



The Village of Lions Bay

REQUEST FOR PROPOSALS

RFP 1806

For

COMMUNITY SIGNAGE MAKEOVER PLAN

PHASE I (SPRING 2018)

CLOSING DATE AND TIME:

**Friday, June 8, 2018
at 4 pm PDT**

SUBMIT PROPOSALS VIA EMAIL ONLY TO:

Peter DeJong
Chief Administrative Officer
Village of Lions Bay
cao@lionsbay.ca

Note: Proponents may be contacted and interviewed prior to the Closing Date and Time.

Introduction

Lions Bay is a small seaside Village nestled at the base of southern British Columbia's Coast Mountain Range. Located on the Sea to Sky Highway between West Vancouver and Squamish, Lions Bay forms part of the Metro Vancouver Regional District. This residential community of 1334 (2016 census) is one of the smallest self-governing municipalities in BC.

Scope of Required Services

Appendix 1, appended to the draft Professional Services Agreement, which is attached as Schedule A, lays out the scope of required services for Phase 1 of the Community Signage Makeover Plan project. Phase 1 consists of the following 3 tasks:

- Task 1: design a Wordmark and simple Usage Guide to substitute for the current logo (which, pending community consultation, may be sunsetted, but the Wordmark is not intended to be or look like a new logo)
- Task 2: develop a Community Signage Style Guide, such that the result “looks like it’s supposed to look like that.” (Style Guide to incorporate Wordmark and Usage Guide and subject to at least two iterations for review and amendments before final design standard submitted and approved)
- Task 3: produce camera-ready art for the Phase 1 signs mocked up herein, adhering to such Style Guide.

Appendix 1 provides fairly detailed suggestions for the three tasks noted above, but proponents are free to utilize or interpret these directions to the extent they feel appropriate in putting together their proposal, and provide details and other information where needed.

Appendix 1 also indicates the anticipated direction for Phase 2 of the project. If interested, proponents should provide a separate proposal for the second phase, including a public consultation plan with an hourly rate and travel costs for any anticipated public consultation sessions. The lump sum Phase 2 proposal should incorporate design and implementation of digital media consultation materials. If a Phase 2 proposal is accepted, the Professional Services Agreement attached as Schedule A will be amended accordingly.

If further interested, proponents may provide a quote for the production of all required signage.

Budget

The total budget for this project is \$15,000, including production and installation of signage. The anticipated budget for the scope of services laid out in Phase 1 is approximately \$5,000.

Evaluation Process

Proposals will be assessed in accordance with the needs of the Municipality as set out in Appendix 1, with price being a significant component in addition to evidence of professionalism, attention to detail, and timeline for completion. The Municipality may award Phase 1, or Phase 1 and Phase 2, or make no award at all with respect to this RFP.

Interpretation

While the Municipality believes the information in this RFP is accurate, the information contained herein is supplied solely as a guideline for Proponents and copy may change. The information is not guaranteed or warranted to be accurate by the Municipality, nor is it necessarily comprehensive or exhaustive. It is the Proponent's responsibility to understand all aspects of the RFP requirements. Should any details necessary for a clear and comprehensive understanding be required, it's the Proponent's responsibility to obtain clarification before submitting a Proposal.

Proposal Expenses

Proponents are solely responsible for their own costs and expenses with respect to their participation in this RFP, including but not limited to, preparing and submitting their proposal, presentations, demonstrations, site visits, interviews, meetings, or contract negotiations whether at the Municipality or elsewhere.

Conflict of Interest

By submitting a Proposal, the Proponent represents that it is not aware of any circumstances that would give rise to a conflict of interest that is actual or potential, in respect of the RFP process, except any expressly disclosed in the Proponent's Proposal.

Confidentiality

Proponents must clearly mark and identify those areas of their Proposals which contain confidential information, if any. The Municipality will not use or disclose such confidential information, except for the purposes of evaluating the proposals submitted under this RFP, or as may be required by law, including but not limited to the BC Freedom of Information and Protection of Privacy Act (“FIPPA”).

Proponents shall keep confidential all information received from the Municipality in connection with this RFP. Proponents shall not use the Municipality’s confidential information except as required to develop a Proposal in response to this RFP.

No Liability

By submitting a proposal, the Proponent shall be responsible for and shall indemnify the Municipality, its employees, volunteers or agents associated with this RFP process, from all claims, loss and damages that relate to or arise out of errors, omissions or negligent acts relating to the RFP. This RFP does not give rise to any tendering law duties or any other legal obligations and the Proponent will have no right to make a claim against the Municipality with respect to the award of a Contract, the failure to award a Contract, or the failure to engage the Proponent in a response to this RFP. The lowest or any proposal may not be accepted. The Municipality reserves the right to reject any and all proposals, to waive technical or legal deficiencies, to make such investigation as it deems necessary to evaluate Proponent's qualifications, to accept any Proposal that may be deemed in the best interest of the Municipality and to negotiate terms and conditions of any proposal leading to acceptance and final execution of a contract. A draft form of contract is attached as Schedule A to this RFP.

Questions

Any questions related to this RFP may be addressed to:

Peter DeJong, Chief Administrative Officer

Village of Lions Bay

cao@lionsbay.ca

604-921-9333 (Office Hours)

604-905-9742 (After Hours)

Schedule A**PROFESSIONAL SERVICES AGREEMENT**

THIS AGREEMENT dated for reference this _____ day of _____, 2018.

BETWEEN:

VILLAGE OF LIONS BAY, a municipality duly incorporated under the laws of British Columbia and having an address at 400 Centre Road, Lions Bay, BC, V0N 2E0 (the "**Municipality**").

AND:

_____, doing business as _____, having an address at _____, [city] _____, BC, [Postal Code] (the "**Contractor**")

WHEREAS the Municipality wishes to engage the Contractor to provide professional services in respect of the Municipality's Community Signage Makeover Plan, and the Contractor wishes to provide such services to the Municipality in accordance with the terms and conditions of this Agreement;

NOW THEREFORE in consideration of the payment of one (\$1.00) dollar and other good and valuable consideration paid by each of the parties to the other (the receipt and sufficiency of which is hereby acknowledged) the Municipality and the Contractor agree as follows:

1.0 DEFINITIONS AND INTERPRETATION**1.1 Definitions**

In these General Terms and Conditions:

- (a) "Agreement" means this Agreement and all appendices attached hereto;
- (b) "Municipality" means the Village of Lions Bay;

- (c) "Contractor" means the Contractor who is providing Services under this Agreement;
- (d) "Disbursements" means the actual out-of-pocket costs and expenses associated with the provision of the Services and not included in "Fees";
- (e) "Fees" means the lump sum compensation to be paid to the Contractor, other than Disbursements, upon completion of the Services;
- (f) "Indemnitees" means the Municipality and all of its elected and appointed officials, officers, employees, servants, representatives, and agents;
- (g) "Services" means the services as described generally in Appendix 1, Phase 1, including anything and everything required to be done for the fulfilment and completion of this Agreement; and
- (h) "Term" has the meaning described in Section 3.1

1.2 Agreement

This Agreement may be modified only by express and specific written agreement. In the event of a conflict between the provisions of any documents listed below, then the following documents shall govern and take precedence in the following order:

- (a) this Agreement and any written amendments to this Agreement;
- (b) other terms, if any, that are agreed to by the parties in writing;
- (c) the Municipality's Request for Proposals;
- (d) the Contractor's Proposal.

1.3 Appendices

The following attached Appendices are part of this Agreement:

Appendix 1 – Village of Lions Bay Community Signage Makeover Plan, Version 9, dated April 23, 2018.

2.0 SERVICES

2.1 Services

The Contractor covenants and agrees with the Municipality to provide the Services as described generally in Appendix 1, Phase 1, including anything and everything required to be done for the fulfillment and completion of this Agreement (the “Services”).

2.2 Changes to Services

The Municipality and the Contractor may, from time to time, by written agreement, make changes in the scope of the Services. The Contractor will not provide any additional Services in excess of the scope of Services unless requested in writing by the Municipality. Any services provided outside the scope of this Agreement shall be deemed to be provided on a volunteer basis to Municipality.

2.3 Standard of Care

The Contractor will perform the Services with that degree of care, skill and diligence normally provided by a qualified and experienced practitioner performing services similar to the Services, and on the understanding that the Municipality is relying on the Contractor's experience and expertise. The Contractor represents that it has the expertise, qualifications, resources, and relevant experience to provide the Services.

2.4 Inspection and Acceptance

All Services performed under this Agreement may be subject to inspection and verification by the Municipality. The Contractor shall provide the Municipality with copies of all documentation deemed necessary by the Municipality for efficient expediting. The Municipality will notify the Contractor in writing of any questions or of any dispute in respect of Services which are not in accordance with the description or specifications stipulated in this Agreement and the parties shall resolve the matter in accordance with section 12.1 of this Agreement. No acceptance by, or on behalf of, the Municipality shall release the Contractor of its obligations as further stated hereunder.

2.5 Holdback for deficient Goods or Services

The Municipality may hold back from payments otherwise due to the Contractor up to 100% of a reasonable estimate, as determined by the Municipality, on account of deficient Services. This holdback may be held, without interest, until such deficiency or defect is remedied.

2.6 Completion

Completion of the Services shall be made free and clear of all liens and encumbrances within the time, in the manner, and to the destination stipulated in this Agreement. In the event of failure to meet this condition, the Municipality shall be entitled to holdback sufficient monies otherwise payable under this Agreement and, in addition, may cancel this Agreement without liability or penalty and the Contractor shall be held liable for any and all expenses or losses resulting from such failure.

2.7 Patents, Copyrights and Trademarks

The Contractor warrants and guarantees that Services delivered under this Agreement do not infringe any valid patent, industrial design, copyright or trademark, foreign or domestic, owned or controlled by any other corporation, firm or person, and agrees to indemnify and save harmless the Municipality and all of its elected and appointed officials, officers, employees, servants, representatives and agents, from and against any and all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) by reason of any claim, action or litigation arising out of any alleged or actual infringement of any patent, copyright or trademark, foreign or domestic, relating to the use or sale of any Services supplied under this Agreement.

3.0 TERM

3.1 Commencement Date and Term

The Contractor shall complete the Services by _____, 2018 (the "Term").

3.2 Term may be Extended

The parties may extend the Term by mutual agreement. If the Term is extended, the provisions of this Agreement will remain in force except where amended in writing by the parties.

3.3 Time

The Contractor acknowledges that time is of the essence with respect to the provision of the Services and accordingly the Contractor will provide the Services within the performance or completion dates or time periods (the "**Time Schedule**") as set out in Section 3.1 of this Agreement, or as otherwise agreed to in writing by the Municipality and the Contractor. If at any time the Contractor discovers that the Time Schedule cannot be met it will immediately advise the Municipality in writing and provide a revised Time Schedule. If the Contractor is delayed by an action or omission of the Municipality, then the Term will be extended for such reasonable time as agreed between the parties.

4.0 PERSONNEL

4.1 Qualified Personnel

The Contractor has the qualifications, experience and capabilities to perform the Services, or will provide only personnel who have the qualifications, experience and capabilities to perform the Services.

4.2 Listed Personnel and Sub-Contractors

The Contractor will perform the Services personally unless otherwise stipulated in this Agreement.

4.3 Replacement of Personnel or Sub-Contractors

If the Municipality reasonably objects to the performance, qualifications, experience or suitability of any of the Contractor's personnel or sub-contractors then the Contractor will, on written request from the Municipality, replace such personnel or sub-contractors.

4.4 Sub-Contractors and Assignment

Except as provided for in this Agreement, the Contractor will not engage any personnel or sub-contractors, or sub-contract or assign its obligations under this Agreement, in whole or in part, without the prior written approval of the Municipality.

4.5 Agreements with Sub-Contractors

The Contractor will preserve and protect the rights of the Municipality with respect to any Services performed under sub-contract and incorporate the terms and conditions of this Agreement into all sub-contracts as necessary to preserve the rights of the Municipality under this Agreement. The Contractor will be as fully responsible to the Municipality for acts and omissions of sub-contractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Contractor.

5.0 LIMITED AUTHORITY

5.1 Agent of Municipality

The Contractor is not and this Agreement does not render the Contractor an agent or employee of the Municipality, and without limiting the above, the Contractor does not have authority to enter into any contract or reach any agreement on behalf of the Municipality, except for the limited purposes as may be expressly set out in this Agreement, or as necessary in order to provide the Services. The Contractor will make such lack of authority clear to all persons with whom the Contractor deals in the course of providing the Services.

5.2 Independent Contractor

The Contractor is an independent contractor. This Agreement does not create the relationship of employer and employee, a partnership, or a joint venture. The Municipality will not control or direct the details, means or process by which the Contractor provides the Services. The Contractor is primarily responsible for provision of the Services and may not delegate or assign the provision of any Services to any other person except as provided for in this Agreement. The

Contractor will be solely liable for the wages, benefits, work schedules and work conditions of any partners, employees or sub-contractors of the Contractor.

6.0 FEES

6.1 Fees And Disbursements

The Municipality will pay to the Contractor the Fees and Disbursements in accordance with this Agreement. Payment by the Municipality of the Fees and Disbursements will be full payment for the Services and the Contractor will not be entitled to receive any additional payment without the prior written approval of the Municipality.

6.2 Costs included in Fees and Disbursements

For greater certainty, costs of general management, non-technical supporting services, general overhead, mobilization/demobilization, travel and all other items associated with the Services are deemed to be covered by the Fees and will not be subject to additional payment by the Municipality unless specifically agreed to in this Agreement.

6.3 No increase in Fees and Disbursements without Written Agreement

No increases in Fees and Disbursements will be accepted by the Municipality without prior written acceptance by the Municipality.

6.4 Payment

- (a) Upon completion of the Services to the satisfaction of the Municipality, the Contractor will render an invoice to be paid by the Municipality within 30 days, subject to the terms of this Agreement;
- (b) the Contractor will, on request from the Municipality, provide receipts and invoices for all Disbursements claimed;
- (c) if the Municipality reasonably determines that any portion of an Invoice is not payable, then the Municipality will so advise the Contractor;

- (d) the Municipality will pay the portion of an Invoice which the Municipality determines is payable within 30 days of the receipt of the Invoice less any deductions for setoffs or holdbacks permitted by this Agreement;
- (e) invoices will be submitted in person, by mail or by email by the Contractor addressed to:

Accounts Payable Department
Village of Lions Bay
PO Box 141, 400 Centre Road, Lions Bay, BC V0N 2E0
accounting@lionsbay.ca;
- (f) the payment by the Municipality of any invoice will not bind the Municipality with respect to any subsequent payment or final payment and will not mean that the Municipality has accepted Services that are not in accordance with the requirements of this Agreement, or that the Contractor is in any manner released from its obligation to comply with this Agreement; and
- (g) unless otherwise provided, all dollar amounts referred to in this Agreement are in lawful money of Canada.

7.0 INDEMNITY, INSURANCE, DAMAGES AND LICENCING

7.1 Indemnity

The Contractor will indemnify and save harmless the Municipality and all of its elected and appointed officials, officers, employees, servants, volunteers, representatives and agents (collectively the “**Indemnitees**”), from and against all claims, demands, causes of action, suits, losses, damages and costs, liabilities, expenses and judgments (including all actual legal costs) for damage to or destruction or loss of property, including loss of use, and injury to or death of any person or persons which any of the Indemnitees incur, suffer or are put to arising out of or in connection with any failure, breach or non-performance by the Contractor of any obligation of this Agreement, or any wrongful or negligent act or omission of the Contractor or any employee or agent of the Contractor.

7.2 Survival of Indemnity

The indemnity described in section 8.1 will survive the termination or completion of this Agreement and, notwithstanding such termination or completion, will continue in full force and effect for the benefit of the Indemnitees.

7.3 Contractor's Insurance Policies

The Contractor will, without limiting its obligations or liabilities and at its own expense, provide and maintain throughout this Agreement the following insurances in forms and amounts acceptable to the Municipality from insurers licensed to conduct business in Canada:

- (a) automobile liability insurance on all vehicles owned, operated or licensed in the name of the Contractor in an amount not less than two million (\$2,000,000) dollars per occurrence for bodily injury, death and damage to property;
- (b) Contractors' equipment insurance in an all risks form covering machinery and equipment used for the performance of the Services.

7.4 Insurance Requirements

The Contractor will provide the Municipality with evidence of the required insurance prior to the commencement of this Agreement. Such evidence will be in the form of a completed certificate of insurance acceptable to the Municipality. The Contractor will, on request from the Municipality, provide certified copies of all of the Contractor's insurance policies providing coverage relating to the Services, including without limitation any professional liability insurance policies. All required insurance will be endorsed to provide the Municipality with thirty (30) days advance written notice of cancellation or material change restricting coverage. The Contractor will be responsible for deductible amounts under the insurance policies. All of the Contractor's insurance policies will be primary and not require the sharing of any loss by the Municipality or any insurer of the Municipality.

7.5 Contractor Responsibilities

The Contractor acknowledges that any requirements by the Municipality as to the amount of coverage under any policy of insurance will not constitute a representation by the Municipality that the amount required is adequate and the Contractor acknowledges and agrees that the Contractor is solely responsible for obtaining and maintaining policies of insurance in adequate amounts. The insurance policy coverage limits shall not be construed as relieving the Contractor from responsibility for any amounts which may exceed these limits, for which the Contractor may be legally liable.

7.6 Waiver of Subrogation

The Contractor hereby waives all rights of recourse against the Municipality for loss or damage to the Contractor's property.

7.7 Protection of Property

The Contractor shall protect the Municipality's property and adjacent properties from damage that may arise as the result of the Contractor's operations under the Agreement. Any such damage caused by the Contractor shall be made good by the Contractor at the Contractor's expense.

7.8 WorkSafe BC And Occupational Health And Safety

The Contractor agrees that it will ensure compliance with and conform to all health and safety laws, by-laws or regulations of the Province of British Columbia, including without limitation the *Workers Compensation Act* and Regulations pursuant thereto.

8.0 TERMINATION

8.1 Termination by the Municipality

The Municipality may at any time and for any reason by 30 days written notice to the Contractor terminate this Agreement before the completion of the provision of all Services. Upon receipt of such notice, the Contractor will provide no further Services other than what is reasonably required to terminate the supply of

Services and return the Municipality's property to the Municipality. Despite any other provision of this Agreement, if the Municipality terminates this Agreement before the completion of providing all the Services, the Municipality will pay to the Contractor all amounts owing under this Agreement for Services provided by the Contractor up to and including the date of termination, plus reasonable termination costs in the amount as determined by the Municipality in its sole discretion. Upon payment of such amounts no other or additional payment will be owed by the Municipality to the Contractor, and, for certainty, no amount will be owing on account of lost profits relating to the portion of the Services not supplied or other profit opportunities.

8.2 Termination for Cause

The Municipality may terminate this Agreement for cause as follows:

- (a) if the Contractor is adjudged bankrupt, or makes a general assignment for the benefit of creditors because of its insolvency, or if a receiver is appointed because of its insolvency, the Municipality may, without prejudice to any other right or remedy the Municipality may have, terminate this Agreement by giving the Contractor or receiver or trustee in bankruptcy written notice; or
- (b) if the Contractor is in breach of any term or condition of this Agreement, and such breach is not remedied to the reasonable satisfaction of the Municipality within five days after delivery of written notice from the Municipality to the Contractor, then the Municipality may, without prejudice to any other right or remedy the Municipality may have, terminate this Agreement by giving the Contractor further written notice. If the Municipality terminates this Agreement as provided by this Section, then the Municipality may:
 - (i) enter into contracts, as it in its sole discretion sees fit, with other persons to complete the Services;
 - (ii) withhold payment of any amount owing to the Contractor under this Agreement for the Services;
 - (iii) set-off the total cost of completing the Services incurred by the Municipality against any amounts owing to the Contractor under this Agreement, and at the completion of the provision of Services pay to the Contractor any balance remaining; and

- (iv) if the total cost to complete the provision of Services exceeds the amount owing to the Contractor, charge the Contractor the balance, which amount the Contractor will forthwith pay.

8.3 Curing Defaults

If the Contractor is in default of any of its obligations under this Agreement, then the Municipality may without terminating this Agreement, upon five days written notice to the Contractor, remedy the default and set-off all costs and expenses of such remedy against any amounts owing to the Contractor. Nothing in this Agreement will be interpreted or construed to mean that the Municipality has any duty or obligation to remedy any default of the Contractor.

9.0 COMPLIANCE WITH LAWS

9.1 Applicable Laws

This Agreement shall be governed by and construed in accordance with the laws and statutes of the Province of British Columbia, regulations or bylaws. The Municipality and the Contractor accept the jurisdiction of the courts of British Columbia and agree that any action under this Agreement shall be brought in such courts and that any reference to any statute, regulation or bylaw refers to that enactment as it may be amended or replaced from time to time.

9.2 Compliance with Applicable Laws

The Contractor will provide the Services in full compliance with all applicable federal, provincial and municipal enactments and regulations.

9.3 Interpretation of Enactments

The Contractor will, as a qualified and experienced contractor, interpret enactments and regulations applicable to the provision of the Services. If an authority having jurisdiction imposes an interpretation which the Contractor could not reasonably have verified or foreseen prior to entering into this Agreement, then the Municipality will pay the additional costs, if any, of making alterations so as to conform to the required interpretation.

10.0 CONFIDENTIALITY, DISCLOSURE OF INFORMATION AND WORK PRODUCT

10.1 No Disclosure

Except as provided for by law or otherwise by this Agreement, the Contractor will keep strictly confidential any information supplied to, obtained by, or which comes to the knowledge of the Contractor as a result of the performance of the Services and this Agreement, and will not, without the prior express written consent of the Municipality, publish, release, disclose or permit to be disclosed any such information to any person or corporation, either before, during or after termination of this Agreement, except as reasonably required to complete the Services.

10.2 Freedom of Information and Protection of Privacy Act

The Contractor acknowledges that the Municipality is subject to the *Freedom of Information and Protection of Privacy Act* of British Columbia and agrees to any disclosure of information by the Municipality required by law.

10.3 Return of Property

The Contractor agrees to return to the Municipality all of the Municipality's property at the completion of this Agreement, including any and all copies or originals of reports provided by the Municipality.

10.4 Use of Work Product

All work produced by the Contractor in respect of the Services shall be the sole property and copyright of the Municipality, to use or amend as it sees fit. The Contractor shall have a limited licence to display the said work product in its portfolio but may not use or copy any of the drawings, designs, concepts, plans, reports, models, specifications, computer software, programs or processes without the express written consent of the Municipality.

11.0 DISPUTE RESOLUTION

11.1 Dispute Resolution Procedures

The parties will make reasonable efforts to resolve any dispute, claim, or controversy arising out of this Agreement or related to this Agreement (“**Dispute**”) using the dispute resolution procedures set out in this section 11.1 as follows:

- (a) the parties will make reasonable efforts to resolve any Dispute by amicable negotiations and will provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate negotiations;
- (b) If all or any portion of a Dispute cannot be resolved by good faith negotiations within 30 days, either party may by notice to the other party refer the matter to mediation. Within seven days of delivery of the notice, the parties will mutually appoint a mediator. If the parties fail to agree on the appointment of the mediator, then either party may apply to the British Columbia International Commercial Arbitration Centre for appointment of a mediator. The parties will continue to negotiate in good faith to resolve the Dispute with the assistance of the mediator. The place of mediation will be Lions Bay, British Columbia, or such other place as the Municipality may, in its sole discretion, specify. Each party will equally bear the costs of the mediator and other out-of-pocket costs, and each party will bear its own costs of participating in the mediation; and
- (c) If within 90 days of the request for mediation, the Dispute is not settled, or if the mediator advises that there is no reasonable possibility of the parties reaching a negotiated resolution, then the parties may mutually agree to submit the Dispute to binding arbitration in accordance with the rules of the British Columbia International Commercial Arbitration Centre, or either party may, without further notice, commence litigation.

12.0 MUNICIPAL POWERS

12.1 Powers Preserved

Nothing in this Agreement limits or abrogates, or will be deemed to limit or abrogate, the jurisdiction of the Council of the Municipality in the exercise of its powers, rights or obligations under any public or private statute, regulation or by-law or other enactment.

12.2 No financial commitments beyond current fiscal year

The Contractor recognizes and agrees that the Municipality cannot make financial commitments beyond the Municipality's current fiscal year. The Municipality will annually make good faith requests for appropriation of sufficient funds to cover all payments covered by this Agreement. If Municipality Council does not appropriate funds, or appropriates insufficient funds, the Municipality will notify the Contractor of its intention to terminate or reduce the services so affected within 30 days after the non-appropriation becomes final. Such termination shall take effect 30 days from the date of notification, shall not constitute an event of default and shall relieve the Municipality, its officers and employees, from any responsibility or liability for the payment of any further amounts under this Agreement.

13.0 GENERAL

13.1 Entire Agreement

This Agreement, including the Appendices and any other documents expressly included by reference in this Agreement, contains the entire agreement of the parties regarding the provision of the Services, and no understandings or agreements, oral or otherwise, exist between the parties except as expressly set out in this Agreement. This Agreement supersedes and cancels all previous agreements between the parties relating to the Services. In the event that the Contractor issues an invoice, packing slip, sales receipt, or any like document to the Municipality, the Municipality accepts the document on the express condition that any terms and conditions in it which constitute terms and conditions which are in addition to or which establish conflicting terms and conditions to those set out in this Agreement are expressly rejected by the Municipality.

13.2 Amendment

This Agreement may be amended only by agreement in writing, signed by both parties.

13.3 Merger And Survival

The representations, agreements, covenants and obligations set out in this Agreement shall survive the performance of the Services and payment of the Fees and Disbursements.

13.4 Unenforceability

If any provision of this Agreement is invalid or unenforceable, it will be severed from the Agreement and will not affect the enforceability or validity of the remaining provisions of the Agreement.

13.5 Cumulative Remedies

The Municipality's remedies under this Agreement are cumulative and in addition to any right or remedy which may be available to the Municipality at law or in equity.

13.6 Notices

Any notice, report or other document that either party may be required or may wish to give to the other must be in writing, unless otherwise expressly provided for, and will be deemed to be validly given to and received by the addressee:

- (a) by hand, on delivery;
- (b) by facsimile or email, by acknowledgement; or
- (c) by mail, five calendar days after posting.

The addresses for delivery will be as shown in the Proposal.

13.7 Headings

The headings in this Agreement are inserted for convenience of reference only and will not form part of nor affect the interpretation of this Agreement.

13.8 Assignment

This Agreement may not be assigned in whole or in part by the Contractor without the prior written consent of the Municipality.

13.9 Singular, Plural and Gender

Wherever the singular, plural, masculine, feminine or neuter is used throughout this Agreement the same will be construed as meaning the singular, plural, masculine, feminine, neuter or body corporate where the context so requires.

13.10 Waiver

Any failure of the Municipality at any time or from time to time to enforce or require the strict keeping or performance of any of the terms and conditions contained in this Agreement shall not constitute a waiver of the terms and conditions and shall not affect or impair the terms or conditions in any way or the Municipality's right at any time to avail itself of any remedies as the Municipality may have for any breach of the terms and conditions.

13.11 Counterparts

This Agreement may be executed in one or more counterparts all of which when taken together will constitute one and the same Agreement, and one or more of the counterparts may be delivered by fax transmission or as a PDF file by email or as a hard copy.

13.12 Enurement

This Agreement shall enure to the benefit of and be binding upon the respective successors and permitted assigns of the Municipality and the Contractor.

END OF PAGE

The Village of
Lions Bay

COMMUNITY SIGNAGE MAKEOVER PLAN.

PHASE 1A (2018): RFP MATERIAL

PHASE 1B (2018): NAMING & CENTENNIAL
TRAIL INTERPRETIVE SIGNS

PHASE 2 (2019): STREET NAME, WAYFINDING
& FIELD GUIDE SIGNS

VERSION 9: 23 APRIL 2018

INTRODUCTION

The community signage makeover project supports the Council strategic goal of “facilitat[ing] an informed and engaged public [through] proactive and transparent communication. The project is intended to demonstrate a well-run, cared-for, welcoming, vibrant, active and diverse community. Council has budgeted \$15,000 to Phase 1.

PHASE 1

The municipality will issue a request for proposals due mid-May from qualified graphics practitioners for three tasks scoped at approximately \$5000 (with the remainder of the \$15,000 budget allocated to production and installation of resulting signage):

- Task 1: design a workmark and simple usage guide to substitute for the current logo (which pending community consultation may be sunsetted)
- Task 2: develop a community signage style guide, such that the result “looks like it’s supposed to look like that.”
- Task 3: produce camera-ready art for the Phase 1 signs mocked up herein, adhering to such style guide.

TASK 1: PRODUCE WORDMARK TO SUBSTITUTE FOR CURRENT LOGO

BACKGROUND



Lions Bay's coat-of-arms is reserved for official communications of the municipality, such as bylaws, reports and letters. Paraphrasing its grant, "the shield's blue background and yellow waves refers to the setting sun on the waters of Howe Sound. The shield's white lions represent the famous snow-capped peaks, The Lions, after which the village is named. The bear holding a spray of wild columbine symbolizes the natural heritage of the area and the village's official flower. The cougars allude both to the village's name and to the animal associated with St. Mark (whose Vancouver church's summer camp that was one of the earliest settlements at Lions Bay). The rocky base represents the nearby mountains. The motto, *Splendour in Serenity*, indicates the character of the village's setting and alludes to the motto of British Columbia, *Splendor Sine Occasu* (Splendour Without Diminishment)," although it has been suggested that the motto might more correctly be rendered *Serenity in Splendour*, if indeed that is the ethos of the current Lions Bay.



Like the coat-of-arms, the current logo employs the symbolism of waves and lions (the peaks were so named in 1889 for a perceived resemblance viewed from Vancouver to the lions in London's Trafalgar Square). There's also the logo of The Seagull, a now ceased community newsletter. It has been suggested that this logo is no longer representative of Lions Bay, and as such, its use should be avoided until its disposition is decided through community consultation.

The Village of Lions Bay

Pending consideration of the community's logo, a temporary wordmark is to be used in Phase 1 of the community signage project. A desirable font would be rustic (but not handwriting), readable, contrasted to standard sign font. This example, Californian FB, kerning 1 pt condensed, 80% black, 75% spacing on bottom line, is pretty close. Sufficient space should be left in all layouts to allow covering with a future final logo sticker. Definition of when and how to use the logo should be laid out in a simple (half-page) guide.

TASK 2: PRODUCE A STYLE GUIDE FOR COMMUNITY SIGNAGE

- Community signage should be viewed with the needs of the community foremost, rather than the needs of the municipality, but since it is municipal, it needs to be consistent and reproducible. Design should reflect Lions Bay, a "a small, picturesque, seaside village nestled at the base of southern British Columbia's Coast Mountain Range in the northwest corner of the Metro Vancouver Regional District. Towering over the Village are the twin peaks from which the Village gets its name, the Lions, or the Two Sisters as they are called by the indigenous peoples of the south coast." Lions Bay is not rustic or urban, but welcoming, vibrant, active and diverse.
- The driver for community signage is to offer interesting or useful information as much as to induce compliance. Enforcement language and layout is to be avoided as far as possible. Understanding is paramount, so word choice and punctuation is very important. Negative and imperative words ("no," "prohibited," "must") are to be avoided. Words are spelled in the English variant, i.e. litre not liter, and colour not color.

- Styles used herein for mock-ups are tentative, but approaching what Council has seen and has in mind. Sign copy is indicative as to word count, but not yet final.

TENTATIVE LAYOUT STANDARD

**TITLES ARE BOLD, ALL-CAPS, CENTRED
(NO PERIODS)**

Margins are __% of panel-width. Body text is __% of title fontsize, left-justified, sentence-case, single spaced. Border width is __% of body text point-size. Corner radius is __% of panel-width. Aspect ratio is square or __ [4:3?] vertical.

- ✓ Bullets are shown thus, with periods.
- ✓ Printed corners are rounded, but the actual print stock can be square-cornered.
- ✓ Mounting hole locations must be shown in camera-ready layout so that screws/bolts do not overlay or interfere with text.
- ✓ The standard municipal font is currently Calibri.

The Village of
Lions Bay

As part of the Style Guide, FUNCTIONAL TYPES are to be defined (limitations of Word as a layout tool preclude showing the proposed Historical/Naming functional type as desired, with rounded corners, and perhaps even more asymmetrical):

**INFORMATION
(HISTORICAL/NAMING)**

White text on Pantone __ green. Shape intended to be retro; corners are intended to be rounded.

**INFORMATION
(RECREATIONAL/
INTERPRETIVE)**

White text and border on Pantone __ brown. Serif font intended to increase readability, reduce officialness.

**INFORMATION
(ARCHITECTURAL)**

Pantone __ dark blue text and border on sandblasted cedar.

**INFORMATION
(MUNICIPAL)**

White text and border on Pantone __ blue.

REGULATORY

Black text and border on 7930 Engineer (ASTM 1), 3930 Hi-Intensity (ASTM 3), 4090 Diamond Grade (ASTM 9), Font: Clearview

WARNING

Black text and border on Pantone __ yellow.

TEMPORARY

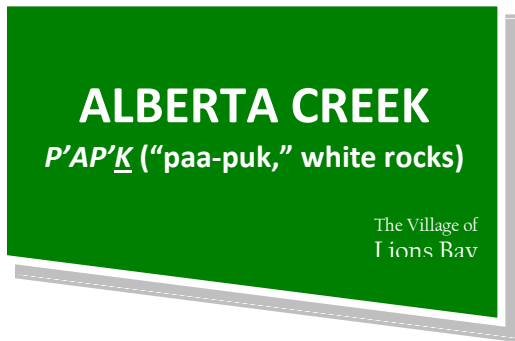
Black text and border on Pantone __ orange.

Style Guide must be APPROVED by staff and ENDORSED by Council before proceeding.

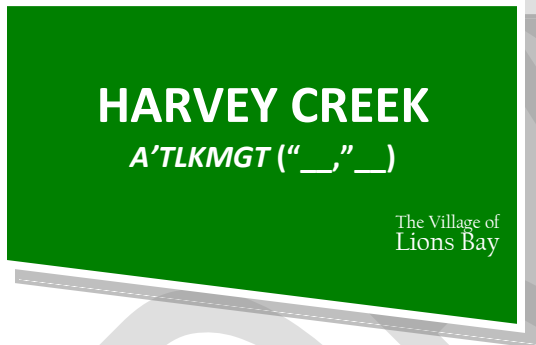
TASK 3: PRODUCE CAMERA-READY ART FOR THE FOLLOWING MOCKUPS

All icons and other graphics must be public domain, and non-copyright (note that sample graphics used herein may not yet meet this requirement). To ensure compliance with expectations, final copy is to be cut-and-paste from the final approved version of this document.

1.1 CREEK NAMES

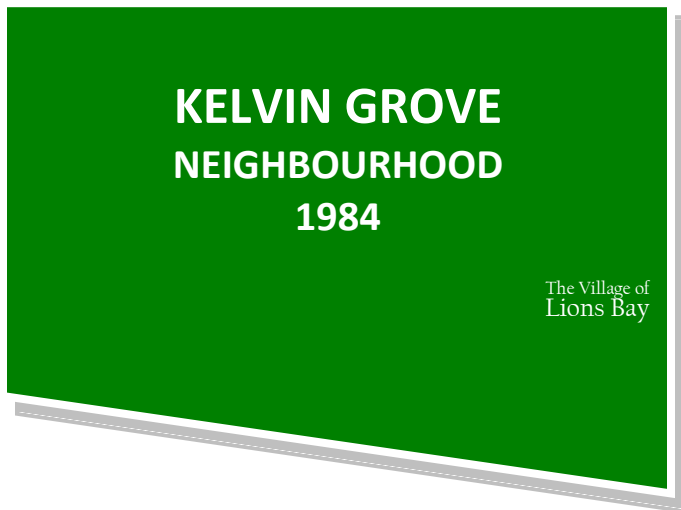
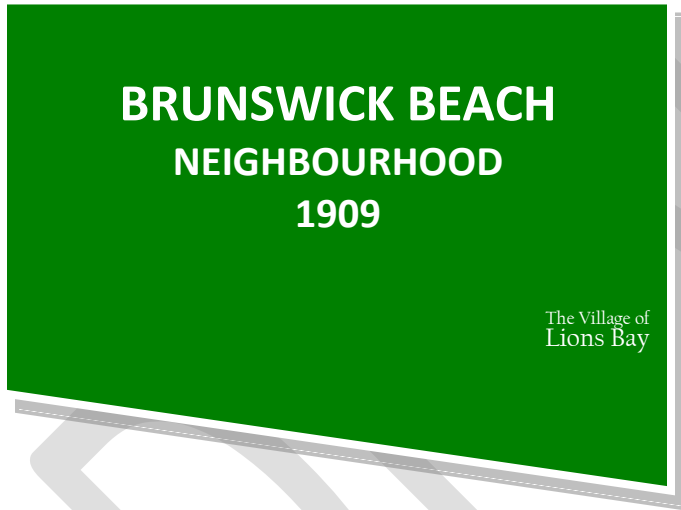
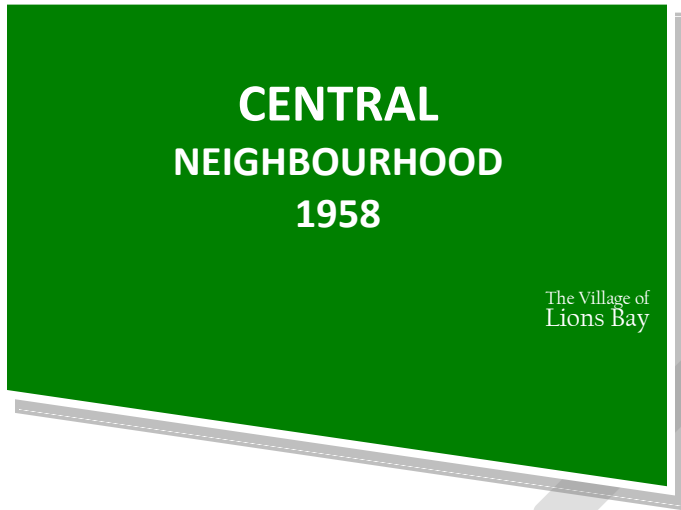


10, approx. 10X10", mounted on the vertical (using wedges if necessary) on right-hand abutments/rails of road bridges at Lions Bay Ave, Isleview X 2, Bayview, Bayview Pl.:



6, approx. 10X10", mounted on the vertical (using wedges if necessary) on right-hand abutments of road bridges at Lions Bay Ave, 99S Offramp (left abutment northbound), Crosscreek. Squamish name TBD.

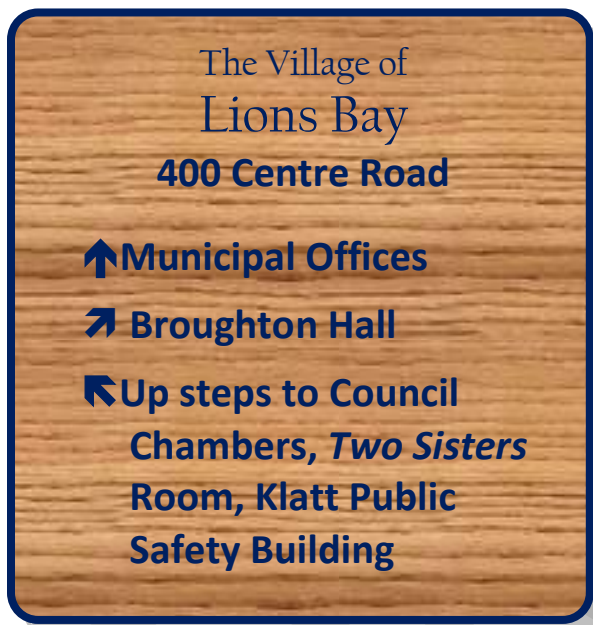
PENDING REPLACEMENTS TO LOG SIGNS (see Phase 3)



1.2 DIRECTIONAL SIGNAGE AT MUNICIPAL HALL

Sizes TBD.

Located in front of municipal notice board ("Two Sisters" is placeholder pending community consultation on a name for the meeting room that used to be the Library; arrows to be oriented by field inspection). Contrary to the proposed style guide, the "bulleted" items do not have periods:



Top of stairs, west side of path:



Door signs. Contrary to the proposed style guide, case is Proper, not ALL CAPS, to match directional signs above:

On top middle east door:



On south door of upper meeting room, as currently used for Historical Society and Playgroup:



On west side door (seen entering the Hall):



On front door (keep existing Hours sign):



3.3 COMMUNITY INFORMATION SIGNAGE

SnapChat community geotag graphic filter, utilising new wordmark

Filters are overlays that users can apply to their Snaps. A geofence will be applied by the municipality, but we need the graphic to upload to it. Requirements: 100% original, no logos or trademarks, no photographs, no hashtags. Don't cover up too much of the screen and make sure it's relevant to the location or moment and something that people will want to use. Files should be 1080px wide and 2340px tall, with no text or important elements within 210px from the top and bottom. File should be under 300KB and in .PNG format (transparency enabled). Examples:

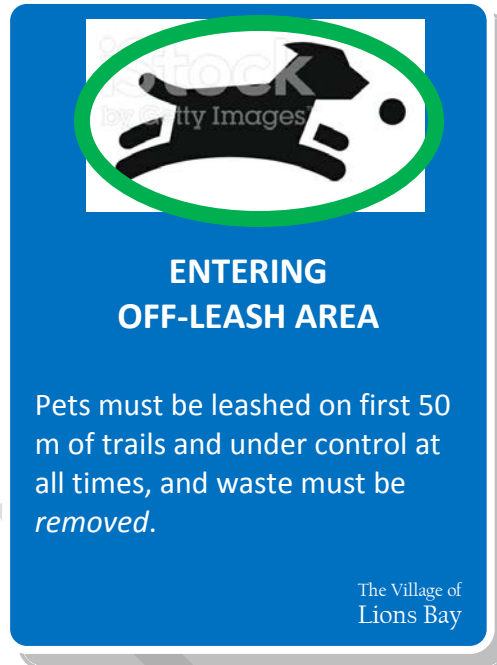


Replace:



Remove all current dog signs (including West Van signs).

At all in-Village trail entrances covered by Bylaw 461's permitted off-leash areas*. Width same as current trail name signs (___ cm) :



*That is, Centennial, Crystal Falls, Harrison Upper & Lower, Loggers Lane, Marjorie's Meadows, Soundview (off Mountain), Sunset, Tidewater** and Kelvin*** trails, plus at Sunset and Oceanview trailheads (which access off-leash-designated Lions, Totally Unnecessary and Trudi's trails). The Erin Moore, Missing Link & Sleepless Nights Trails are new since the bylaw, and lead from off-leash trails--presumably we don't expect dogs to be put back on leash up there, so the bylaw must be updated. Turpin and Pride trails should remain off-leash designated.

**Tidewater Trail is impassable so a sign is unneeded here.

***No dog walker would be off leash on the Kelvin Trail that close to the Highway, so a sign here is probably unneeded.

At beaches and elsewhere. Need better logos encompassing cigarettes, e-cigs/vapes and spliffs. Pipes?





The current sign's tone and wordiness may be counterproductive.

Trailname and off-leash dog sign supplement (purposely separate, but same width of ____). Not under new bear signs, new Drinking Water Catchment signs, new trailhead signs.

DRINKING WATER CATCHMENT AREA

Please help protect this watershed by keeping to trails and removing *all* waste.

Thanks

The Village of
Lions Bay

- ✓ Trails maintained by volunteer groups: use at own risk.
- ✓ Expect off-leash dogs.
- ✓ Absolutely no fires at any time.

The Village of

At 3 trailheads. Wording TBC with LBSAR, Trailblazers, BCMC. No wordmark, non-standard font and first-person address is contrary to style guide, but intentional.

Determine GPS check number off Google Earth once location of sign is determined.

Approx. width 70 cm

**BACKCOUNTRY TRAILHEAD:
50 SUNSET DRIVE
LIONS BAY BC V0N2E0**

- ✓ Trails maintained by regional volunteer groups: use at own risk.
- ✓ Conditions change fast: have suitable gear ([www.lbsar.ca/Tips & FAQs](http://www.lbsar.ca/Tips%20&%20FAQs)). Search & Rescue is not for hikers who are simply unprepared or benighted. In a real emergency call 911 well before dark.
- ✓ Beware rockfall, avalanche, debris torrent, cornice collapse.
- ✓ This is black bear, coyote, cougar, bobcat country.
- ✓ Unreliable cell signal uphill. Ensure *now* that someone knows where you're going.
- ✓ Help protect this sensitive ecosystem: zero fires, stay on trails to minimise erosion, pack out trash, ablute away from watercourses (water unsafe to drink due to human contamination).



.....

GPS CHECK: __ M ABOVE DATUM:



Same again for "165 SUNSET DRIVE" and "375 OCEANVIEW ROAD".

Replace:



This sign can be improved with a community focus, rather than a municipal one.

Approx. width: 50 cm

**KELVIN GROVE
WASTEWATER TREATMENT PLANT
(BUILT 1984)**

This secondary-process facility treats up to 400,000 litres (100,000 USG) per day of domestic wastewater from 100 residences in Lions Bay's Kelvin Grove neighbourhood. It meets current health authority ocean discharge permit limits of 45 parts per million (ppm) of biological oxygen demand and 60 ppm of total suspended solids.

WARNING: TRAINED & AUTHORISED PERSONNEL ONLY. CONFINED WORKSPACE PROCEDURES & BREATHING APPARATUS REQUIRED. 6 M DEEP FOUL WATER; HIGHLY TOXIC HYDROGEN SULPHIDE GAS. CALL 911 IN EMERGENCY. CALL PUBLIC WORKS: (111)111-1111.

The Village of
Lions Bay
feedback@lionsbay.ca, #lionsbay

Can we/do we add haz mat diamonds?: acid, H₂S

Intake gates. Approx. width 50 cm.

HARVEY CREEK WATER INTAKE (BUILT 19__)

Under provincial license a self-scouring weir beyond this gate delivers raw surface water from Harvey Creek to water treatment facilities below.

WARNING: AUTHORISED PERSONNEL ONLY:
CLIFF & ROADWAY COLLAPSE HAZARD,
CONFINED WORKSPACE & LANDSLIDE
PROTOCOLS IN EFFECT.

The Village of
Lions Bay
feedback@lionsbay.ca, #lionsbay

MAGNESIA CREEK WATER INTAKE (BUILT 19__)

Under provincial license an experimental infiltration-gallery weir beyond this gate delivers raw surface water from Magnesia Creek to water treatment facilities below.

WARNING: AUTHORISED PERSONNEL ONLY:
CLIFF & ROADWAY COLLAPSE HAZARD,
CONFINED WORKSPACE & LANDSLIDE
PROTOCOLS IN EFFECT.

The Village of
Lions Bay
feedback@lionsbay.ca, #lionsbay



5 TIDEWATER WAY FRANK SMITH PUBLIC WORKS YARD

Enter only on business. Beware moving equipment. 24/7 video surveillance.

The Village of
Lions Bay
feedback@lionsbay.ca, #lionsbay

Can we/do we add haz mat diamonds?: oxidiser, acid...



We don't want "Rules" front and centre, nor "please act responsibly" nor "please use garbage cans:" people will or they won't, regardless of sign. "Open" is better than "park hours" and much better than "Closed."

Remove this semi-duplicate naming signage:



Size TBD. 11 PM requires community consultation and Council approval.

Enjoy your visit to
LIONS BAY BEACH PARK
OPEN 8 AM TO 11 PM

- ✓ No lifeguards: use at own risk.
- ✓ BBQ only in designated spots.
- ✓ Unamplified music welcome.
- ✓ Rockfish Conservation Area: no fishing. Prawning & crabbing from land is illegal. Leave birds & other wildlife undisturbed.
- ✓ No open flame (propane fires OK on sand), no alcohol, no tents, no smoking/vaping, no dogs, no scuba diving.

Maintenance paid by parking fees & local taxes. Municipal jurisdiction extends 300m into ocean.

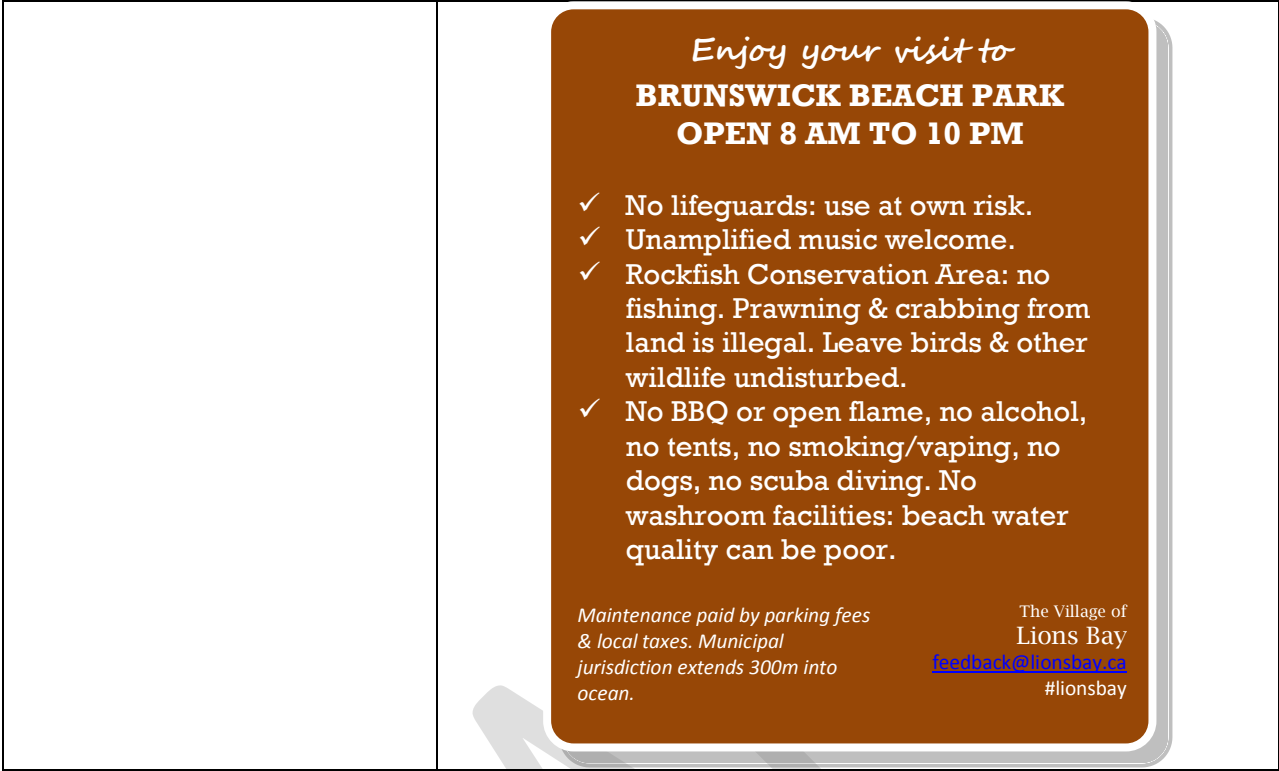
The Village of Lions Bay
feedback@lionsbay.ca
 #lionsbay

Enjoy your visit to the
KELVIN GROVE BEACH & MARINE PARK
OPEN 8 AM TO 10 PM

- ✓ No lifeguards: use at own risk.
- ✓ BBQ only in designated spots.
- ✓ Licensed dogs, scuba diving, unamplified music, non-motorised boating inside demarcation buoys welcome.
- ✓ Rockfish Conservation Area: no fishing. Prawning & crabbing from land is illegal. Leave birds & other wildlife undisturbed.
- ✓ No open flame (propane fires OK on sand), no alcohol, no tents, no smoking/vaping.

Maintenance paid by parking fees & local taxes. Municipal jurisdiction extends 300m into ocean.


The Village of Lions Bay
feedback@lionsbay.ca



1.3 ADVISORY SIGNAGE

REPLACEMENT 60 x 60 DIAMOND¹ SIGNS FOR TRIPODS to freshen the beat-up ones we have now, to remove the word “restrictions,” to reduce bureaucratic language, to make period-end explicit (by simple expedient of removal of sign). We need at entrance to Brunswick Beach, S end of Crosscreek bridge, LB Ave downhill, Isleview entrance, Kelvin Grove uphill, Kelvin Grove downhill. Use of Coastal Health logo TBC:

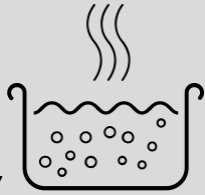
WATER CONSERVATION ADVISORY



Temporary supply issue. Please help to conserve drinking water while this sign is displayed.

The Village of Lions Bay

¹ Word’s limited graphics capabilities make these diamond layouts hard to mock up, but the wording and approximate logo are representative.



BOIL WATER ADVISORY

Temporary source issue. Boil municipal water for human consumption while this sign is displayed.

The Village of
Lions Bay

Vancouver Coastal Health
Promoting wellness. Ensuring care.

3.5 KLATT PUBLIC SAFETY BUILDING

Move existing signage and produce new, with a view to civilians in a panic and professionals in a hurry:



Mounted on spacers over ventilation grille

410 CENTRE ROAD
KLATT PUBLIC SAFETY BUILDING

LIONS BAY
FIRE RESCUE

Emergency Social Services

R.C.M.P.
SUB-STATION

HAZARDOUS MATERIALS
LIONS BAY

British Columbia Ambulance Service
Station 233

BAY
ESCUE
HALL

Paint trim only (consult LBAC on colour)

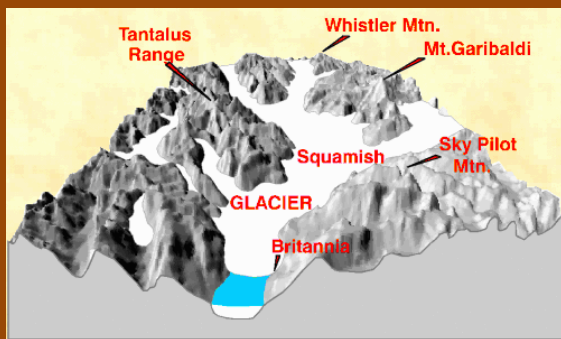
Utilise existing ESS, RCMP, BCAS signs (new name, LBFR, LBSAR)

3.6 INTERPRETIVE SIGNAGE

At Sunset trailhead (graphic copyright to be obtained from <https://www.cgenarchive.org/vancouver-sea-to-sky.html>. Text clearance to be obtained from Pierre Freille). Size TBD.

HOWE SOUND, THE SEA-TO-SKY & THE COAST RANGE

Known as *Atl'Kitsem - Texwnewest'* (Paddling North - Paddling South) to the *Skwxwú7mesh* ("skwo-ho-mesh," People of the Sacred Water), Howe Sound was so named in 1792 for Royal Navy admiral Lord Howe by 35-year-old Capt. George Vancouver, during his voyage in *HMS Discovery*. Other modern names in the area — Brunswick, Harvey, Keats, Gambier, Bowyer, Bowen — were set during the 1857-61 survey voyage of *HMS Plumper*, after officers and ships present at Howe's 1794 *Glorious First* naval battle against France.



Part of the 18,000 km² Salish Sea, Howe Sound is a network of fjords formed by glaciation and erosion. The last or Fraser Glaciation peaked 17,500 years ago, with ice up to 2 km thick covering this spot. As the climate began warming, ice moved over the landscape, as seen from the smooth **rock face 30 m to the south**. Howe Sound was ice-free 13,500 years ago: to the north, higher volcanic peaks that had protruded from the ice and were not

eroded are still jagged today, and the last vestiges of the glaciers that carved Howe Sound can today be seen as snowfields in the Tantalus Range to the NW. The landscape was reshaped by water erosion and rockfalls, first onto and against receding ice, then onto the land and into the sea. When people first began exploring these waters the land was depressed from the weight of ice: the coastline was about 220 m higher than today, **the level of this sign**. As the land rebounded, sea level dropped, reaching today's levels about 6000 years ago. Coast Salish peoples have inhabited this area for thousands of years, using canoes and trails to trade goods to the Fraser Canyon, north to the Johnson Strait, and south to the Olympic Peninsula. In the 1850s gold prospectors built the rough Heritage Trail up Howe Sound to the Cariboo. The "Squamish Railroad" opened in ___ and Highway 99 opened in 1958, connecting Vancouver to Squamish by road, and Whistler 11 years later.

The waters and islands of Howe Sound are ___ km² in extent, extending 45 km NNE from the Strait of Georgia to Squamish, and 21 km WSW from here to Gibsons. Below is Lions Bay's Brunswick Beach neighbourhood, built on a geological feature known as a tombolo, a rock connected to the shore by a sandspit. The Squamish knew it as *Kéletstn* (Sometimes They Fight There). A kilometer further south is central Lions Bay, given the Squamish name *Ch'ich'iyuy Elxwikn* ("chi-chi-yoy el-g!-oi-ken," The Two Sisters), from the Coast Salish legend of the twin peaks above the community. The Lions peaks were so named 1889 for a resemblance seen from Vancouver to the lion statues on London's Trafalgar Square. ___ km further south is Horseshoe Bay, *Ch'axáy* ("cha-g!-hi," sizzling), for the sound of herring spawning there every Spring. The Britannia copper mine operated 18 km north of here from 1905 to 1974. Since treatment of acid rock leachate from its tunnels and pit began in 2005, herring, salmon, dolphin, seal and orca have returned to the waters of Howe Sound.

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Lions Bay

feedback@lionsbay.ca #lionsbay

©2018 E&OE without prejudice

At Kelvin Grove Beach and Marine Park

[Standard text]

North of here is Lions Bay's Beach Park, ChiChi__ in Squamish (xxx, "The Sisters," from the Coast Salish legend of the twin peaks) and believed to have been a stop on local trade routes for thousands of years, as well as Brunswick Beach, Kéletstn in Squamish (*kay-let-sen*, "Sometimes They Fight There"). Horseshoe Bay to the south is Ch'axáy in Squamish (*cha-g!hi*, "sizzling," from the sound of millions of spawning herring).

©2018

At Lions Bay Beach Park

[Standard text]

This beach requires sand replenishment today within a short window after herring spawning season ends and __. It is believed to have been a stop on local trade routes for thousands of years. Just to the north is Brunswick Beach, in Squamish Kéletstn (*kay-let-sen*, "Sometimes They Fight There"). Horseshoe Bay to the south is Ch'axáy in Squamish (*cha-g!hi*, "sizzling" from the sound of millions of spawning herring). ©2018

Need to correct typos and syntax errors, plus use an opportunity to add information to enhance and manage the visitor experience.



Size TBD.

black bear, coyote, cougar and bobcat

Enjoy this forest
WILDLIFE HABITAT.



Keep dogs and children in sight and make a noise to let wildlife know you are approaching, especially near loud water and when windy.

BLACK BEARS are common. They are jet black to light brown, weigh up to 110 kg and run 60 km/h. They are not aggressive. Huffing, jaw snapping and growling are *defensive* behaviours. Rearing is to see and smell better. But NEVER APPROACH CUBS: the mother *is* nearby and *will* protect them. FED BEARS ARE DEAD BEARS: bears habituated to people can become a nuisance and will likely have to be euthanized.

COYOTES, COUGARS, BOBCATS and SNAKES are also seen. None of the six snakes native to the Lower Mainland are venomous. If you encounter a wild animal DO NOT RUN. BACK AWAY, leaving it an escape route and TALK SOFTLY to not pose a threat.

©2018. The Village of Lions Bay is a *BC Bear Smart Community*.

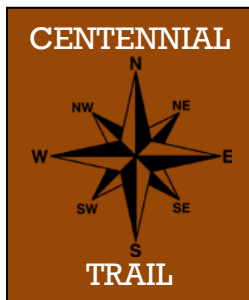
3.7 CENTENNIAL TRAIL SIGN REPLACEMENTS

All mounted on 2" galvo pipe or channel, with a large variety at 12X12" and a medium at 8X8", on a plinth at 30° that obscures a collar used for pounding into the ground). In general, the ethos is not educational, but informational (IOW, we don't ask questions, but induce readers to ask their own). Wording is second-person. Purposely not numbered or sequenced. Still requires a Council policy on

adoption of the Trail, and a signage plan: do we want signs for points of interest AND natural phenomena?

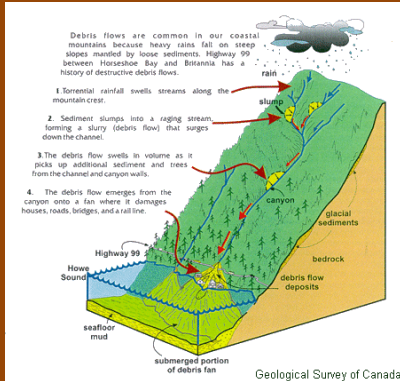
In 2010 volunteers created the CENTENNIAL TRAIL to link central Lions Bay to Brunswick Beach on the centennial of its founding in 1909. Interpretive signage along the trail offers insights into BC's forests and how First Nations interacted with local resources. Look down and up and out, and enjoy in all weathers. You can help preserve this special ecosystem by _____. Donations are gratefully received at _____.

At select intersections:



On or at Dudley Bridge:

INUKSHUK or INUKSUK comes from Inuit words *inuk* ("person") and *-suk* ("substitute"). In the past inukshuks were stone markers used by the peoples of the often featureless Arctic for navigation and signs. Today, especially since its use as a logo of the 2010 Vancouver Olympic Games (which technically was an *inunnguaq* or "imitation of a person"), inukshuks are seen today a symbol of Canada. In wilderness areas, latter-day inukshuks laid by hikers need to be removed so as to not confuse hiking trail cairns.



ALBERTA CREEK. Central Lions Bay below is built on alluvial

fans of material originating from the Magnesia, Harvey and Alberta creek channels, particularly since the last ice age ended 13,500 years ago. Intense rain in the early hours of 11 February, 1983 caused earth to slump into this creek high above, triggering a debris flow of 12,000 cubic metres of mud, rocks and logs that swept through Lions Bay in four waves, destroying roads, bridges and houses, and killing two teenage boys while they slept, at the site of today's Wade Memorial park. After the Alberta Creek tragedy, debris catchment basins, diversion channels like this flume, and over-height bridges on Highway 99 were built by the provincial government on Alberta Creek, Harvey Creek, Magnesia Creek and Charles Creek, and no major debris flow damage has occurred since. The catchments have to be emptied, especially after major storms, such as after 2014, requiring __ 10-ton truckloads.

__ m north of General Store, __ m south of Brunswick Beach. ©2018

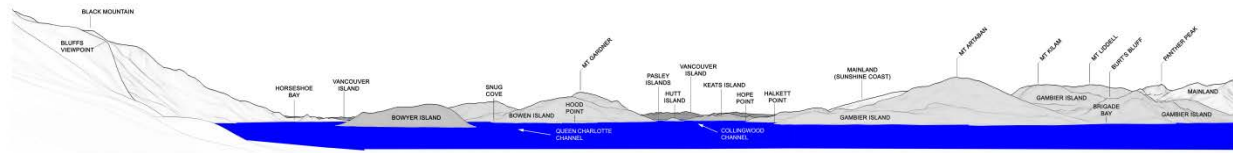
BRUNSWICK HILL GRAVEL DEPOSIT.

Location: __

FIRE IN COASTAL FORESTS. No large fires have occurred in Lions Bay in recent memory, but many trees are blackened by fire, likely the result of burning slashpiles left after logging from the 1880s to the 1960s. Note the large Douglas-fir trees that have been protected from fire by their thick bark. After a fire, regeneration begins with establishment of pioneer species like shrubs, maple and alder. Conifers (locally a mix of western hemlock, western redcedar and Douglas-fir) may take 500 years to return to old growth stage. Although the Lower Mainland is one of the wettest areas in Canada, summer temperatures reach the 30s and conditions get very dry. You can help project the forests of Howe Sound, particularly in dry periods, by being vigilant against fire.

__ m north of General Store, __ m south of Brunswick Beach.

Reflection Point panorama (existing)



Location: southern aluminum bridge on Schoolyard Creek (is this location right, since that is not one of the creeks that actually produce Lions Bay's water? Maybe drop?):

SCHOOLYARD CREEK. Lions Bay is part of the Metro Vancouver Regional District, but not part of its water system. With terrain too steep for any reservoirs, the community draws its drinking water directly from steep mountain creeks, which are fed by snowmelt, rain and groundwater springs. The water is treated with ultraviolet light and chlorine in two automated plants. About 48 hours of supply is stored in tanks, and gravity fed through large mains and pressure-reducing valves to Lions Bay's 580 residences and institutional users. Consumption averages 1.2 million litres a day in winter, including network leaks, and half that much again in summer, when the municipality institutes water conservation measures.

__ m north of General Store, __ m south of Brunswick Beach. ©2018

Is this sign appropriate on the Centennial? Tailed frogs are more likely higher up?:



COASTAL TAILED FROG (*Ascaphus truei*). This remarkable frog is found from western BC south to California; one other ___ species in the *Ascaphus* genus lives in the Kootenays, Montana and Idaho. This little frog is relatively unevolved, with more vertebrae than modern frogs, an inability to vocalise, and free ribs. Adults are 2 to 5 cm long, with tan or brown grainy skin; some are green, red or entirely black. The male's "tail" is actually an adaptation to life in fast-flowing streams; it is the only North American frog that reproduces by internal fertilization. After storing sperm over the winter, in summer females lay their eggs under rocks for protection from swirling water. Tadpoles take up to four years to metamorphose into froglets, holding onto rocks in moving water with a suction cup mouth. They eat algae and lots of conifer pollen, hence this habitat.

Tailed frogs live 15 to 20 years, one of the longest-lived frogs in the world. Adults eat insects, spiders and snails. The tongue is sticky, but cannot flip out to grab insects as other frogs do, so the tailed frog grabs its prey by mouth. Tailed frogs are on the provincial Blue List and designated as Special Concern by Endangered Wildlife Canada (COSEWIC). They are protected from being killed, collected or harmed under the provincial *Wildlife Act.*, so if you are lucky enough to see one, watch from afar and notify BC Frogwatch (Google 'frogwatch incidental wildlife observation'). ©2018

At log bench at Eagle view Lookout:

EAGLE VIEW LOOKOUT. In the large fir tree across the highway, in line with the top of the power pole, is a bald eagle nest that has been in use for several years. Bald eagles build the largest nests of any North American bird and mate for life, returning to the same nest until it breaks from its own weight or is destroyed in winter storms. Most raptors nest in April or May, but bald eagles are early breeders: nest building or reinforcing is often by mid-February, and the male and female take turns incubating 2-3 eggs from late February to early March; the other parent can often be seen close by on the lookout for intruders and food.

After hatching, eaglets will remain in the nest for 10 to 14 weeks. , They pick up and manipulate sticks, play tug of war with each other, practice holding with their talons, and stretch and flap their wings. By 8 weeks, they are strong enough to lift off the nest, and they first leave the nest at ___ weeks. After they fledge juveniles will remain close to the nest and attended to by their parents for a further 6-8 weeks.

___ m north of General Store, ___ m south of Brunswick Beach. ©2018

COAST DOUGLAS-FIR (*Pseudotsuga menziesii*). Also known as Oregon pine, the scientific name is for Scottish naturalist Archibald Menzies who noted it in 1791 (along with *Arbutus menziesii*) on Capt. Vancouver's *HMS Discovery* voyage. Its common name is for Menzies's rival, Scottish botanist David Douglas. Douglas-firs are native from central BC to central California. It is a particularly tall tree, regularly reaching 60-75 meters on the coast. Locally it is found mixed with western hemlock and western redcedar. When only one of these trees dies in a forest and the canopy opens up, already-established seedlings of shade-tolerant cedar and hemlock have a head-start over the shade intolerant Douglas-fir. Over hundreds of years, firs are pushed out. But a large disturbance such as fire or landslide allows faster-growing Douglas-firs to dominate the new forest's canopy—the proportion of these three climax species in a stand indicates how long ago the last forest-clearing event was.

This specimen began its life around 1680; its diameter is about 1.4 m. Douglas-fir wood is highly valued for its hardness, durability and large dimensions, and is unique among softwoods in not shrinking as it dries, making it ideal for construction. Animals eat its seeds and leaves. ©2018

WESTERN REDCEDAR (*Thuja plicata*). This giant tree would have been about 1400 years old when it was uprooted, probably by a summer storm about 100 years ago, judging by its size, the direction it fell and the age of the new trees growing in it. Locally Western redcedar grows alongside Douglas-fir and western hemlock, and can be identified by its relatively smooth bark, drooping branches, wide base and braided leaves (*plicata* means braided; the redcedar is actually a member of the cypress family). Also known as giant redcedar, canoe cedar, and giant arborvitae ("tree of life," for medicinal properties of the sap, bark and twigs), this economically and culturally important tree can grow to 60 m tall, and is particularly long-lived, regularly exceeding 1000 years old.

Redcedar was vital to coastal First Nations people, who called it "long life maker." They used all parts of the tree, for dugout canoes, house planks, bentwood boxes, clothing, arrow shafts, carved items, rope, clothing, baskets, as well as many medicines. Today, this soft timber with a tight, straight grain, few knots and high resistance to decay is ideal for outdoor uses.

__ m north of General Store, __ m south of Brunswick Beach. ©2018

WESTERN HEMLOCK (*Tsuga heterophyll*, "mother of trees" and "different leaves"). Also known as Olympic fir and Prince Albert's fir, this tree is native from southern Alaska to central California, and grows to 50 m in BC. It has a narrow crown, a characteristic drooping top shoot, and needles that smell of grapefruit when crushed (it is named for but unrelated to the similar-smelling toxic herb hemlock).

Western hemlock's even grain makes it superior to other hemlocks for machining into mouldings and turnings. First Nations people also carved its easily worked wood into spoons, bowls, combs, roasting spits and other implements, and boiled its high-tannin bark to tan hides and for a red dye.

Western hemlock forms a symbiotic association with fungi, allowing seedlings to survive on rotting nurse logs, and trees to host edible fungi like chanterelles. It is a climax species in old-growth forests locally alongside western redcedar and Douglas-fir. By being highly shade-tolerant, it is also a pioneer species in new stands: seedlings grow in the shade of their parent, then take advantage of gaps in the canopy when the older hemlock's shallow roots make it vulnerable to blowdown and fire. ©2018

Location: __

PACIFIC DOGWOOD (*Cornus nuttallii*). A small tree of up to 15 m tall, with branches in a circular pattern around the tree. The showy white flowers are actually four to six modified leaves that surround a cluster of 30 to 40 actual small green flowers. Dogwoods usually flower in Spring and again in Fall. The fruit is eaten by birds and bears. ©2018



BIG LEAFED MAPLE (*Acer macrophyllum*) is the largest maple in Canada, reaching heights of 36 m. Growing in the forest it develops a narrow crown that is supported by a trunk without branches for half its length. Those growing in the open have a broad crown which is supported by a few large, spreading limbs.

They are often draped in mosses, because the bark is rich in calcium and moisture, adding to the diversity of this coastal rainforest. ©2018



ARBUTUS (*Arbutus menziesii*). A broadleaf evergreen member of the Ericaceae heather/heath family that can grown up to 30 m tall, this quintessential BC tree has a crooked trunk, twisting branches and an irregular crown. Its scientific name is for Scottish naturalist Archibald Menzies, who noted it in 1791 on Capt. Vancouver's voyage of exploration (as he did *Pseudotsuga menziesii*, the Douglas-fir). Known outside BC as the Pacific madrone or Oregon laurel, it ranges from BC south to central California. It generally occurs only within a few kilometres of the ocean and often on exposed rocky bluffs. Mature trees are extremely sensitive to alteration of the slope or drainage at the roots.

First Nations people chewed the berries and made them into a cider. Bark and leaves were used to treat stomach-aches, cramps, skin ailments, and sore throats. Many animals also eat the berries. The hard, dense wood is sometimes used for flooring. Although drought tolerant, fast growing and producing a very large numbers of seeds, arbutus is declining in numbers: it needs fire to reduce the canopy so that it can regenerate quicker than other species, like the Douglas-fir it is often found close to. ©2018

Location: MOVE FROM CURRENT LOCATION, TO NEAR FOOT OF LOGGERS LANE IN VIEW OF NOTCHED CEDAR

HERITAGE LOGGED TREE (___ m east). The first sawmill in what is today BC started at Fort Victoria on "Vancouver's Island" in 1847, a year after the Oregon Treaty established the western US-British North America boundary at the 49th parallel until the Strait of Juan de Fuca. The Hudson's Bay Company's main trading operation at Fort Vancouver on the Columbia River (across from present-day Portland) quickly became unprofitable, and moved to Victoria in 1849.

By the 1880s loggers were cutting trees on the Lower Mainland close to the shoreline, including the beach at Lions Bay. BC loggers were known for jamming a springboard into a notch cut into the tree, on which men could stand to cut the tree above its wide base, using double-edged axes and cross cut saws. In the late 1930s heavy two-man chainsaws were introduced, to be replaced by lighter chainsaws in the 1940s. A springboard notch in a tree means it was certainly cut before 1940. Which trees were taken depended on market demand for their wood at the time. It these woods that seems to have been cedar, since there are plenty of pre-1940 Douglas-firs still standing.

___ m north of General Store, ___ m south of Brunswick Beach. ©2018

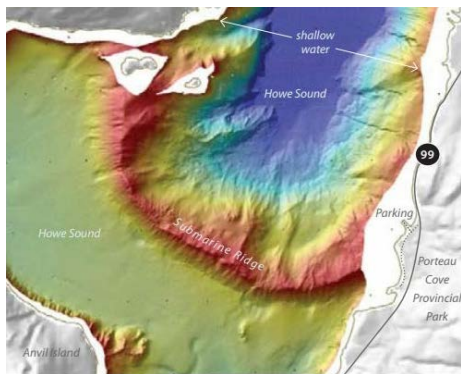
Location: __

HIMALAYAN BLACKBERRY (*Rubus armeniacus*) is native to Iran and Armenia, but found today in temperate climates worldwide. This invasive species grows on disturbed sites like roads, embankments, forest cuts, and wooded ravines. Thickets can produce tens of thousands of seeds per square meter a year, which remain viable in the soil for several years, making blackberry hard to eradicate. Spread by birds, it outcompetes low-growing native vegetation through shading and build-up of leaf litter and dead stems, preventing the establishment of native trees. As thickets become impenetrable they also limit movement of animals. ©2018

PACIFIC BANANA SLUG (*Ariolimax columbianus*) is the second-largest terrestrial slug in the world, growing to a length of 25 cm. It is not usually found in gardens, preferring its natural habitat of cool forest floors. Slugs recycle dead and decaying plant matter, animal waste and fungi into a nitrogen-rich humus in which new plants grow on the forest floor. A slug's slime protects it as it glides over rough surfaces. Slug slime can absorb up to 100 times its own volume of water, making washing it off almost impossible (wait for it to dry then rub it off like glue). At the start of summer, slugs cocoon themselves with slime and burrow into leaves and soil and aestivate (hibernate) until the rainy season starts.

__ m north of General Store, __ m south of Brunswick Beach. ©2018

At __: Can we add signs for the stretch from Harrison Steps to Crystal Falls?



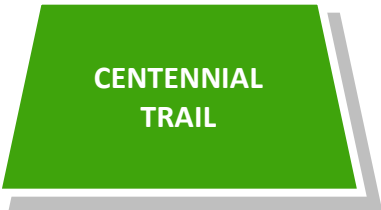
Terminal moraine. At Porteau ("water harbour").

Proposed as a location for a future "Third Crossing" of a 24/7 highway to the Sunshine Coast mainland, currently only accessible by 4WD tracks or ferry.

REMOVALS: WILDLIFE HABITAT TREES. Cat Stevens song lyrics, Robert Frost poem.

TRAIL SIGNS

Before sign finalisation a Trails Management Policy is required, but in general current signs need to be replaced over time, matching this style guide to reduce any misapprehension of municipal maintenance, for which use of logo or wordmark is contraindicated. In all cases trail name signs require the supplemental “municipal” use-at-own-risk sign is located below. Mounted to standalone galvanised channel or poles is preferred to nailing to trees.



DRAFT

DRAFT

PHASE II (2019+): ROAD NAMES, WAYFINDING SIGNAGE, FIELD GUIDES




ROAD NAME SIGNS



WAYFINDING SIGNAGE

- Drivers: feature of a complete community, get residents out hiking and discovering their village, accommodate and spread visitor load (they're coming anyway), distribute parking demand, produce sense of prosperity and diversity.
- Decide syntax between "100 m: Centennial Trail.", "100 m to Centennial Trail.", "Centennial Trail (100 m)." All distance figures must be confirmed to the nearest 100 m (or 0.1 km for numbers > 599) on Google Maps.
- Colours and layout TBC. Use of hiking terms like "spur" and "cut-off" is deliberate.

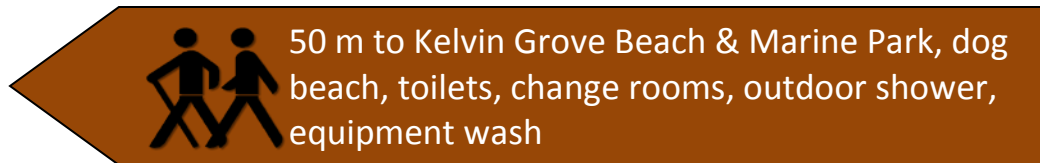
ICON USAGE

	Pointers to in-Village locations and trails. 2 people is a safety hint.
	Pointers to backcountry trails. Backpack indicates a backcountry route
	Pointers to washrooms

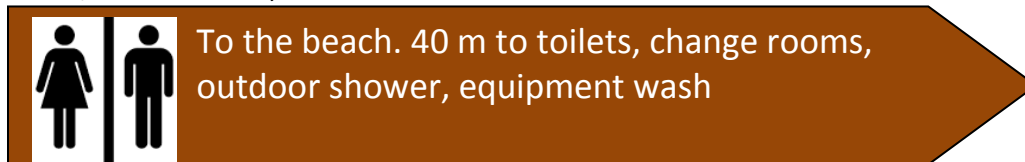
➡ At N side of Tidewater Way opposite exit from Kelvin Grove BP parking lot:

1.3 km to central Lions Bay for municipal offices,
general store & café, Centennial Trail,
backcountry trailheads

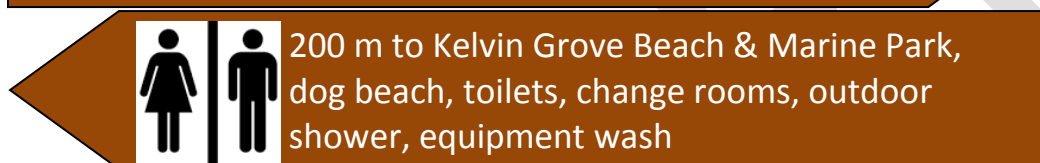
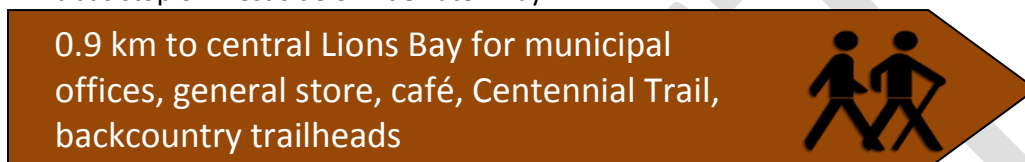




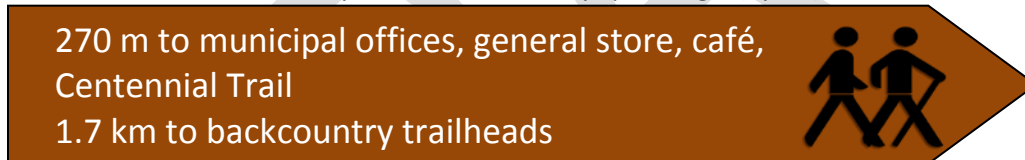
➤ Midway along south side of Kelvin Grove parking lot (note that wash table would need to be added; hose bib exists):



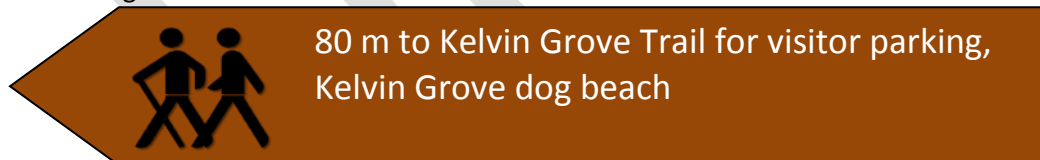
➤ At bus stop on west side of Tidewater Way:



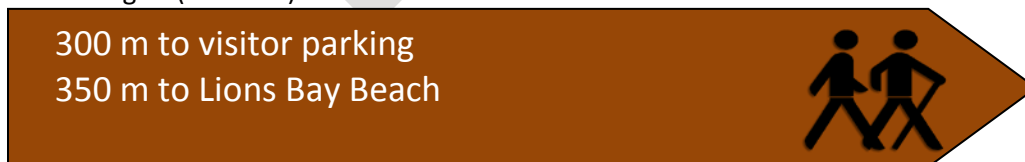
➤ On SW corner of Lions Bay Ave. at 99 S onramp, pointing E (uphill):



➤ Pointing S:



➤ Pointing W (downhill):



➤ On west side of Lions Bay Ave. directly opposite CN crossing:

30 m to Lions Bay Beach



➔ On east side of Crosscreek at south end of bridge:



200 m to general store, café, Centennial Trail
10 m to Marjorie's Meadow dog park
1.6 km to backcountry trailheads

1.2 km to backcountry trailhead for
Unnecessary Mountain Trail, Erin Moore Trail



➔ Halfway up Oceanview:



600 m to backcountry trailhead for
Unnecessary Mountain Trail, Erin Moore Trail

➔ On east side of Centre Road at T opposite centreline of Crosscreek (same pole as street name signs):



100 m to Centennial Trail for Harrison Trail,
Crystal Falls Trail
100 m to Post Office, general store, café

1.6 km to backcountry trailheads for The Lions-
Binkert Trail, Tunnel Bluffs Trail, Upper Harrison
Trail, Trudi's Trail, Sleepless Nights Trail




Note: the Lions Trail is incorrectly called "Magnesia Creek Trail" on Google Maps.

➔ On west side on Bayview at school driveway (in conjunction with overflow parking signage):


1.1 km to backcountry trailheads for The Lions-
Binkert Trail, Tunnel Bluffs Trail, Upper Harrison
Trail, Trudi's Trail, Sleepless Nights Trail




➔ On east side of Mountain opposite Bayview T:


 800 m to backcountry trailheads for The Lions-Binkert Trail, Tunnel Bluffs Trail, Upper Harrison Trail, Trudi's Trail, Sleepless Nights Trail


➡ On east side of Sunset at Mountain T:


 150 m to backcountry trailhead for The Lions-Binkert Trail, Tunnel Bluffs Trail, Upper Harrison Trail spur to Centennial Trail

200 m to backcountry trailhead for Trudi's Trail, Sleepless Nights Trail and cut-off to The Lions-Binkert Trail 


At intersection of Centennial and Lower Harrison trails, both sides:


Brunswick Beach via Centennial Trail (___ m), to Crystal Falls Trail 

Lower Harrison Trail to The Lions-Binkert Trail (___ m) 

Centennial Trail to Lions Bay General store (___ m) via Eagleview Loop, Reflection Point, Neil's ___ and 39 Steps 

At bottom of 39 Steps, both sides:

Centennial Trail to Lower Harrison Trail (spur to The Lions-Binkert Trail, ___ m), Brunswick Beach (___ m) and Crystal Falls Trail (___ m) 

 Centennial Trail to Lions Bay General Store (___ m)

At entrance to Centennial Trail on the Pit road, both sides:

Centennial Trail to Lower Harrison Trail spur to
The Lions-Binkert Trail (__ m), Lions Bay General
store (__ m), Eagleview Loop, Neil's __, 39 Steps



Brunswick Hill Road to Soundview Trail spur to
The Lions-Binkert Trail (__ m)



At north end of Brunswick Hill ("Gravel Pit"), both sides:

200 m to backcountry trailhead for Trudi's Trail,
Sleepless Nights Trail and cut-off to The Lions-
Binkert Trail



To Brunswick Beach (__ m)



Entrance logs or panels, replacing existing:

VILLAGE OF LIONS BAY

Population 1500. Altitude: sea level - 240 m
Central Neighbourhood (ca. 1955)

One each at Kelvin Grove north and south:

VILLAGE OF LIONS BAY

Population 1500. Altitude: sea level - 240 m
Kelvin Grove Neighbourhood (ca. 1981)

In underpass (thus includes residences above the highway). Spotlit?

VILLAGE OF LIONS BAY

Population 1500. Altitude: sea level - 240 m
Brunswick Beach Neighbourhood (ca. 1909)

FIELD GUIDES

BIRD SIGN (100 CM WIDE, 150 CM HIGH, 2 columns), located ends of Centennial Trail, Sunset Trailhead, Oceanview Trailhead.

Descriptions broadly follow the following syntax:

Picture/painting, pointing right

NAME (*Linnean*, name source).

Size/recognition.

Range, habitat, rarity.

Characteristics.

Diet.

BIRDS OF LIONS BAY (ILLUSTRATIONS NOT TO SCALE)



ANNA'S HUMMINGBIRD (*Calypte anna*, named for the French courtier Duchess Anna of Massena, 1802-1887). Over 330 species of hummingbirds are known, only in the Americas. In the early 20th century Anna's bred only in northern Mexico and southern California, but urban gardens have now allowed this hardy bird to range to BC. Unlike most hummingbirds, Anna's males have a buzzy song lasting 10-12 seconds and given while perched. They have a dark tail and a rosy-red iridescent crown, chin and throat. The female has a green crown and a gray chin and throat with variable amounts of thin dark streaking or rosy red spots. Anna's live up to 8 years. A diet of nectar and small insects, up to half their body weight a day, supports 20 heart beats and 50 wing beats a second. Anna's are strongly territorial, so when food supply from a domestic feeder is interrupted, their survival is put at risk.



AMERICAN ROBIN (*Urduis moratoriums*). A member of the thrush family, the robin is easily recognized, and one of the first birds to arrive in early spring from California and Mexico. The male's rich mating caroling starts just before first light. It is long-lived, about 13 years. It does much of its foraging on the ground, running and pausing to locate worms by sight (not by sound as previously thought).



VARIED THRUSH (*Ixoreus naevius*). This handsome but shy bird is a large thrush, 20 to 26 cm in length with a 34-42 cm wingspan. Its sweet, eerie song is heard more often than the bird is seen. It breeds in dense coniferous forest, with two to five eggs being laid in a tree nest. Local birds overwinter rather than migrate.



STELLER'S JAY (*Cyanocitta stelleri*), also known as the mountain jay and pine jay, was first identified in Alaska by prolific Russian explorer Georg Steller, 1709–1746. It thrives in dense coniferous woods of BC's mountains and coast, where its dark colors blend in with the shadows. It lives in flocks except when nesting, often flying across a clearing one at a time giving low *shook-shook* calls before swooping up to perch. Diet consists of a wide range of seeds, nuts, berries and other fruit, invertebrates, small rodents, eggs and nestlings of other birds.



HAIRY WOODPECKER (*Leuconotopicus/Picoides? villosus*) is a medium-size woodpecker, 18-26 cm in length with a 33-43 cm wingspan. Widespread throughout North and Central America, local birds do not migrate south in winter. They eat fruits, berries, nuts, and are known for foraging on trees (and sometimes houses) to uncover insects, making a knocking or rolling drum sound, which is also used as a mating call in spring. Their call is a sharp *keek*.



RED-BREASTED SAPSUCKER (*Sphyrapicus ruber*). A slender bird with stiff tail and relatively long wings, its flight alternates between bursts of wing beats and dips with wings tucked against the body. They don't actually suck sap, but drill rows of holes in the bark of trees, returning later to lap up the sugary liquid with brush-like tongues, and gathering trapped insects to feed their young. The red-breasted sapsucker's breeding habitat is old-growth forest; they nest in April or May, and producing one brood of 4-7 per breeding season. Both parents feed the young, and fledglings leave the nest at 3-4 weeks old.



NORTHERN FLICKER (*Colaptes auratus*). These ground-dwelling woodpeckers hunt for ants and subterranean insects using their feet and strong bills to dig them from the ground. Unlike our other woodpeckers they migrate south for the winter and on their return in spring can be heard attracting a mate and claiming their territory by drumming on anything that will make a loud noise such as gutters. Their interesting call sounds like a sustained laugh.



SPOTTED TOWHEE (*Pipilo maculatus*, previously known as rufous-sided towhee). This large handsome sparrow with rusty flanks, long tail, and cat-like call is well-known on the North Shore in winter. In the spring breeding season, males spend 70 to 90 percent of the morning singing to attract a mate. Once they do, two or more broods of three to five eggs are laid per season; the female incubates the eggs alone for 12 to 14 days; the young leave the nest at 10 to 12 days. It forages on the ground, noisily rummaging through dry leaves searching for insects, seeds and berries.



DARK-EYED JUNCO (*Junco hyemalis*). Another member of the sparrow family, juncos are one of the most common birds in North America. The *hyemalis* (“winter”) species is a flashy little bird, 13 to 17 cm long with a wingspan of 18 to 25 cm. Listen for their *trilling* song, and *tinkle*, *chip* and *tick* calls. They breed in coniferous or mixed forest throughout North America, flitting about the forest floor feeding on insects and seeds, often in flocks that may contain several subspecies. Local birds overwinter here, and lay two clutches of four eggs in the spring, incubated by the female.



BLACK-CAPPED CHICKADEE (*Poecile atricapillus*). This member of the tit family has a wingspan of 16–21 cm and a body length of 12–15 cm. Listen for it calling its name in the branches overhead, *chik-a-dee-dee*. Chickadees are known for boldness near humans and for their ability to lower body temperature during cold winter nights. Like many of its family, black-capped chickadees store seeds and insects in bark, leaves or knotholes, and can remember the location for up to a month.



GOLDEN-CROWNED KINGLET (*Regulus satrapa*). One of our tiniest birds at __ and __, the golden-crowned kinglet is remarkable in its ability to survive in cold climates, overwintering throughout much of the continent. It has a distinctive high pitched *se-se-se* call and can often be seen in groups searching for insects and larvae.



NORTHERN BALD EAGLE (*Haliaeetus leucocephalus washingtoniensis*, Greek for “white headed sea eagle from Washington”). Bald eagles range the continental US, northern Mexico, Alaska and most of Canada. Almost extinct in the 1950s, populations have recovered after the banning of hunting and DDT (which affects eggshell strength). Males and females have the same plumage. Body length is 70 to 102 cm and wingspan 1.8 to 2.3 m. Females are about 25% larger than males, averaging 5.6 kg against the average male’s 4.1 kg. Bald eagles live about 20 years in the wild. Our northern subspecies is found where large nesting trees are near large bodies of open water, because fish comprises the majority of its diet. Bald eagles are opportunistic feeders, eating carrion and stealing other birds’ prey. Their talons are very powerful, estimated to be ten times the pressure of a human’s. Bald eagles can fly with prey at least equal to their own weight and have been seen dragged into the water and swimming to shore, pulling their catch along.

AMERICAN CROW (*Corvus brachyrhynchos*, literally “short-billed crow”). Common throughout North America, American crows are 40–50 cm long, have a wingspan of ___ and weigh 300 to 600 g. Males are larger than females.



Crows are often seen harassing eagles and owls, ___

The usual call is a characteristic *CaaW!-CaaW!-CaaW!*.



COMMON RAVEN (*Corvus corax*, literally Latin and Greek for “raven”). Found across the Northern Hemisphere, the common raven is 60 cm in length with a 115-130 cm wingspan, with a heavier bill and a lower, hoarser voice than its crow relative. Ravens live for a long time, up to 20 years in the wild and 40 in captivity, and are known for their intelligence. Coupled with their fearlessness, ravens feature in mythology, folklore, art and literature worldwide. To the Coast Salish, Raven is a transformer, trickster and creator spirit.

It's thought ravens collect shiny objects to impress other ravens. Pair courting begins at a very young age with aerial acrobatics, demonstrations of intelligence and providing food, but ravens do not bond until two to three years later. Once paired, they nest together for life, usually in the same defended territory. They make distinctive calls: a deep, resonant *pruk-pruk-pruk*, a high, knocking *toc-toc-toc*, a dry, grating *kraa*, and a low guttural chuckle. Their diet is omnivorous: carrion, insects, cereal grains, berries, fruit, small animals and food waste: they know very well when garbage day is.

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NOCTURNAL DENIZENS OF LIONS BAY



RACCOON (*Procyon lotor*, Greek and Latin for “dog-like washer”). A __ native to North America, called *ah-rah-koon* in Algonquin which means “rubs, scrubs, scratches with its hands.” Sometimes spotted in the day. They live in holes in old rotting trees and when they give birth in early May can have as many as 6 kits. They spend most of the winter asleep in their dens and live for around 2-3 years in the wild.

Eat
Aggressive



NORTHERN FLYING SQUIRREL (*Glaucomys sabrinus*). About an hour after sunset flying squirrels emerge from their homes in holes in old dead trees in the forest around us. They are about 30 cm long and the extra skin between their legs lets them glide through the air as far as 60 m. They eat nuts, seeds, berries and insects. You can help them by building nesting boxes in your garden.



NORTHERN SAW-WHET OWL (*Aegolius acadicus*). This small owl is about the size of a robin, and may have come by its name for a call that sounds like a saw being sharpened on a whetstone, usually to find a mate, so heard more April through June. These birds wait on a high perch at night and swoop down on prey relying as much on particularly acute hearing as on sight. It eats mice and small rodents and is rarely seen.



BARRED OWL (*Strix varia*) is native to the East, but with new forests providing a migration route, was first spotted in BC 1947 and has spread rapidly. Its “*who cooks for you*” call is often heard after dusk in the Village. It is between 43 and 61 cm in height and feeds mainly on small mammals. It often lets humans approach to within a few yards when it perches on branches.

Barred owls are partly responsible for the recent decline of the northern spotted owl,

adult is 40–63 cm (16–25 in) long with a 96–125 cm (38–49 in) wingspan. Weight in this species is 500 to 1,050 g (1.10 to 2.31 lb). the chest is barred horizontally while the belly is streaked vertically (hence its name "barred owl"). The legs and feet are covered in feathers up to the talons.^[5] The head is round and lacks ear tufts. The closely related spotted owl is similar in appearance, but slightly smaller and has spots rather than streaks down the underside.



COUGAR (*Puma concolor*). Secretive and largely solitary by nature, the cougar is largely nocturnal, although daytime sightings do occur particularly around twilight. This cat prefers dense underbrush and rocky area habitats, for stalking, but can also live in open areas. Adult males are about 2-4 m long from head to tail and females slightly smaller. It is an obligate carnivore, meaning it feeds exclusively on meat. Deer and raccoon are part of its diet. Life expectancy – 8 -13 years. In Lions Bay there have been occasional sightings of them descending the creek beds.



MARSH SHREW (*Sorex bendirii*). Also known as the Pacific water shrew and Jesus shrew, at __ cm long this is the largest North American long-tailed shrew, found from southern British Columbia to northern California. With air trapped in its fur for buoyancy, marsh shrews can run for three to five seconds on top of the water, hence one of its names. It is rarely seen because it hunts for spiders, worms and insects at night.



GREAT HORNED OWL (*Bubo virginianus*). Also known as the hoot owl, this large bird, 55 cm in length and 1.2 m in wingspan, is widespread throughout the Americas. Its resonant territorial *ho-ho-hoo hoo hoo* call peaks after midnight, decreasing in February or March at the onset of egg laying. It hunts in the evenings and early mornings, from secrecy and stealth to hunt. It is well camouflaged. Owls hunt mainly by watching for prey from high vantage points with eyes highly adapted for nocturnal hunting. They fly from spot to spot, swooping down on prey its short, wide wings (stiff feathers make them silent). It feeds on rabbits rats, and other small rodents, swallowed whole when possible, with pellets of non-digestibles regurgitated 6 to 10 hours later. , usually in the same location where the prey was consumed. They live about 14 years.



COYOTE (*Canis latrans*, Latin for “howling dog”). They appeared in the Lower Mainland in the 1980s and it is now estimated that there are between three thousand urban coyotes. They are quite common in Lions Bay but do most of their hunting for small mammals at night although they are sometimes spotted on our roads during the day.



BUSHY-TAILED WOODRAT (*Neotoma cinerea*). Also known as the pack rat, this large and solitary rodent is indigeonous to western North America, and known for a “trading” habit: it will drop whatever it may be carrying for something better, particularly if it’s shiny.

The coat is usually grey on the back and with tawny brown sides. The undersides and feet are white. They can grow to 46 cm long with tail. They feed just after sunset and before sunrise on berries, twigs and needles. In coniferous forests, the woodrat may build its house as high as 15 m up a tree. Bushy-tailed woodrats do not hibernate. They build several food caches, which they use during the winter months. The woodrat drums its hind foot when alarmed.



STRIPED SKUNK (*Mephitis mephitis*) come out to feed in the early morning or at dusk and spend the day sleeping. They grow to about 80 cm and live around 6 years. In May they give birth to 4 -6 young. They defend themselves by spraying a strong smelling musk as far as 6 m.

Owner'semail@domain.tld

MOVE these elsewhere to not interfere with the interpretive ethos. AT INTERSECTION OF CENTENNIAL AND LOWER HARRISON TRAILS? Does this sign have relevance in a sequence of interpretive signs?

WILDFLOWERS OF LIONS BAY



FOXGLOVE (*Digitalis purpurea*) was introduced to North America from Europe and thrives here, especially on disturbed ground. Folklore says that wicked fairies gave the flowers to foxes to wear around chicken coops without being heard. Its flowers are magenta, blue and white, it grows to about 1.5 m tall and can be seen all along the trail from early summer on. The flowers are poisonous.



LUPINE (genus *Lupinus*). There are over 200 species of lupines in North and South America. You can see blue ones about 1.5 m high growing along the face of Brunswick Hill in late spring, where they were seeded when the trail was built in 2009.

ST. JOHN'S WORT



EVENING PRIMROSE (*Oenothera biennis*) blooms during the spring and summer. Flowers open late in the afternoon and close at sunrise, hence the "evening" name. They emit lemony fragrance which attracts moths, main pollinators of this plant. Grows to between 60 and 180 cm and is often sighted on the trail along the face of Brunswick Hill.

SALAL



PACIFIC BLEEDING HEART (*Dicentra formosa*) produces flowers from spring to early summer, which turn into seedpods. Ants like the oil in the seeds, and they carry them from the plant throughout the forest. Bleeding heart also regrows from its thick stems. It can be found in moist forests and woodlands, especially near stream banks. The bleeding heart has long, soft and feathery leaves that grow in green stems at least 20 cm tall. The flowers look like pink and purple hearts, and grow in clusters at the end of a stem.



FORGET ME NOT (*Myosotis laxa*) is a beautiful little flower with a blue corolla and yellow eye. It blooms in the early spring then stops flowering to set seeds with the arrival of summer heat. Small seedlings appear unobtrusively in fall, then bloom the following spring. It grows to about 30 cm. The common name dates back to the 1500s when a blue flower was worn to retain a lover's affection.



QUEEN'S CUP (*Clintonia uniflora*) grows in the under story of coniferous forest and flowers in midsummer. The plant has only two or three wide leaves located at the base of its stem. It bears flowers singly or clusters of two or three. The small simple flower has six white sepals and six white stamens. The flower is replaced atop the stem by a round blue berry up to a centimeter wide. Height up to 15 cm.



FIREWEED (*Chamaenerion angustifolium*) can be recognized by its pink flowers and narrow alternative leaves, it can grow up to 2.5 m high. It is a pioneer species that quickly colonizes open areas with little competition, such as the sites of forest fires and forest clearings and needs plenty of light.

DRAFT

APPENDIX



Simply remove these obsolete signs (rather than update them at treatment plant gates, to alleviate a small but real security risk). If, however, signage is required to fulfil previous funding requirements, it should read:

DRINKING WATER TREATMENT FACILITY

This plant is one of two in Lions Bay that use ultraviolet irradiation and chlorine injection to disinfect raw water drawn from surface creeks. Treated water quality far exceeds Canadian Drinking Water Standards and achieves Vancouver Coastal Health permit requirements without use of filtration. \$1.26 mil. of the cost of the 2009 project was provided by the BC Community Water Improvement program and \$0.63 mil. by 30-year loan financing approved by Lions Bay voters. **DANGER! AUTHORISED PERSONNEL ONLY: CHLORINE GAS, HIGH VOLTAGES, PRESSURISED EQUIPMENT.**

Note, not “reservoir,” to avoid giving the impression we have dams:

MAGNESIA TANK, 1986

455,000 liters (100,000 imp. gal., 120,000 US gal.).

HARVEY TANK, 2018

2,000,000 liters (450,000 imp. gal., 530,000 US gal.).