of Nanaimo	
Potential Partners	FireSmart	
Cost	Timeline	Priority
Medium	Short	Medium
Monitoring Metrics: • Define goals/areas and monitor • Number of new signs • Use survey to test awareness of public Next Steps: • ID vulnerable areas on maps • Assess existing signs and identifying new areas • Develop education strategy		

Objective 2 | Continue long-term planning for sea level rise in alignment with Waterfront Master Plan.

What has been completed so far?

- Phase 1 Technical Report (complete)
 - o study of existing coastal processes and expected effects of sea level rise on the Town waterfront
 - o brings a local focus to the global issues of sea level rise, and provides insight into the diverse characteristics of different areas of Town waterfront
- Phase 2 –Waterfront Master Plan (complete)
- Community and stakeholder engagement in visioning and planning of Waterfront Master Plan
- Beach Creek Estuary & Marine Spit (estuary and foreshore improvements will also reduce the vulnerability of the outlet to being plugged or compromised during high water storm events)

Action 2.1: Update coastal vulnerability assessments as more information is available, to evaluate future sea-level rise, flooding, and erosion risks to the community.		
Supporting Actions	• Identify vulnerable infrastructure and well fields. • Complete flood zone mapping.	
Lead Organization(s)	Town of Qualicum Beach; Regional District of Nanaimo	
Potential Partners	Department of Fisheries; Ministry of Forests, Lands, Natural Resources Operations and Rural Development; First Nations	
Cost	Timeline	Priority
Medium	Medium	Medium
Action 2.2: Create policies or bylaws to address long-term planning for sea level rise, using nature-based infrastructure where possible.		
Supporting Actions	• Develop Flood Construction Levels (FCLs) for new builds. • Explore options for rebuilding and relocating as required. • Create new policy/bylaw to prevent development in high-risk flood areas.	
Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Regional District of Nanaimo; Province of BC; Municipal Insurance Association of BC (Public)	
Cost	Timeline	Priority
Low	Medium	High
Action 2.3: Work with organizations like Green Shores to protect coastal infrastructure and homes at risk from sea level rise and storm surge.		

Lead Organization(s)	Town of Qualicum Beach; Green Shores	
Potential Partners	Regional District of Nanaimo	
Cost	Timeline	Priority
Low	Long/Ongoing	High
Supporting Action 2.4: Create communications plan to share information about preparing for sea level rise with Qualicum Beach residents and businesses.		
Lead Organization(s)	Town of Qualicum Beach; Regional District of Nanaimo	
Potential Partners	Community Organizations; Neighbourhood Associations	
Cost	Timeline	Priority
Low	Short	Medium
Monitoring Metrics: • Define goal and measure • Monitor and measure impacts over time • Annual review • Percentage of vulnerable property owners being aware Next Steps: • Review and monitor Waterfront Master Plan • Create working group to implement Waterfront Master Plan policies • Develop communications plan to share information about sea level rise • Work with neighbouring jurisdictions on regional sea level rise mitigation and adaptation • Next steps from Waterfront Master Plan (2016): 1. Monitor erosion and coastal conditions with annual topography and air photos. 2. Prepare “shovel-ready” pilot projects to test scenarios for coastal protection. 3. Work with property owners to establish neighbourhood level adaptation strategies.		

-
4. Work with authorities to establish a stream-lined approvals process for projects in Qualicum Beach that are consistent with the Waterfront Master Plan.
 5. Develop a safe, continuous waterfront walkway from the Visitor Centre area to the beach washrooms
 6. After monitoring the results of the continuous walkway west of the Visitor Centre, explore options to extend a continuous waterfront walkway past the residential dwellings west of Bay Street.
 7. Update the Waterfront Master Plan in conjunction with future Official Community Plan reviews.
-

Objective 3 | Promote and expand the use of Low Impact Development (LID) and Nature-based Solutions (NBS) for building.

What has been completed so far?

- Sustainability Plan
- Development Permit Areas to protect marine and freshwater habitat, farmland and sensitive terrestrial ecosystems
- Green Laneways Project for low impact development and rainwater management (2013)

Action 3.1: Increase permeable surfaces on both private and public property to manage impacts from extreme rainfall events and support aquifer health.

Supporting Actions	• Keep Sustainability Plan up to date • Encourage the incorporation of Low Impact Development (LID) features and green infrastructure into new development and redevelopment projects. • Require more energy efficient construction.	
Lead Organization(s)	Town of Qualicum Beach; Province of BC	
Potential Partners	Development Community; Business Council of BC; Partnership for Water Sustainability in BC (annual conference)	
Cost	Timeline	Priority
Medium	Short/Ongoing	Medium

Action 3.2: Investigate feasibility of Natural Asset Management Plan development.

Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Asset Management BC; Municipal Natural Assets Initiative (MNAI); Union of BC Municipalities (UBCM)	
Cost	Timeline	Priority

Medium	Medium	Medium
Supporting Action 3.3: Explore best practices from other communities and organizations and support businesses and organizations practicing LID.		
Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Partnership for Water Sustainability in BC (annual conference)	
Cost	Timeline	Priority
Low	Short	Medium
Monitoring Metrics: • Permeability percentage on public and/or private land • Identify areas on public property and evaluate performance of infrastructure (on benchmarks or engineered design) • Create policies and Natural Assets Valuation Next Steps: • Identify best areas and systems • Feasibility assessment • Develop plan and apply for grants • Add layer to Asset Management System • Build capacity of local businesses to utilize LID		

Objective 4 Effectively manage and support a healthy urban forest.	
What has been completed so far? • Tree canopy inventory • Significant Tree bylaw Urban Forest Master Plan	
Action 4.1: Implement the Urban Forest Master Plan and subsequent bylaws/policies to manage trees and vegetation.	
Lead Organization(s)	Town of Qualicum Beach

Potential Partners	Mount Arrowsmith Biosphere Region Initiative (MABRI)	
Cost	Timeline	Priority
Medium	Short	Medium
Action 4.2: Monitor urban trees for hazards caused by extreme wind or rainfall events.		
Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Local arborist companies	
Cost	Timeline	Priority
Medium	Ongoing	Medium
Action 4.3: Research into how to create a resilient urban forest, including desirable and strategic species (e.g. native trees, pollinator-friendly).		
Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	MOSAIC Forest Management; MABRI; Streamkeepers; Forestry Sector; Society of Landscape Architects Plant Nurseries	
Cost	Timeline	Priority
Low	Short	Medium
Monitoring Metrics: • Determine time interval to measure canopy cover • Percentage of tree canopy (based on details within strategy and bylaws) • Database of hazardous trees on both private and public lands • Diversity of tree inventory • Monitor urban heat island effect, which is most prevalent in urban areas without a tree canopy to retain moisture and buffer temperature		

Next Steps:

- Urban Forest Management System - Complete strategy and identify bylaw and policies
- Add tree management to annual budget

Objective 5 | Improve coordinated watershed management and planning.**What has been completed so far?**

- Aquatic Habitat Development Permits (aquatic habitat is protected through Development Permit areas).
- Wording will increase regulatory flexibility for land use adjacent to greenways.
- These regulations will need to meet the requirements of the provincial Fish Protection Act.
 - Ecological Greenways for aquatic habitat and connecting green spaces across and within the Town
- Monitoring of aquifer health
- Little Qualicum River Water Management Plan- Feasibility study
 - Qualicum Beach Streamkeepers proposing a community-based water management plan be created
- 2013 Qualicum Beach Greenways Study
 - Watershed management is integrated in the Greenways project
- Regional District of Nanaimo's 'Team WaterSmart' program (mostly geared toward water conservation, but also more broadly towards watershed stewardship and management)
 - Free workshops and events
 - RDN's Community Watershed Monitoring Network Results Session

Action 5.1: Protect forested lands in environmentally sensitive areas in order to provide ecosystem service benefits (e.g. biodiversity, and watershed, and aquifer protection).

Supporting Actions

- Continue to support and participate in regional initiatives such as the update of the Drinking Water and Watershed Protection Action Plan.
- Encourage the RDN to acquire Hamilton Marsh.

Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Regional District of Nanaimo; Member municipalities in Regional District; Department of Fisheries and Oceans	
Cost	Timeline	Priority
Medium	Long	High
Action 5.2: Produce valuation (in accounting terms) for local watersheds, water retention, water purification, flood control, cleaner air.		
Lead Organization(s)	Town of Qualicum Beach	
Cost	Timeline	Priority
Medium	Long	High
Action 5.3: Monitor aquifer health and assess climate risk.		
Supporting Actions	Monitor well fields and explore future options for additional well fields.	
Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Regional District of Nanaimo Community volunteers	
Cost	Timeline	Priority
Low	Long	Medium

Objective 6 | Increase water conservation practices and policies.

What has been completed so far?

- Complete recovery of the Berwick aquifer through a seasonal recharge strategy.

• Annual water use restrictions tailored to weather, well conditions and local consumption patterns • Regional District of Nanaimo's Water Conservation Plan (2013) • Regional District of Nanaimo's online water conservation tools and strategies for indoor, outdoor, and businesses - o Tips for xeriscaping and using native trees, shrubs, and herbaceous species • Regional District of Nanaimo's 'Team WaterSmart' program - o <u>Team WaterSmart – Water to Earth month</u> (March and April 2020) ▪ <u>WaterSmart workshop</u> day April 19, 2020 (Beban Park in Nanaimo) ▪ Irrigation initiatives ▪ Team WaterSmart at Earth Day festival (April 25, 2020)		
Action 6.1: Increase education around water conservation (e.g. rain barrels, cisterns, rebates, initiatives).		
Supporting Actions	• Explore public programs to incentivize water conservation (e.g. toilets efficient irrigation, rainwater harvesting technologies on private properties, etc.)	
Lead Organization(s)	Town of Qualicum Beach; Regional District of Nanaimo	
Potential Partners	Mount Arrowsmith Biosphere Region Research Institute	
Cost	Timeline	Priority
Low	Ongoing	Medium
Action 6.2: Improve use of drought resistant plants in the region, both on private and public property.		
Lead Organization(s)	Town of Qualicum Beach	
Potential Partners	Qualicum Beach Streamkeepers; Mount Arrowsmith Biosphere Region Research Institute; Arrowsmith Naturalists	
Cost	Timeline	Priority
Low	Long	Medium

Action 6.3: Explore tough issues before emergency situations arise (e.g. competition for securing additional water sources, low flow in rivers and conflict between Department of Fisheries and other water uses.(Note. Implementation of solutions, such as acquisition of new sources would be a major expense)

Lead Organization(s)	Town of Qualicum Beach; Regional District of Nanaimo	
Potential Partners	Mount Arrowsmith Biosphere Region Research Institute	
Cost	Timeline	Priority
Low	Long	Medium

Action 6.4: Conduct impact monitoring in two fish bearing streams.

Lead Organization(s)	Town of Qualicum Beach; Streamkeepers	
Potential Partners	Mount Arrowsmith Biosphere Region Research Institute	
Cost	Timeline	Priority
Low	Short	High

Monitoring Metrics:

- Monitor aquifer levels
- Report annually to council and the public on website

Next Steps:

- Add water monitoring flow at Beach Creek and report out annually to Council for Information and Trends
- Continued collaboration with Regional District of Nanaimo

Objective 7 | Continue to manage invasive species throughout the community

What has been completed so far?

- Urban Forest Master Plan.
- Policies in the 2018 Official Community Plan highlight a need for invasive species management.
- Scotch broom is identified as an invasive plant and property owners are required to remove it.
- Broombusters Invasive Plant Society – provide outreach and education about the risks associated with Scotch Broom (e.g., social, ecological, and economic).
 - Support large-scale ecological restoration efforts in the region
- Coastal Invasive Species Committee
 - Provide outreach and education, collaboration, support, and management for invasive species on Vancouver Island
 - Town has an annual contract for removal of Knotweed and Giant Hogweed.
- Garry Oak Meadows Management Plan – Fairwinds The Lakes District, Nanoose Bay
 - Addresses need for invasive species management in the protection and enhancement of Garry Oak ecosystems in the region
 - Provides direction for adaptive management of GOEs
- Regional District of Nanaimo – Invasive Species programs
 - Provide workshops and education on invasive species and the need for natives
 - Invasive Species Management Program
- Invasive Species Council of BC – “Plant me Instead” guidebook

Action 7.1: Create an invasive species action plan and coordinate with existing initiatives (e.g. Broom Busters).

Supporting Actions	• Research and monitoring for invasive species and plant diseases in response to changing climate conditions. • Identify monitoring metrics for tracking changes in invasive species and plant diseases in the community. • Further strengthen relationships with Island Corridor Foundation, BC Hydro, and Forestry Companies to monitor and manage invasive species.
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Lead Organization(s)	Province of BC; Invasive Species Council of BC	
Potential Partners	Town of Qualicum Beach; Mount Arrowsmith Biosphere Region Research Institute	
Cost	Timeline	Priority
Medium	Medium	Medium
Action 7.2: Create a public facing communications plan and involve community to help manage invasive species.		
Supporting Actions	- Continue public education on prevention, identification, and taking action on invasive species, and work with local groups on removal and proper disposal. - Raise awareness of some of the issues/threats facing habitats in the area.	
Lead Organization(s)	Town of Qualicum Beach; Invasive Species Council of BC; Mount Arrowsmith Biosphere Region Research Institute	
Potential Partners	BroomBusters; Streamkeepers	
Cost	Timeline	Priority
Low	Medium	High
Monitoring Metrics: - Identify the percent change within Town-owned inventory - Changes in inventory over time - Annual update and distribution of the information Next Steps: - Add to Parks work plan - Invasive species inventory as a baseline - Collect information from partnering organizations		

Objective 8 | Improve Public Health, Safety and Preparedness to Climate-Related Events

What has been completed so far?

- Climate change and sea level rise are addressed within the Waterfront Master Plan through precautionary preparing and planning
- Emergency Management Oceanside with the Town of Qualicum Beach, City of Parksville, and the Regional District of Nanaimo hosted “Oceanside Emergency Preparedness Expo” (October 2019). Workshops/training included:
 - Personal preparedness;
 - FireSmart;
 - Climate Change on Vancouver Island
- EMO launched new website (September 2019) with information on emergency preparedness (<http://emergencyoceanside.ca/>)
- OCP provides direction for maintenance of good air quality in the region
 - S3.2 “Climate Emissions Planning”
- [BC Air Quality Health Index tool](#) for monitoring up-to-date air quality

Action 8.1: Increase public awareness and access to information on air quality and heat events.

Supporting Actions

- Provide public education materials on personal protection from extreme heat events and smoke from wildfires.
- Explore potential to link heat advisories to Town website.
- Use advisory system as a form of messaging actions and information to residents.
- Continue to raise awareness about fire risk in the region and seek collaborations that help forecast air quality concerns that could be exacerbated by climate change.

Lead Organization(s)

Town of Qualicum Beach;
City of Parksville
Emergency Management Oceanside;

	Island Health; WorkSafe BC	
Potential Partners	Regional District of Nanaimo; Planning Institute of BC (PIBC); Ministry of Health	
Cost	Timeline	Priority
Low	Medium	High
Action 8.2: Explore potential locations of community cooling centres including HEPA air filters for smoke events.		
Supporting Actions	• Create neighbourhood support networks	
Lead Organization(s)	Town of Qualicum Beach; Regional District of Nanaimo; Residents' Association; Emergency Management Oceanside	
Potential Partners	WorkSafe BC	
Cost	Timeline	Priority
Medium	Long	High
Action 8.3: Incorporate climate change considerations into emergency management planning.		
Supporting Actions	• Ensure Hazard Risk and Vulnerability Assessment is implemented and updated regularly. • Promote personal emergency planning and preparedness kits (3-day supply minimum). • Continue work on community energy plans to improve resiliency for emergency situations (e.g. power loss, cancellation of BC ferries, blocked access for emergency vehicles). • Plan ahead for increased pressures on social and emergency services during extreme events.	

	Work with local businesses to improve resiliency of business continuity.	
Lead Organization(s)	Town of Qualicum Beach; Qualicum Beach Chamber of Commerce City of Parksville	
Potential Partners	Regional District of Nanaimo; Province of BC	
Cost	Timeline	Priority
Low	Medium	Medium
Action 8.4: Explore new policy to replace air filters during or after smoke events.		
Supporting Actions	Explore best practices in other communities	
Lead Organization(s)	Town of Qualicum Beach; Emergency Management Oceanside; Regional District of Nanaimo	
Potential Partners	Province of BC	
Cost	Timeline	Priority
Low	Short	Medium
Action 8.5: Strengthen communication with key suppliers (e.g. BC Hydro, fuel supplier for emergency equipment, and health providers).		
Lead Organization(s)	Town of Qualicum Beach;	
Potential Partners	Regional District of Nanaimo	
Cost	Timeline	Priority
Low	Long	High

Monitoring Metrics:

- Complete plan and implement review schedule
- Ensure ongoing distribution of information to community
- Annual review of stakeholder businesses list
- Number of educational workshops
- Number of signups to notification systems

Next Steps:

- Review provincial programs and initiatives and reach out to province and provincial agencies to identify needs and existence of plans.

Objective 9 | Integrate Climate Change Thinking into Future Planning

What has been completed so far?

- OCP provides direction to develop a “Value-based Assessment Framework for Residential Development” which is to incorporate community priorities such as **climate change mitigation and adaptation**.
 - Goal 1 of OCP: Prepare for climate change and reduce energy consumption
 - Climate change adaptation is incorporated into various sections of OCP, including Section 2.2 of OCP: Land Use
- Waterfront Master Plan (2016)
- Sustainability Plan (2010, 2018)
- Memorial Avenue upgrades
 - Raingarden
 - Beach Creek Estuary and Roundabout
 - Diverting runoff away from Beach Creek
- Town of Qualicum Beach completes the Climate Action Revenue Incentive Program (CARIP) Public report each year
 - CARIP report summarizes actions taken in each year and proposed for the next year to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

Action 9.1: Educate and involve youth in climate change adaptation planning.

Lead Organization(s)	Vancouver Island University; School District 69; Mount Arrowsmith Biosphere Region Research Institute	
Potential Partners	Town of Qualicum Beach City of Parksville	
Cost	Timeline	Priority
Low	Ongoing	Medium
Action 9.2: Share results of Qualicum Beach's Climate Change Adaptation Project with Town Staff and community.		
Lead Organization(s)	Town of Qualicum Beach; Residents' Associations	
Potential Partners	Regional District of Nanaimo	
Cost	Timeline	Priority
Low	Short	High
Action 9.3: Engage with Town staff to explore climate-related initiatives across all departments		
Supporting Actions	• Integrate climate adaptation and resilience standards into urban and strategic planning, design, and development approval processes. • Include support for climate change adaptation in existing planning documents and all new strategies moving forward.	
Lead Organization(s)	Town of Qualicum Beach	
Cost	Timeline	Priority
Low	Long	High

Action 9.4: Support conversations around the mental health impacts associated with climate change and consider if PTSD-CTSM (Critical Incident Stress Management) services are required after extreme events.

Lead Organization(s)	Town of Qualicum Beach Regional District of Nanaimo; School District 69; Emergency Management Oceanside City of Parksville	
Potential Partners	Island Health; Town of Qualicum Beach; Emergency Management BC; Provincial Health Services Authority	
Cost	Timeline	Priority
Low	Long	Low
Monitoring Metrics: • Completion of this plan • Number of planning processes that include climate metrics Next Steps: • Sit down with Town staff to discuss plan and how it can integrate into current work plans		

Appendix B – Glossary of Terms

Adaptation: Includes any initiatives or actions in response to actual or projected climate change impacts and which reduce the effects of climate change on built, natural and social systems.

Adaptive Capacity: The ability of built, natural and social systems to adjust to climate change (including climate variability and extremes), to moderate potential damage, to take advantage of opportunities, or to cope with the consequences.

Climate: The weather of a place averaged over a period of time, often 30 years. Climate information includes the statistical weather information that tells us about the normal weather, as well as the range of weather extremes for a location.

Climate Change: Climate change refers to changes in long-term weather patterns caused by natural phenomena and human activities that alter the chemical composition of the atmosphere through the build-up of greenhouse gases which trap heat and reflect it back to the earth's surface.

Climate Projections: Climate projections are a projection of the response of the climate system to emissions or concentration scenarios of greenhouse gases and aerosols. These projections depend upon the climate change (or emission) scenario used, which are based on assumptions concerning future socioeconomic and technological developments that may or may not be realized and are therefore subject to uncertainty.

Greenhouse Gas (GHG) Emissions: Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation, emitted by the Earth's surface, the atmosphere itself, and by clouds. Water vapour (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and chlorofluorocarbons (CFCs) are the six primary greenhouse gases in the Earth's atmosphere in order of abundance.

Climate Impact: The effects of existing or forecast changes in climate on built, natural, and human systems. One can distinguish between potential impacts (impacts that may occur given a projected change in climate, without considering adaptation) and residual impacts (impacts of climate change that would occur after adaptation).

Impact Statement: Climate-related impact statements are concise statements that outline locally-relevant projected threats and how those changes are expected to affect the built, natural, social, and economic systems of the municipality.

Mitigation: The promotion of policy, regulatory and project-based measures that contribute to the stabilization or reduction of greenhouse gas concentrations in the atmosphere. Renewable energy programs, energy efficiency frameworks and substitution of fossil fuels are examples of climate change mitigation measures.

Resilience: The capacity of a system, community or society exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure.

Risk: The combination of the likelihood of an event occurring and its negative consequences. Risk can be expressed as a function where $\text{risk} = \text{likelihood} \times \text{consequence}$. In this case, *likelihood* refers to the probability of a projected impact occurring, and *consequence* refers to the known or estimated outcomes of a particular climate change impact.

Sensitivity: Measures the degree to which the community will be affected when exposed to a climate related impact. Sensitivity reflects the ability of the community to function (*functionality*) as normal when an impact occurs.

Vulnerability: Vulnerability refers to the susceptibility of the community to harm arising from climate change impacts. It is a function of a community's sensitivity to climate change and its capacity to adapt to climate change impacts.

Weather: The day-to-day state of the atmosphere, and its short-term variation in minutes to weeks.

Appendix C – Acronyms

CCCAP – Community Climate Adaptation Plan

DPA – Development Permit Area

EOC – Emergency Operations Centre

FCLs – Flood Construction Levels

GIS – Green Stormwater Infrastructure

IPCC – Intergovernmental Panel on Climate Change

LID – Low Impact Development

MABRI – Mount Arrowsmith Biosphere Region Initiative

NBS – Nature-based Solutions

References

- Bush, E.J., Loder, J.W., James, T.S., Mortsch, L.D., & Cohen, S.J. (2014). An overview of Canada's changing climate. In F.J. Warren & D.S. Lemmen (Eds), *Canada in a changing climate: Sector perspectives on impacts and adaptation* (pp. 23–64). Ottawa, ON: Government of Canada.
- Climate Atlas of Canada (2019). *Urban Forests and Climate Change*. Prairie Climate Centre. Retrieved from <https://climateatlas.ca/urban-forests-and-climate-change>
- Government of Canada. (2016). *The Paris Agreement*. Retrieved from <https://www.canada.ca/en/environment-climate-change/services/climate-change/paris-agreement.html>
- Government of Canada. (2018). *Canada's climate plan*. Retrieved from <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan.html>
- Government of Canada. (2018). *Adapting to climate change in Canada*. Retrieved from <https://www.canada.ca/en/environment-climate-change/services/climate-change/adapting.html>
- Government of Canada. (2018). *Expert panel on climate change adaptation and resilience results*. Retrieved from <https://www.canada.ca/en/environment-climate-change/services/climate-change/adapting/expert-panel-adaptation-resilience.html>
- Government of Canada. (2019). *Pan-Canadian framework on clean growth and climate change* (Publication No. En4-294/2016E-PDF). Gatineau, Quebec: Environment and Climate Change Canada. Retrieved from <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html/>
- Hoffman, A. (2015). *Climate change and biodiversity*. Melbourne, Australia: Australian Academy of Science. Retrieved from <https://www.science.org.au/curious/earth-environment/climate-change-and-biodiversity>
- International Panel on Climate Change. (2014). Climate Change 2014: *Synthesis Report*. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the IPCC [R.K. Pachauri & L.A. Meyer (Eds.)], pp. 1-151. Geneva, Switzerland: IPCC. Retrieved from <https://archive.ipcc.ch/report/ar5/syr/>
- International Panel on Climate Change. (2018). Summary for Policymakers. In V, Masson-Delmotte, P. Zhai, H.O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, ... T. Waterfield (Eds.), *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C*

above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, pp. 1-24. Geneva, Switzerland: World Meteorological Organization.

Lemmen, D.S., Warren, F.J., James, T.S., & Mercer Clarke, C.S. (Eds.). (2016). *Canada's marine coasts in a changing climate*. Ottawa, ON: Government of Canada.

North American Space Academy. (2019). *2018 fourth warmest year in continued warming trend, according to NASA, NOAA*. Retrieved from <https://climate.nasa.gov/news/2841/2018-fourth-warmest-year-in-continued-warming-trend-according-to-nasa-noaa/>

National Oceanic and Atmospheric Administration. (2019). *July 2019 was hottest month on record for the planet: Polar sea ice melted to record lows*. Retrieved from <https://www.noaa.gov/news/july-2019-was-hottest-month-on-record-for-planet>

Strathcona Forestry Consulting. (2007). *Community wildfire protection plan: Town of Qualicum Beach, BC*. Retrieved from <https://qualicumbeach.civicweb.net/document/7166>

SNC Lavalin. (2015). *Waterfront master plan phase 1 (Technical Report No. 614088-2000-41ER-0001)*. Retrieved from <https://qualicumbeach.civicweb.net/filepro/documents/5945>

Szyniszewska (2010). *Invasive Species & Climate Change*. Climate Institute. Retrieved from <https://climate.org/archive/topics/ecosystems/invasivespecies.html>

Town of Qualicum Beach. (2016). *Waterfront master plan phase 2 (community consultation)*. Retrieved from <https://qualicumbeach.civicweb.net/filepro/documents/5069?preview=6365>

Zurich Flood Resilience Program. (2020). *Why conduct flood mapping?* Retrieved from <https://www.floodresilience.net/why-conduct-flood-mapping>

**Town of Qualicum Beach M
M E M O R A N D U M**

TO: Lou Varela, CAO

FOR: Council Meeting, January 18, 2023

FROM: Luke Sales, Director of Planning

SUBJECT: Grant Application Resolution for Crescent Road East Culvert Rehabilitation

RECOMMENDATION

- THAT Council directs staff to submit an application for grant funding application for Crescent Road East Culvert Rehabilitation through the Investing in Canada Infrastructure Program – Green Infrastructure program;
- AND FURTHER THAT Council supports the project and commits to its share (\$500,062) of the project, as well as cost overruns.

BACKGROUND

Council previously approved the submission of this grant application at the September 21, 2022 Council meeting.

The grant was submitted on October 7, 2022, and since then staff were contacted by the program requesting that the Council motion include commitment for the Town's share of the project costs and any additional cost overruns.

DISCUSSION

The Investing in Canada Infrastructure Program – Green Infrastructure program will fund flood mitigation infrastructure projects for individual communities (up to \$10 million), and joint applications submitted by multiple communities (up to \$20 million). The program has a total of \$81.865 million federal and provincial dollars to support projects that increase structural capacity and/or natural capacity with the intent of reducing, or even negating, the effects of flooding

- **Deadline:** October 7, 2022
- **Timeline:** Projects must be completed by March 31, 2027
- **Cost-sharing:** 73.3% Funding (26.7% Town portion)
- **Total project cost:** Early estimate \$1,250,000
- **Source of Town portion of funding:** Currently funded in 2022-2026 Financial Plan – any grant received would directly benefit Town budget

Financial Implications

The Crescent Road Culvert Rehabilitation is already in the Town's 5-year Financial Plan as follows:

- 2022 - \$150,000
- 2023 - \$200,000
- 2026 - \$900,000

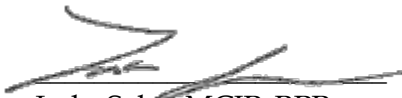
Funding would have to be transferred between budget years if the Town is successful in this grant application.

SUMMARY

Staff submitted a grant application to the Investing in Canada Infrastructure Program – Green Infrastructure program on October 7, 2022, and the program has requested an updated Council resolution to include the commitment for project costs and any additional cost overruns. The proposed project is funded in the 2022-2026 Financial Plan, and any grant received would directly benefit the Town budget.

ALTERNATIVES

1. THAT Council provides alternative direction to staff.



Luke Sales, MCIP, RPP
Director of Planning
Report Writer



Genelle Conn
Acting Director of Finance
Concurrence



Lou Varela, MCIP, RPP
CAO
Concurrence

**Town of Qualicum Beach
MEMORANDUM**

TO: Lou Varela, CAO

FOR: Regular Council Meeting January 18, 2023

FROM: R.K. (Bob) Weir, P. Eng., Director of Engineering & Capital Projects

SUBJECT: BC Hydro Lease Lights – Request for Direction on Next Steps

RECOMMENDATION:

Staff have identified several possible options for next steps with the LED streetlight conversion project and request direction from Council.

Option 1: THAT Council takes no action to modify BC Hydro lease lights and direct staff to advise members of the public with concerns that no further action will be taken by the Town.

Comment: This alternative does not have budget impact, nor does it satisfy public complaints.

Option 2: THAT Council request BC Hydro crews change the luminaire colour temperature to 3000K for the 35 LED streetlights identified to date through the complaint process.

Comment: This change would not significantly impact road safety if the luminaire wattage remained unchanged, and does not include modification to lights located on major collectors or at intersections that staff have previously advised against modification for reasons of safety. The cost to replace luminaires is expected to be between \$250 and \$500 per light. Total budget would be determined by the number of requests for light changes to date and is subject to change if additional requests are made.

Option 3: THAT Council request BC Hydro crews change the luminaire colour temperature to 3000K for all 75-watt LED streetlights in residential areas that are not located on arterials, major collectors or intersections.

Comment: This option involves 386 lights. At the estimated exchange cost of \$250 to \$500 per light, the total cost would be between \$96,500 and \$193,000.

Option 4: THAT Council provides direction to staff to undertake additional research, including but not necessarily limited to: a drone survey, community wide survey on light impact, etc., in advance of directing further action for the BC Hydro LED streetlight upgrade program.

Comment: The cost of a drone flight over 3 representative locations, including image processing, is estimated at \$2,500. Council may direct additional research options at their discretion.

Option 5: Another alternative as directed by Council.

PURPOSE:

To provide Council with an update on the BC Hydro streetlight conversion program, and to seek Council direction on possible next steps for staff. Staff continue to receive correspondence from concerned residents who have not seen requested changes made to their streetlights.

While residents have expectations for action to address their streetlight complaints, staff has little ability to respond from the operational level. As such, staff are seeking Council direction, in consideration of budget and risk, for possible next steps.

BACKGROUND:

Staff are providing background information on the BC Hydro Light Emitting Diode (LED) streetlight upgrade program, and seeking Council direction for moving forward. While it is within the Town's ability to direct modification of the BC Hydro streetlights, such modifications will have risk and cost that require governance direction for staff to proceed.

Staff has little ability to respond to public complaints from the operational level as BC Hydro has advised that all inspected lights, for which complaints have been received, are installed to specification or have been addressed. At the time of report writing, the Town has received 55 outstanding complaints about streetlights, resulting from the 551 new lights that have been installed.

The Town has provided to BC Hydro the location of lights which have generated complaints (see attached map).

Project Origin:

BC Hydro has been mandated to remove all *high-pressure sodium (HPS)* light ballasts in the province containing *polychlorinated biphenyls (PCB)*. As such, BC Hydro has undertaken a complete retrofit of the HPS streetlights with LED streetlights.

- Qualicum Beach has 551 BC Hydro lease lights (the ones attached to wooden utility poles), most of which were degraded with age and grime, so that they were producing light at approximately half of their as-new specification.
- The Town adopted a "like for like" conversion of wattages from HPS to LED, as represented in the [BC Hydro Customer Tool Kit](#), which resulted in a predominance of 75 watt LED lights, with some 114 and 162 watt lights on arterials and major collector roadways. There is one 39 watt light installed in Town; an installation error by BC Hydro.
- The two colour temperatures made available were 3000K (degrees Kelvin) or 4000K. The Town has been specifying 4000K for LED lighting since 2012 as this colour temperature is technically recognized as being superior in colour rendition and allows drivers and pedestrians to discern an object at a greater distance. As streetlights exist for the purpose of roadway safety, staff considered this colour temperature to be optimal.
- The LED retrofit was accomplished over a few days, and the combination of the restored light output and the whiter spectrum of the LED lights has resulted in both complaints and positive commentary.

BC Hydro Pole Mounted Streetlight Analysis by Illumination Engineer

A third party engineering consulting service was commissioned by the Town of Qualicum Beach to better understand the impact of the roadway lighting levels resulting from the BC Hydro's Street Light Replacement Program. A summary of the findings is as follows:

- The existing spacing of the lights does not allow for illumination of the roadway in accordance with recommended industry standards (ANSI/IES RP-8-18).
- There is a drastic difference between HPS performing at approximately 55% of their original specification and the replacement LED performing at 100%, the latter of which performs similarly to the HPS lighting when it was initially installed decades ago.
- In order to provide illumination levels meeting industry standards using 39 watt luminaires it would require cutting the current light spacing in half, or effectively doubling the number of installed lights.
- If the above option cannot be satisfied due to cost/logistics it is recommended that streetlighting be left as is.
- With the luminaire wattage available only at a few fixed levels, distribution type fixed as a Type II, and other optics/options such as shields not available, municipalities have limited options and flexibility in providing alternative solutions in neighbourhoods perceived to be over-lit.
- Many complaints about intrusive light spill onto private properties arise result from the davit arms being oriented at 45° at intersections to avoid conflict with overhead wires.
- 4000K colour temperature provides the highest detection distance for both drivers and pedestrians.
- In municipalities where the median age is lower, a mix of 3000K in residential areas and 4000K at intersections, on arterial and collector roadways has been adopted

Municipal Insurance Association of BC (MIABC)

The Municipal Insurance Association of BC (MIABC) was also consulted and has advised that if the Town were to remove lights that provide better vision for pedestrians and drivers, and to replace them with lights that are less effective at lighting the roadway, there could be an increase to the Town's liability exposure. MIABC cautioned against increasing the Town's liability exposure and warned of their potential difficulty in defending the Town and its reasoning to reduce lighting in consideration of potential impacts to safety. The following is an excerpt from correspondence with MIABC: *"For example, if a pedestrian were to be struck by a vehicle in this area, we would have a very difficult time defending the Town and its reasoning for regressing on this safety feature."*

Authority

The Town of Qualicum Beach is the customer subscribing to the BC Hydro Overhead Streetlight Program and is at liberty to direct the addition, removal, or modification of these lights at the Town's expense. While staff respectfully acknowledge this authority of Council, staff are professionally bound to note that both the Illumination Engineer and the MIABC have recommended against removing lights or reducing light quality. While staff are responsible for making recommendations, staff recognize that it is a Governance responsibility of Council to manage risk and budget for the municipality, and as such are seeking direction.

DISCUSSION:

Streetlight Removal or Replacement

The BC Hydro website lists standard fees and charges for connections and modifications, and specifically has two entries relating to streetlights: streetlight relocation \$1,465, and streetlight removal \$852 (with an age depreciation allowance). However, BC Hydro has indicated that they will exchange luminaires during the upgrade program for different colour or wattage and estimate the cost per fixture to range from \$250 to \$500 depending on traffic control requirements. To date, the following changes have been made to installed lights:

- BC Hydro has exchanged three fixtures on Larch Drive, at no cost to the Town, in order to demonstrate the colour temperature differences.
- For the light modification at Burnham and Hemsworth, the Town has been billed \$879 as it involves a davit arm relocation.
- BC Hydro modified one light located on Judges Row, at no cost to the Town.

No additional adjustments to lights, at BC Hydro's expense, are anticipated as BC Hydro has determined that the remaining lights are installed to specification.

Changing Colour Temperature

As noted above, there are only two colour temperatures offered by BC Hydro, 3000K and 4000K. Both colours are noticeably whiter in appearance than the 2200K HPS lights that were replaced. Research has concluded that LED luminaires with a colour temperature of 4000K provide the highest detection distance, even when compared to HPS luminaires of much higher wattage. In addition, the colour rendering of luminaires at 4000K is superior as it is both warm enough that the red spectrum is rendered well and cool enough to render the blue end in a neutral manner. The replacement of 4000K luminaires with 3000K luminaires would result in a 10% drop in lumen output and a slightly less realistic colour rendition, which may not unduly compromise safety. It is worth noting that changing the colour temperature from 4000K to 3000K on Larch Drive did not eliminate complaints about the streetlights in the immediate area.

Changing Luminaire Wattage

In contrast to a change in colour temperature, changing luminaire wattages has potential for increased risk. Luminaire wattages in Qualicum Beach are a mix of 75, 114 and 162 watt LED. The 114 and 162 watt LED lights are typically on arterials like Highway 19A, collector roads and at intersections and points of conflict. The balance of the lights located in the residential areas are predominantly 75 watt. Replacing a 75 watt with a 39 watt LED would result in a 40% drop in lumen output.

The Illumination Engineer's report (attached for convenience) identified that the existing lighting (75 watts) does not meet recommended roadway lighting standards now, mainly due to the spacing of existing lights. It was further determined that to meet the standard with 39 watt LEDs, would require cutting the spacing in half and doubling the number of lights given the 40% drop in lumen output. The replacement of existing 75 watt with 39 watt lights at the existing spacing would reduce illuminance and negatively impact uniformity, or in simple terms, it would significantly reduce the lit area of the roadway and increase the unlit dark areas between lights to the detriment of user visibility.

Figure 1 below is a computer-generated image of light coverage based on the manufacturer's IES performance specifications for the existing 75 watt luminaires. The image shows the extent of illumination, and the unlit areas of the roadway between the light locations. It also shows the impact of the davit arm orientation and the cast of the Type II distribution along the roadway if they are mounted on the pole perpendicular to the road, or in the case of light 840, perpendicular to the cross street.



Figure 1

Figure 2 below shows the same information as Figure 1 in a more graphical way that displays the variance in illumination at the ground surface.



Figure 2

Figure 3 below shows the impact of a davit arm oriented at 45° and the corresponding light trespass onto private properties at opposing corners of the intersection. This example also illustrates the impact of a higher wattage lamp at 416 that almost bridges the unlit area between 416 and 415.



Figure 3

While these images are computer generated with the manufacturer's data that is used for streetlighting design, the option exists to collect drone imaging to compare with the computer generated images and confirm the actual extent of lit and unlit areas of the roadway. Staff have obtained an informal estimate to conduct this exercise at the cost of \$2,500 for a drone flight over 3 representative locations including image processing. Council could choose to undertake this research, or an expanded version, prior to providing further direction to staff.

Financial Implications

The BC Hydro lights are a leased service to the Town for which the municipality pays a monthly rate comprised of three components: electrical consumption, maintenance, and capital cost recovery.

The combined lease rate varies by wattage as follows: \$18.96 per fixture per month for 75 watt, and \$23.74 per fixture per month for 114 watt (the rate for a 39 watt is \$15.23 although there is only a single light installed by BC Hydro in error). The total annual cost to the Town for the 551 lease lights is \$145,083.

At the time of report writing, the Town has received 55 resident complaints (not including multiple submissions by the same complainants), of which 9 lights are located on major collectors or at intersections that staff have previously advised against modification for reasons of safety. If Council were to direct the modification of the other 35 lights for which complaints have been received, the cost to the Town would be between \$8,250 and \$16,500, depending on the location and traffic control requirements. It is worth noting that if Council were to start modifying lights at no cost to residents, additional requests may be expected and these costs would increase proportionately.

If Council were to direct the modification of all 75-watt lights in residential areas that are not located on arterials, major collectors or intersections, this would involve 386 lights. At the estimated exchange cost of \$250 to \$500 per light, the total cost would be between \$96,500 and \$193,000.

There is currently no budget identified for modification of BC Hydro lease lights as such the matter would require a governance decision.

SUMMARY:

Streetlights are intended for road safety. LED lighting is a new and superior technology to the HPS lighting it replaced, offering greater efficiency, reliability and colour spectrums that improve visibility. The LED lights selected for the replacement program are equivalent in light output to the HPS lights replaced at their original time of installation, and they are in a colour temperature designed to optimize night vision of drivers and pedestrians. No other alternative to LED lighting was offered by BC Hydro during the upgrade.

Both complaints and appreciation have been received about the restored light output of the luminaires:

In summation:

- 8% of the lights have generated complaints;
- 92% of the lights have not generated complaints;

Based on the Illumination Engineer's report, the discussion with MIABC about risk, and recognizing that streetlights are a public safety level of service intended to address the needs of the entire community, staff are recommending Council maintain the current number and placement of lights and maintain the existing luminaire wattage of 75 watts. This approach aligns with recommendations contained in the Illumination Engineer's Report and those made by MIABC.

Staff further recognize that changing colour temperature of the streetlights would result in a marginal drop in illumination and a slightly less realistic colour rendition, which may not unduly compromise safety. Should Council direct staff to change the colour temperature of the streetlights at Town cost from 4000K to 3000K, the modifications may not satisfy all concerns about light intensity, as was the case with the test area located at Larch Drive.



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BC HYDRO POLE MOUNTED STREET LIGHTING ANALYSIS FOR TOWN OF QUALICUM BEACH

Project Number: 1-20-006

PREPARED FOR

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Revision 00
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1.0 Purpose

e2 Engineering was commissioned by The Town of Qualicum Beach to provide engineering consulting service to understand the impact of the roadway lighting levels due to the BC Hydro's Street Light Replacement Program, where existing High-Pressure Sodium (HPS) luminaires attached to BC Hydro poles are upgraded to high efficiency Light-Emitting Diode (LED) luminaires. This report outlines BC Hydro's guidelines for HPS replacement, provides streetlighting modelling before and after HPS replacement to LED, and compares the current LED lighting levels in Qualicum Beach to ANSI/IES RP-8-18 Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting.

2.0 Summary

The spacing between existing BC Hydro pole mounted luminaires in areas/streets examined at Qualicum Beach does not allow for proper illumination of the roadway as per ANSI/IES RP-8-18 recommendations. This lack in lighting uniformity due to luminaire spacing coupled with the lack of distribution types offered by BC Hydro has contributed to increase in visibility-reducing factors and increase in obtrusive lighting. As per BC Hydro's recommendation, the Town of Qualicum Beach has selected the LED wattage equivalent to that of the existing HPS lighting, however, the existing HPS lighting being replaced was likely performing at 50-60% due to light loss factors. The recently installed LED luminaire will also experience light loss factors during the course of its life, but as expected, the initial lighting levels will be brighter than the end-of-life levels. This drastic difference between HPS performing at approximately 55% and the replaced LED performing at 100% certainly contributes to the perception of over lighting, albeit performing similarly to the HPS lighting when it was initially installed.

3.0 Background

The BC Hydro Street Light Replacement program is mandatory to meet federal regulations to remove Poly-Chlorinated Biphenyl (PCB) from lighting ballasts by the end of year 2025. Unlike HPS and other obsolete light sources, LED luminaires are rapidly evolving, and their efficacy vary greatly depending on the manufacturer, model number, optics, year of design and year of production. Appendix F of BC Hydro's application to the British Columbia Utilities Commission (BCUC) to submit the 2020 Street Lighting Rate for approval states that the specified wattage of LED luminaires can be 43% to 73% less than the existing HPS luminaire, based on the results of the field trial [1].

However, the field trials took place in roads with luminaire spacing of approximately 50 meters, whereas the luminaire spacing in Qualicum Beach is approximately double that distance.

Due to rate of evolution with LED luminaries, BC Hydro has recognized that future LED luminaires could be more efficient and has subsequently grouped the replacement/upgrade possibilities into four groups:

1. 50W LED or less – equivalent to 100W flat lens HPS
2. 51-80W LED – equivalent to 100W drop lens HPS
3. 81-120W LED – equivalent to 150W HPS
4. Greater than 120W LED – equivalent to 200W HPS

To reduce cost and variation in stock products, BC Hydro has standardized the LED wattage for the time being (until further improvements to LED luminaires are realized) to the following fixed levels:

Model	LED Wattage	Equivalent Wattage HPS	Colour Temperature (CCT)	Light Distribution	Lumen Output
Lite-S	39W	100W Flat	3000K 4000K	Type II Max Throw	5,150 5,250
	75W	100W Drop	3000K 4000K	Type II Max Throw	7,700 8,500
Lite-M	114W	150W	3000K 4000K	Type II Max Throw	12,700 14,050
	162W	200W	3000K 4000K	Type II Max Throw	16,900 18,650

Note that the wattage of the luminaire is fixed, along with the light distribution type and other optics/options that is typically available to a lighting designer. In light of this, the Town of Qualicum Beach and other municipalities alike have very limited options and flexibility in providing alternate solutions in neighbourhoods perceived to be over-lit and areas with excessive obstructive lighting.

4.0 Introduction to Streetlighting Design

Several factors affect the streetlighting design and the demography and statistical evidence of the neighbourhood must be considered prior to the start of streetlighting design. At a minimum, the following data is typically useful prior to the start of design:

1. Median age of the automobile users
2. Type of road – local, arterial, collector, highway, etc.

3. Accident rates in the neighbourhood
4. Pedestrian conflict level
5. Other source of lighting

The streetlighting designer can determine the appropriate lighting intensity and lighting uniformity (ratio between maximum/average and minimum lighting level) by using the information listed above in conjunction with the recommended lighting design criteria listed in ANSI/IES RP-8-18 standards. The result is directly dependant on the luminaire mounting height, type of light source, the type of optics/distribution of the luminaire and the wattage of the luminaire. However, calculating these values alone is insufficient in providing proper streetlighting, as adjusting these parameters without consideration to the neighbourhood conditions will inevitably result in light trespass, glare, and light pollution. The duty of a streetlighting designer is to provide a design to maximize the luminaire spacing (to reduce the quantity of luminaires) while achieving the recommended lighting levels, uniformity levels and reducing/eliminating obtrusive light.

5.0 Pole Spacing

As mentioned, a streetlighting design is dependent on several factors, but general assumptions can be derived for residential streets based on previous experience and lighting models. In general, 35W LED luminaires mounted 9m above grade, and spaced approximately 50 meters apart will produce sufficient lighting and uniformity level standards. Typically, BC Hydro pole spacing is about 45-50 meters apart. This spacing is ideal as each BC Hydro pole will have a 35W LED luminaire, which is typical in new neighbourhoods with BC Hydro overhead lines (see “BC Hydro Field Trial” section for further information). Although the BC Hydro pole spacing in Qualicum Beach follows a similar pattern, the luminaires are installed on every other BC Hydro pole, effectively doubling the spacing required to meet the recommended lighting and uniformity level. This approach is referred to as “half code” lighting and is not recommended as providing half the criteria will not merely result in half the benefit, but will likely produce results that are detrimental to safety and visibility as the lack of uniformity will “force the eye to adapt to very pronounced shadows and very high contrast ratios in the field of view” [2].

6.0 Light Distribution, Pole Height, Davit Arm and House Shield

Light Trespass, Glare and Light Pollution are three elements that the ANSI/IES RP-8-18 standard refers to a “obtrusive light”. Obtrusive light is light that falls beyond the area that we are attempting to illuminate. ANSI/IES RP-8-18 standard provides a few examples of obtrusive lighting that is typical in many municipalities [2]:

1. Local residents who register complaints about a bright street light visible in their windows
2. Local resident who registers complaints about illuminance falling onto their property.

The approach to reduce obtrusive light is straightforward, and effective:

1. Experimenting with various mounting heights
2. Adjusting wattage of luminaires
3. Selecting luminaires with a different distribution suited for the application (i.e Type II, III and V)
4. Luminaire enabled optic adjustment
5. Selecting luminaires with reduced back light, uplight and glare
6. Installing house shields to prevent back light
7. Installing street shields to prevent glare
8. Adjustment of luminaire tilt
9. Rotation of davit arm around pole

Although most of these options are available to every municipality through proper selection of the manufacturer provided SKUs, we are limited by the product selection restriction introduced by BC Hydro. Although available through the manufacturer, BC Hydro does not allow the use of external house shields, external street shields, integrated optics to reduce BUG (back light, up light and glare) rating, davit arm angle and most importantly – the selection of luminaire distribution type other than Type II distribution. The use of other types of distribution, for example - Type IV distribution, can significantly reduce the obstructive light that is being encountered in some intersections as the BC Hydro mandated Type II distribution spills too much light on adjacent properties.

To mitigate the light spill of Type II distribution unto neighbouring at intersections, we could consider rotating the obtrusive luminaire to navigate the light spill away from the affected property. However, this solution presents safety issues since rotating the luminaire at intersections from 45 degrees to 90 degrees will inevitably introduce dark spots at crossings which is typically resolved by adding a luminaire on the road perpendicular to the luminaire being altered. In other words, in

neighbourhoods where Type II distribution luminaire cannot be replaced with Type IV distribution luminaire (due to BC Hydro's restrictions), an alternate option may be to add a luminaire and change the rotation of the obtrusive luminaire. In any case, a lighting study will need to be performed to understand the positive and negative impact of the various option at each area of concern. A blanket statement on the procedure to mitigate obtrusive light cannot be made as reduction of obtrusive light is a function of numerous factors described above. Designing to a blanket statement may resolve one issue while likely introducing additional issues.

7.0 Color Temperature

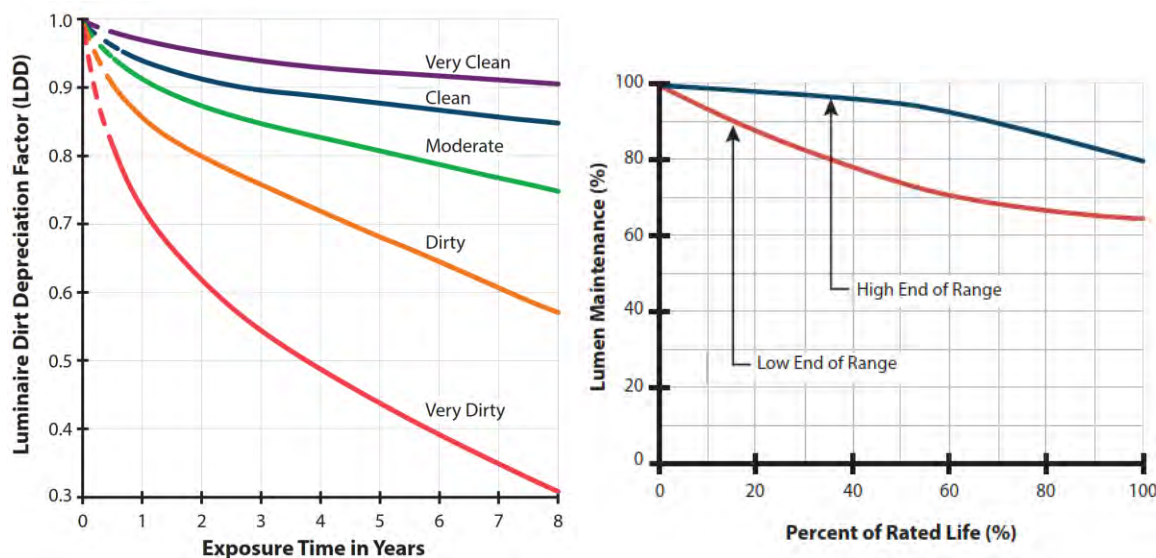
Most municipalities typically state various specification requirements that the streetlighting design must adhere to. Such requirements may include restriction to luminaire wattage, distribution/optic of the luminaire and color temperature of the luminaire. Municipalities such as the City of Duncan and the Town of Sidney - where the median age is larger than 55 years – have adopted streetlighting color temperature of 4000K. In other municipalities where the median age is lower, a mix of 3000K in residential neighbourhoods and 4000K in intersections and/or arterial/collector roads have been adopted.

In Qualicum Beach, the median age is 65 years. A 70-year-old with 20/20 vision during daytime hours will have his/her vision reduced to 20/40 or worse during night time [2]. This reduction in visibility during night reduces the driver's ability to detect objects on/near the road which directly impact his/her reaction time. Research has concluded that LED luminaires with a color temperature of 4100K provide the highest detection distance, even when compared to HPS luminaires of much higher wattage [3]. In addition, the color rendering of luminaires at 4100K is also better as it is both warm enough that the red spectrum is rendered well and cool enough to render the blue spectrum in a neutral manner [3].

Ideally, all luminaires in a particular neighbourhood should have the same color temperature for consistency and aesthetics, however, it is not uncommon for municipalities to install two different color temperatures within the same street/neighbourhood during the course of a streetlighting replacement program.

8.0 Light Loss Factor

Many factors affect the light output of a luminaire. The total light loss factor is a combination of all such factors which includes lamp lumen depreciation, luminaire dirt depreciation, maintenance factors, ballast factors and luminaire ambient temperature factors. Below are two charts [2] extracted from the ANSI/IES RP-8-18 standard which illustrates the luminaire dirt depreciation and lamp lumen depreciation for HPS luminaire. The HPS luminaire replaced in Qualicum Beach likely has a light loss factor of 0.5 to 0.6. In other words, the lighting level of the HPS luminaire was only 50-60% of the lighting levels provided by the same HPS luminaire when it was originally installed.



As noted in the chart above, the cleanliness of the environment that the luminaire was exposed to, and the exposure time both play a significant role in the lighting output of the luminaire. Therefore, the accurate method to stipulate the light loss factor of the HPS luminaire would have been to obtain on-site data and examination of the HPS luminaire both before and after cleaning. However, for the purposes of this study, reasonable assumptions have been made to stipulate the light loss factor of the HPS luminaire at 0.55. When trying to compare the lighting levels between the replacement LED luminaire, and the replaced HPS, it is important to keep light loss factor in mind for two reasons:

1. HPS luminaire would have been 40-50% brighter when it was originally installed
2. LED luminaire will also experience similar loss in light output through the course of its life

9.0 Assumptions

The lighting models and calculations attached throughout this report are based on the following assumptions:

1. The HPS luminaires have a lamp lumen depreciation of 0.65, and the luminaire dirt depreciation of 0.85. Therefore, the HPS luminaires will be modelled at 100% and 55% (i.e 0.55 light loss factor) to represent their operation when they were initially installed, and their most recent condition, respectively.
2. Upgraded LED luminaires are currently performing at 100% (i.e 1.0 light loss factor).
3. IES lighting modelling files provided by BC Hydro as part of their Streetlighting Replacement Program information is the same as the luminaires installed during the upgrade.
4. The LED luminaires were upgraded from HPS as per the equivalent wattage table provided by BC Hydro.
5. Luminaire height, arm length, wattage of luminaire and direction of luminaire provided by Town of Qualicum Beach.

10.0 Qualicum Beach - HPS and LED Model Overview

The following images visually compare the lighting levels before and after the change to LED luminaires. The drawing package provide these visuals for each street/area that that e2 Engineering was commissioned to provide a lighting study for.



Figure 1: Shaded contour calculation of 75W LED at 100% (current status with LED luminaire)



Figure 2: Render of 75W LED at 100% (current status with LED luminaire)



Figure 3: Shaded contour calculation of 100W HPS at 55% (potential status prior to upgrade to LED luminaire)



Figure 4: Render of 100W HPS at 55% (potential status prior to upgrade to LED luminaire)



Figure 5: Shaded contour calculation of 100W HPS at 100% (potential status at initial installation of HPS luminaire)



Figure 6: Render of 100W HPS at 100% (potential status at initial installation of HPS luminaire)



Figure 7: Shaded contour calculation of 115W LED at 100%
(current status with LED luminaire)



Figure 8: Render of 115W LED at 100%
(current status with LED luminaire)



Figure 9: Shaded contour calculation of 150W HPS at 55%
(potential status prior to upgrade to LED luminaire)



Figure 10: Render of 150W HPS at 55%
(potential status prior to upgrade to LED luminaire)



Figure 11: Shaded contour calculation of 150W HPS at 100%
(potential status at initial installation of HPS luminaire)



Figure 12: Render of 150W HPS at 100%
(potential status at initial installation of HPS luminaire)

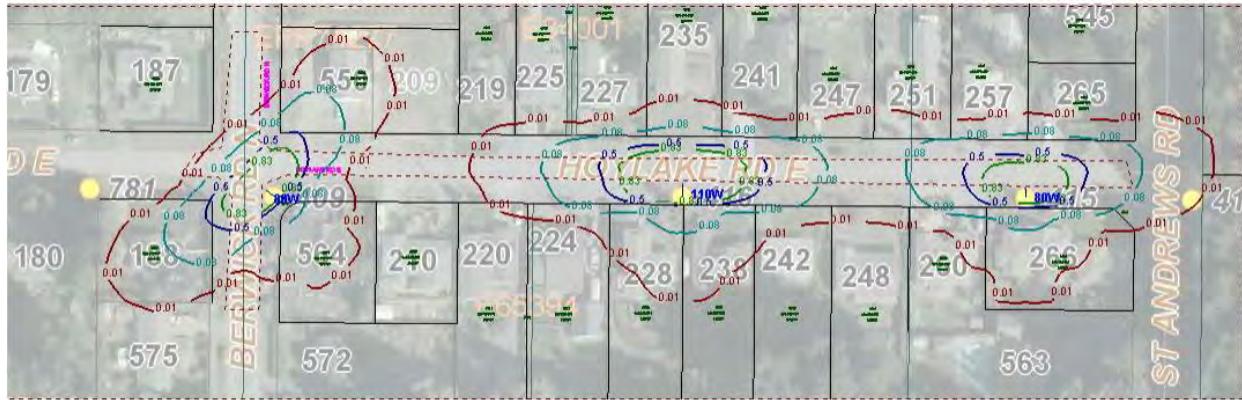


Figure 13: LED at 100% (current status with LED luminaire)



Figure 14: HPS at 55% (potential status prior to upgrade to LED luminaire)



Figure 15 – HPS at 100% (potential status at initial installation of HPS luminaire)

11.0 BC Hydro Field Trial – Lighting Models

In 2016, BC Hydro conducted a field trial to replace HPS lamps with LED lamps. One of the streets included in this trial was Regent Rd, between 3rd Ave and 7th Ave in Richmond BC. Using the same streetlight locations and LED fixtures used in the trial, e2 Engineering has prepared lighting models to verify the results of the LED replacements that BC Hydro deemed acceptable. Also included are models showing the same 80W fixtures that were installed in Qualicum Beach.

The original HPS fixtures are modelled below at 1.0 and 0.55 light loss factor.



Figure 16: Regent St - 100W HPS at 100% (potential status at initial installation of HPS luminaire) with Calculation Results



Figure 17: Regent St - 100W HPS at 55% (potential status prior to upgrade to LED luminaire) with Calculation Results

Next, the 35W LED fixtures used in the field trial are modelled.



Figure 18: Regent St - 35W LED Replacements at 100% (current status with LED luminaire) with Calculation Results

The above results were deemed acceptable in the BC Hydro study, however this exact luminaire is no longer approved for use. There is a 39W fixture from BC Hydro's luminaire specifications chart that is comparable to the 35W LED used in the field trial. Models and calculations for that approved luminaire are included below.



Figure 19: Regent St - 39W LED Replacements at 100% with Calculation Results

For comparison, the next Regent Street model shows the 80W fixtures that were installed throughout Qualicum Beach.



Figure 20: Regent St - 80W LED Replacements at 100% with Calculation Results

12.0 Qualicum Beach – Lighting Models

Models and calculations for Crescent Road West in Qualicum Beach were conducted to show the difference between the existing 80W LED luminaire, the 35W LED luminaire used at Regent Road, and the 39W luminaire approved for use by BC Hydro. Crescent Road West was selected for direct comparison to Regent Road because of the similarity between the two roads.

The following model and calculations are for the 80W LED luminaire currently installed at Crescent Road West.

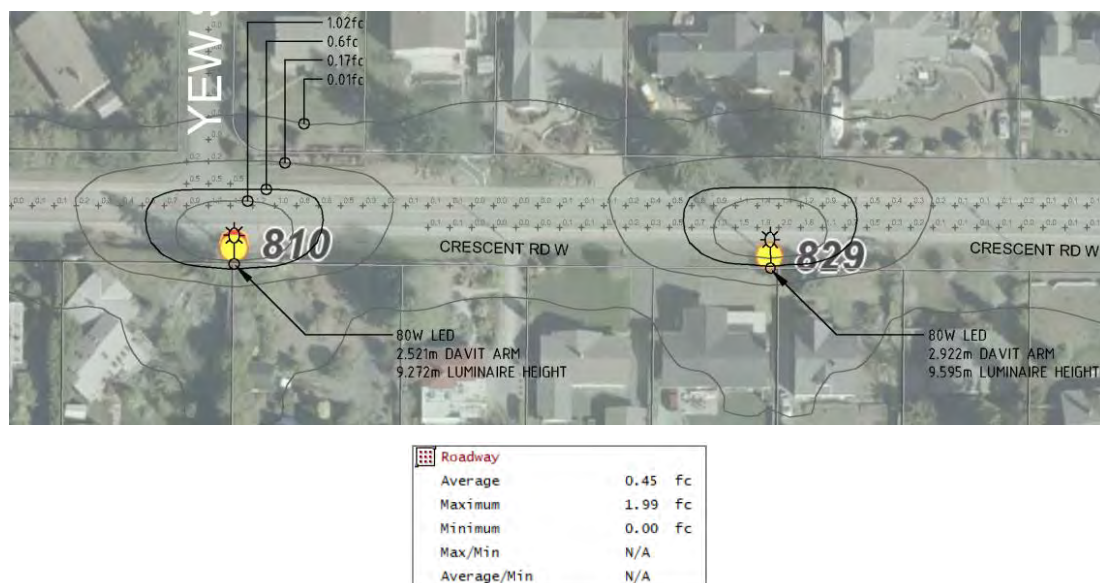


Figure 21: Crescent Road West - 80W LED at 100% with Calculation Results

Shown below is the model and calculations for the 35W LED luminaire from Regent Road and 39W LED fixture approved by BC Hydro, respectively.

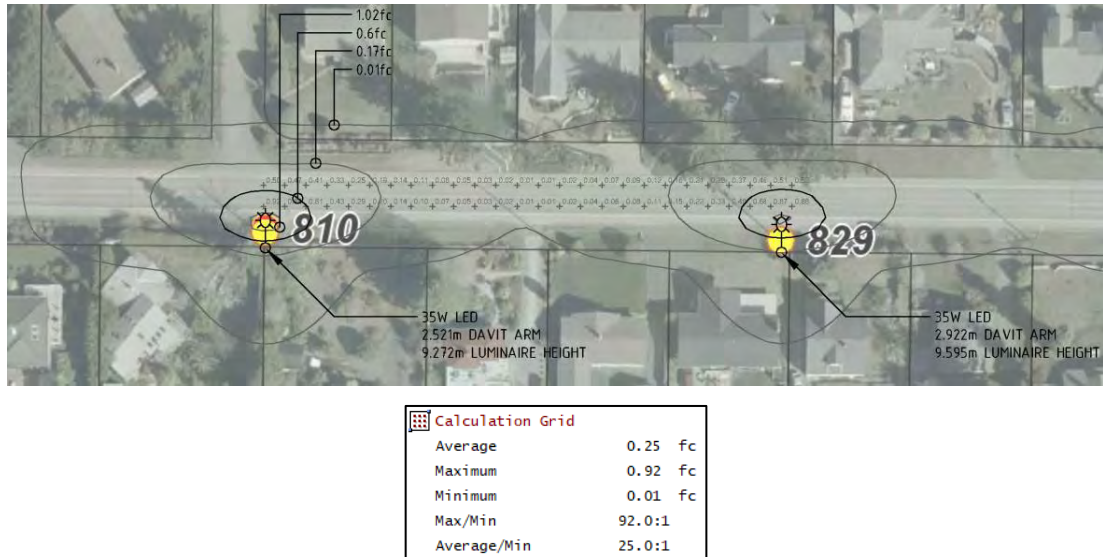


Figure 22: Crescent Road West - 35W LED at 100% with Calculation Results

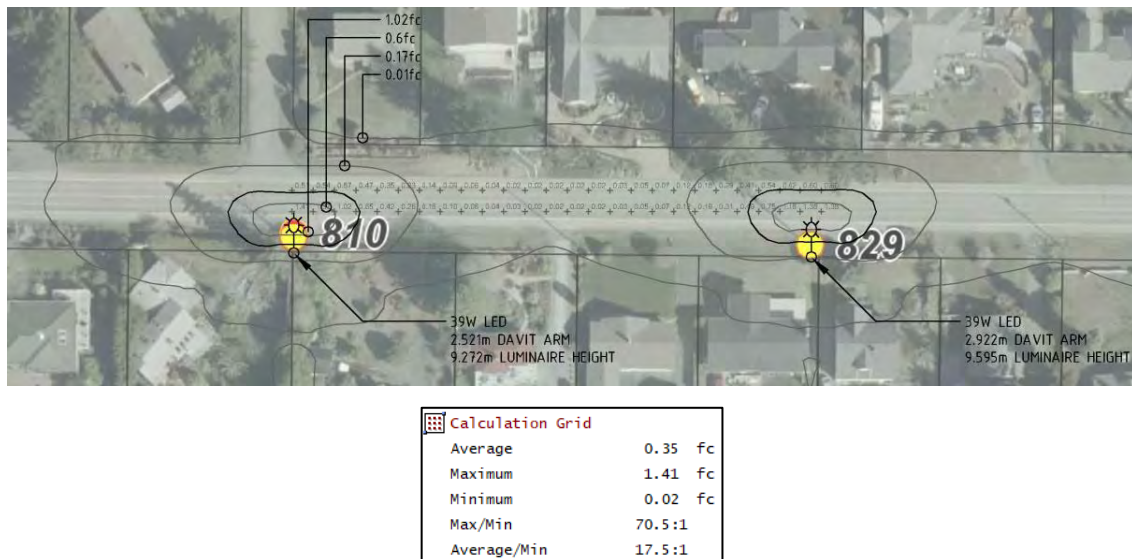


Figure 23: Crescent Road West - 39W LED at 100% with Calculation Results

For additional reference, the same portion of Crescent Road West is shown below with the previously installed HPS fixtures at 100% and 55%. The fixtures are modelled at 100% to show their performance when they were newly installed, and at 55% to represent their end of life performance.

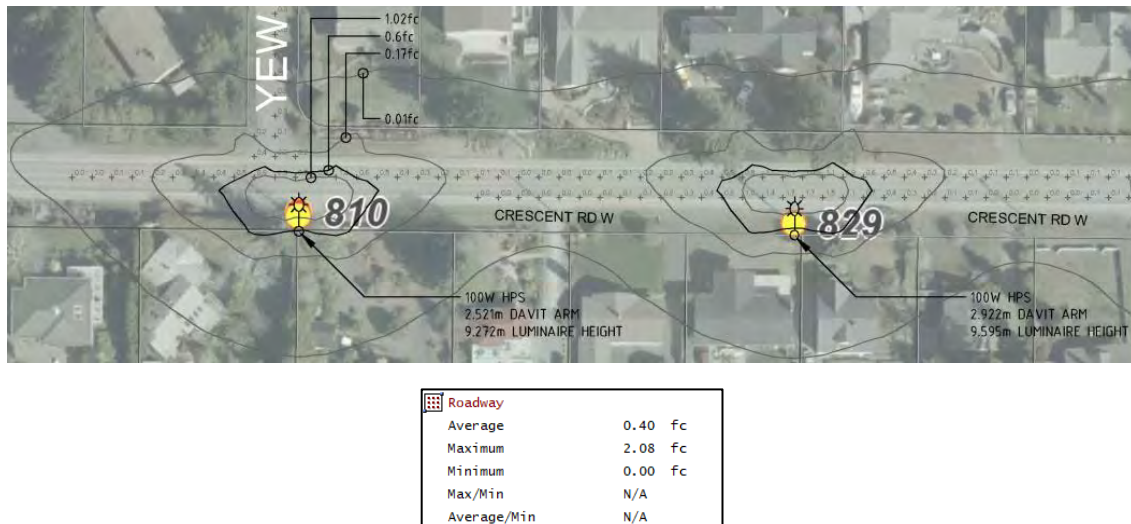


Figure 24: Crescent Road West - 100W HPS at 100% with Calculation Results

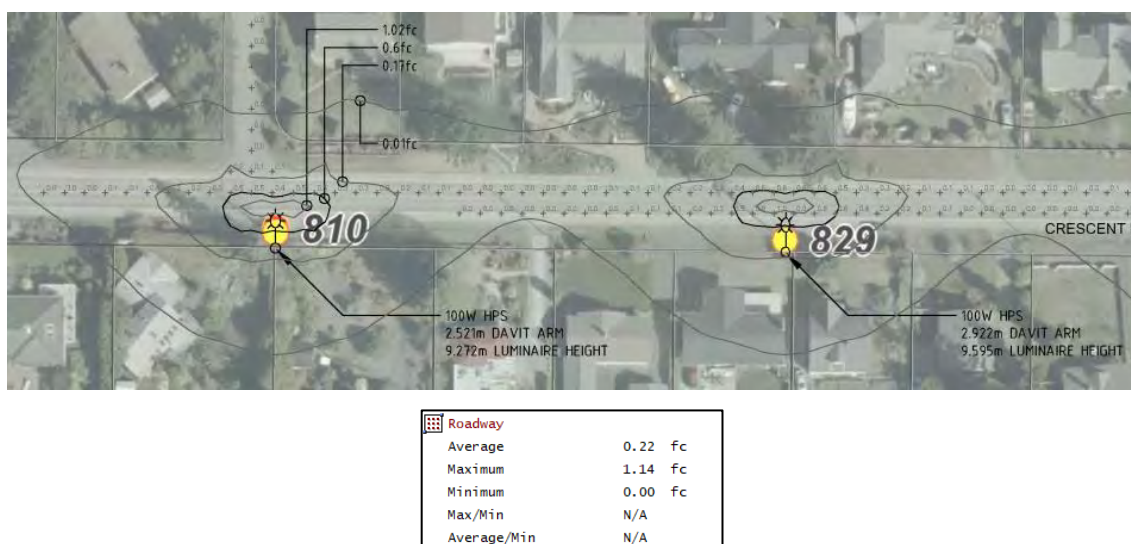


Figure 25: Crescent Road West - 100W HPS at 55% with Calculation Results

13.0 Comparison of Results

Lighting model calculation results from Regent Road and Crescent Road West are tabulated below and compared with ANSI/IES RP-8 requirements.

Regent Road Calculation Results - local road, low pedestrian activity						
	35W LED (field trial luminaire)	39W LED	80W LED (currently installed)	100W HPS @100%	100W HPS @55%	ANSI/IES RP-8 Requirements
Reasonably meets ANSI/IES RP-8 recommendations?	Yes	Yes	Yes	Yes	Yes	N/A
Average Illuminance (fc)	0.6	0.8	1.34	1.16	0.64	0.372 minimum
Maximum Uniformity (max/min ratio)	3.3	2.8	2.8	4	4	10.0 maximum
Average Uniformity (average/min ratio)	2	2	1.9	2.1	2.1	6.0 maximum

Crescent Road West Calculation Results - local road, low pedestrian activity						
	35W LED (field trial luminaire)	39W LED	80W LED (currently installed)	100W HPS @100%	100W HPS @55%	ANSI/IES RP-8 Requirements
Reasonably meets ANSI/IES RP-8 recommendations?	No – maximum uniformity is poor	No – maximum uniformity is poor	No – maximum uniformity is poor	No – maximum uniformity is poor	No – maximum uniformity is poor	N/A
Average Illuminance (fc)	0.25	0.35	0.45	0.42	0.23	0.372 minimum
Maximum Uniformity (max/min ratio)	92	70.5	66.3	104	114.0	10.0 maximum
Average Uniformity (average/min ratio)	25	17.5	16.0	21.0	23.0	6.0 maximum

The critical factor that impacts these results is the distance between two luminaires. The average distance between luminaires at Regent Road is 46.13m while the average spacing for luminaires used in the Crescent Road West model is 96.6m. The average spacing between luminaires in areas of Qualicum Beach that e2 Engineering has been commissioned to investigate is 96.3m. As the luminaire spacing increases, both the maximum and average uniformity decreases. Although ANSI/IES RP-8 states maximum uniformity of 10:1 at local roads with low pedestrian activity, it is not uncommon

for maximum uniformity to reach as high as 20:1 in many existing local roads. Although the average illuminance levels are met, the maximum uniformity at Crescent Road West is exceptionally high due to the existing spacing of the luminaires on existing poles. Both the average illuminance and uniformity must pass for streetlighting design to be functional, safe and as recommended by ANSI/IES RP-8-18.

From the tables above, it can be observed that the 80W LED luminaire performs similarly to the 100W HPS luminaire at 100%. Although the average illuminance levels of the 80W LED at Regent Road is slightly higher than the 100W HPS, the increase in uniformity should offset the human ability to observe the change in the slightly higher lighting levels.

It is easy to note that the 80W replacement LED luminaire outputs twice the lighting levels of the degraded HPS luminaire. The new LED luminaire will also experience light loss factors during the course of its life, but as expected, the initial lighting levels will be brighter than the design end of life levels. This drastic difference between HPS performing at approximately 55% and the replaced LED performing at 100% certainly contributes to the perception of over lighting, albeit performing similarly to the HPS lighting when it was initially installed.

Lowering the wattage of the LED luminaires from 80W to 39W in Regent Road still meets the ANSI/IES RP-8 requirements of illuminance and uniformity. However, due to the luminaire spacing at Qualicum Beach, reduction of 80W LED luminaires to 39W LED luminaires is not possible without consideration of adding additional luminaires to improve uniformity. For example, Sheet E11a-R shows lighting calculations for the three existing luminaire on Crescent Road West modelled at 39W instead of the existing 80W luminaire. Sheet E11b-R shows lighting calculations with additional 39W LED luminaires required to meet streetlighting standards. In other words, lowering the wattage of the streetlighting, and adding additional luminaires is a proven method to meeting ANSI/IES RP-8-18 streetlighting standards.

14.0 Conclusion

The streetlighting at Qualicum Beach has been historically designed to “half code”, resulting in the lack of uniform lighting levels. In addition, the HPS luminaires that were replaced with LED luminaires were likely performing at half it’s initial performance. With the replacement of HPS luminaires with LED luminaires performing at 100%, compounded with “half code” design, an observer’s sight will be obscured leading him/her to believe that the environment is over-lit. Lighting modelling has revealed that the lighting levels

due to the LED replacement program at Qualicum Beach is similar to the lighting levels that would have been encountered when HPS lighting was initially installed. The complaints at Qualicum Beach are likely due to the effects that obtrusive light has in the neighbourhood rather than a function of the luminaire color temperature, or incorrect selection of LED luminaire wattage (for the existing luminaire spacing). The following methods are proposed to mitigate obtrusive light, and all of these solutions will need further lighting study to understand the impact it has on the neighbourhood:

1. Decrease luminaire spacing and luminaire wattage – ideally 39W spaced at 45-55m spacing (which is the spacing of existing BC Hydro poles)
2. Negotiate with BC Hydro to allow house side shields, street side shields, and LED integrated optics to mitigate backlight, uplight and glare
3. Negotiate with BC Hydro to allow alternate LED distribution types (i.e. Type IV distribution) for use near intersections or areas where lighting trespass is a concern
4. Modify davit arm lengths and mounting height to mitigate obtrusive lighting on nearby properties

The correct method to resolve the concerns at Qualicum Beach would be to design to ANSI/IES RP-8 standards, which can only be met by providing lighting as per Solution #1 above, and using Solution #2, #3 and #4 as complimentary solutions to further improve the streetlighting condition. If Solution #1 cannot be satisfied due to cost/logistics, it is recommended that the streetlighting be left as-is other than minor modifications to davit arms and installation of house/street shields (with permission from BC Hydro) to reduce obtrusive light near/on properties with high concern.

15.0 References

- [1] BC Hydro, "British Columbia Utilities Commission British Columbia Hydro and Power Authority 2020 Street Lighting Rate Application," 2020.
- [2] IES Illuminating Engineering Society, ANSI/IES RP-8-18 Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting, Illuminating Engineering Society, 2018.
- [3] Clanton & Associates Inc., "Seattle LED Adaptive Lighting Study," Boulder, 2014.

16.0 Appendix

e2 has prepared packages containing calculations and models to compare:

- Existing LED Lamps at 100% (calculations, shaded image, and rendered image)
- HPS Lamps at 100% (calculations, shaded image, and rendered image)
- HPS Lamps at 55% (calculations, shaded image, and rendered image)
- 39W LED Lamps at 100% replacing existing LED lamps
- 39W LED Lamps at 100% replacing LED lamps and added on empty BC Hydro poles
- 39W LED Lamps at 100% with locations redesigned to best meet IES standards

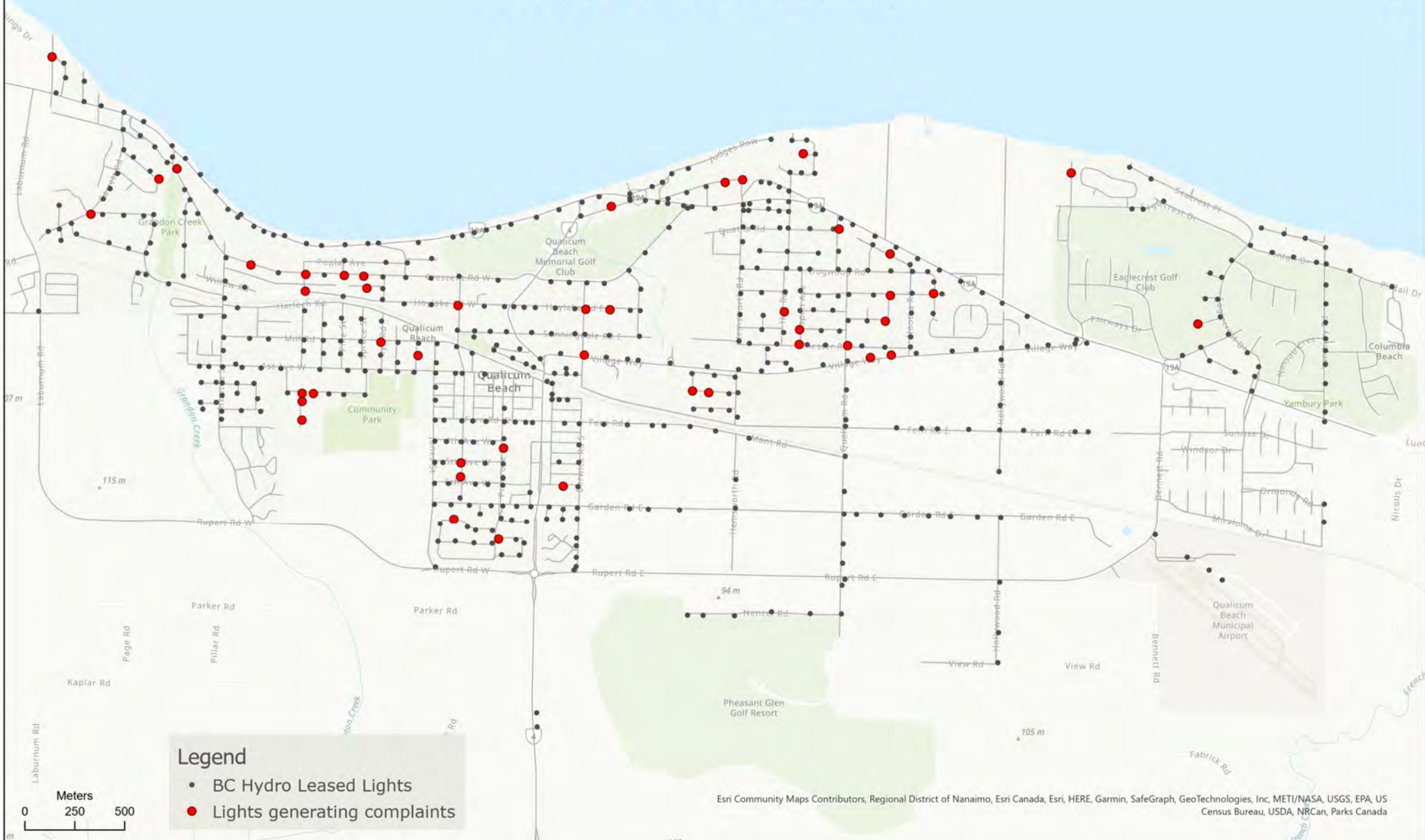
The only deviations from the above format are sets E14 and E15.

- E14 shows the 35W LED fixture used in the BC Hydro field study and compares it with the 39W LED fixture that BC Hydro approves, at Crescent Rd W and Rye Rd.
- E15 shows the 35W LED fixture from the BC Hydro study, 39W LED fixture, 80W LED fixture (existing) and HPS at 100% and 55%. This set is modelled at Regent Rd in Richmond BC, with the same layout that BC Hydro conducted in their field study at this location.

Packages are prepared for the following areas:

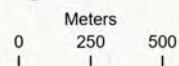
Sheet Number Prefix	Street(s)
E1	Crescent Rd W
E2	Hoylake Rd E between Berwick Rd E and St Andrews Rd
E3	Corner of Beach Rd and Hoylake Rd W
E4	Corner of Island Hwy W and Hemsworth Rd
E5	6 th Ave E and Berwick Rd
E6	Larch Dr
E7	Chester Rd and Aspen Ave
E8	Sumac Dr and Tamarac Dr
E9	Canyon Crescent Rd
E10	Corner of Alder St and Hoylake Rd W
E11	Crescent Rd W and Rye Rd
E12	Valdez Ave and Savary Dr
E13	Beach Rd
E14	Crescent Rd W and Rye Rd
E15	Regent Street - Richmond, BC

BC Hydro Leased Lights Map



Legend

- BC Hydro Leased Lights
- Lights generating complaints



Esri Community Maps Contributors, Regional District of Nanaimo, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, US Census Bureau, USDA, NRCan, Parks Canada

**Town of Qualicum Beach
MEMORANDUM**

TO: Lou Varela, RPP, MCIP, Chief Administrative Officer

FOR: Regular Council Meeting, January 18, 2023

FROM: R.K. (Bob) Weir, P. Eng., Director of Engineering & Capital Projects

SUBJECT: Waterfront Expansion Phase 1 Ditch Infill Parking – Tender Award

RECOMMENDATION:

THAT the Town of Qualicum Beach awards the Waterfront Expansion Phase 1 Ditch Infill Parking Contracts 1, 2 and 3 to Edgett Excavating Ltd. in the amount of \$636,107.85.

PURPOSE:

To present to Council the results of the tender call for the Waterfront Expansion Phase 1 Ditch Infill Parking.

BACKGROUND:

The Town of Qualicum Beach received a grant from BC Tourism in the amount of \$700,000 for improvements along the waterfront. The initial grant application anticipated parking improvements and other amenities, however, the actual grant award was less than the Town's initial request and the scope of work was reduced to focusing on the infilling of the south side ditch and improvements to parking. With the uncertainty of escalating construction costs, the project was divided into three sections and contractors were asked to bid on them as possible stand-alone projects so that the Town could select to award one, some combination, or all the contracts, depending on what could be accommodated with the budget.

DISCUSSION:

Tenders for this project were opened at the Qualicum Beach Town Hall on January 11th, 2023. A total of five tenders were submitted and are summarized as follows:

<u>Tenderer</u>	<u>Total Tender</u>
Edgett Excavating Ltd. (Courtenay)	\$636,107.85
Upland Excavating Ltd. (Campbell River)	\$851,130.00
IWC Excavation Ltd. (Nanaimo)	\$945,192.15
Copcan Civil LP (Nanaimo)	\$977,469.68
Hazelwood Construction Services (Nanaimo)	\$1,050,084.00

The tender amounts shown are for the combined totals of Contracts 1, 2 and 3, and include \$45,000 in contingency allowances, \$15,000 in cash allowances for erosion and sediment control, and 5% GST.

The lowest Tender was submitted by Edgett Excavating Ltd. of Courtenay. Edgett has completed numerous municipal projects in the mid-Vancouver Island area, including several successful projects for the Town of Qualicum Beach.

As the Town has adopted a Social Procurement Policy, Tenderers were asked to submit a community benefit plan outlining their social value initiatives in the construction industry and the local community. The Tender Documents stated that evaluation of the community benefit plans could affect the ranking of the Tenders for any Tender within 5% of the total Tender Price of the low bid. The social value scoring obtained by each Tenderer is summarized as follows:

<u>Tenderer</u>	<u>Social Value Points Obtained</u>
Edgett Excavating Ltd. (Courtenay)	35/65
Upland Contracting Ltd. (Campbell River)	53/65
IWC Excavation Ltd. (Nanaimo)	40/65
Copcan Civil Ltd. (Nanaimo)	26/65
Hazelwood Construction Services (Nanaimo)	20/65

As the second lowest bid is not within 5% of the low bid, the ranking of the Tender prices is not affected by the Social Value scoring.

FINANCIAL IMPLICATIONS:

A portion of the initial grant has been expended on archaeological and geotechnical investigations as well as the engineering survey and detailed design. It is estimated that an additional \$150,000 will be required from reserves to cover the construction and associated project management and inspection costs if it is decided to award all three contracts. The Manager of Finance has confirmed that these funds are available from either 2022 budgeted reserves carried forward or as a 2023 capital allocation. Alternatively, Council could consider awarding Contract 1 and 2 or 1 and 3 but the opportunity to complete all 3 contracts is considered advantageous at this time as construction costs continue to be volatile and are unlikely to decrease in the near term.

SUMMARY

Staff recommend awarding all three contracts of the Waterfront Expansion Phase 1 Ditch Infill Parking to Edgett Excavating Ltd. in the amount of \$636,107.85.

ALTERNATIVES

1. THAT Council not award Waterfront Expansion Phase 1 Ditch Infill Parking Contracts 1, 2 and 3 due to insufficient budgeted funds;
2. THAT Council award Waterfront Expansion Phase 1 Ditch Infill Parking Contracts 1 and 2;
3. THAT Council award Waterfront Expansion Phase 1 Ditch Infill Parking Contracts 1 and 3;
4. THAT Council provides alternative direction to staff



Bob Weir, P.Eng.
Director of Engineering & Capital Projects
Report Writer



Genelle Conn
Interim Director of Finance
Concurrence



Lou Varela, RPP, MCIP
CAO
Concurrence

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