ELECTORAL AREA SERVICES COMMITTEE

Thursday, October 19, 2023

TO BE HELD

IN THE BOARDROOM OF THE SUNSHINE COAST

REGIONAL DISTRICT OFFICES AT 1975 FIELD ROAD, SECHELT, B.C.

AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of Agenda — Pages 1 - 2

PRESENTATIONS AND DELEGATIONS

2. Proposal for Transportation Choices Sunshine Coast (TraC) - Connect the Coast.

i. Alun Woolliams, Transportation Choices Sunshine Coast (TraC) - Connect the Coast - An initiative to build All Ages and Abilities (AAA) Active Transportation Infrastructure from the Langdale Ferry Terminal to West Sechelt — Annex A pp 3 - 4

ii. Staff Report Proposal for 'Connect the Coast' through All Ages and Abilities Active Transportation Infrastructure Planning — Annex B pp 5 - 88
Interim Manager, Parks Services
Bicycle & Walking Paths (Voting – B, D, E, F)

3. Proposal for Halfmoon Bay Community Hall

i. Craig Burns, Principle Architecture
Project Definition Report for the Halfmoon Bay Community Hall at Connor Park. — Annex C pp 89 - 99

ii. Staff Report for Halfmoon Bay Community Hall – Project Definition Report — Annex D pp 100 - 143
Manager, Asset Management
Community Halls (Voting – A, B, D, E, F)

REPORTS

4. Zoning Bylaw No. 722 Revision — Annex E pp 144 - 152
General Manager, Planning and Development
Rural Planning (Voting – A, B, D, E, F)

5. Temporary Moveable Small Home Pilot Project Update — Annex F pp 153 - 166
General Manager, Planning and Development
Rural Planning (Voting – A, B, D, E, F)

6.	Forestry Referrals: BC Timber Sales (BCTS) Operating Plan (CRN00155) 2023-2027 *Strategic Planning Coordinator and Senior Planner* **Rural Planning (Voting – A, B, D, E, F)**	Annex G pp 167 - 179
7.	Development Variance Permit Application DVP00087 (13305 Kammerle Road) *Planner* **Electoral Area A - Rural Planning (Voting – A, B, D, E, F)**	Annex H pp 180 - 186
8.	Halfmoon Bay Childcare Centre – Electoral Areas' Grant-in-Aid *Administrative Assistant, Corporate and Administrative Services* **Grants-in-Aid (Voting – A, B, D, E, F)**	Annex I pp 187 - 218
9.	Electoral Area A (Egmont / Pender Harbour) Advisory Planning Commission Minutes of September 27, 2023 **Electoral Area A - Rural Planning (Voting – A, B, D, E, F)**	Annex J pp 219 - 220
10.	Electoral Area B (Halfmoon Bay) Advisory Planning Commission Minutes of September 26, 2023 **Electoral Area B - Rural Planning (Voting – A, B, D, E, F)**	Annex K pp 221 - 222
11.	Electoral Area D (Roberts Creek) Advisory Planning Commission Minutes of September 18, 2023 **Electoral Area D - Rural Planning (Voting – A, B, D, E, F)**	Annex L pp 223 - 224
12.	Electoral Area E (Elphinstone) Advisory Planning Commission Minutes of September 26, 2023 **Electoral Area E - Rural Planning (Voting – A, B, D, E, F)**	Annex M pp 225 - 227
13.	Electoral Area F (West Howe Sound) Advisory Planning Commission Minutes of September 26, 2023 **Electoral Area F - Rural Planning (Voting – A, B, D, E, F)**	Annex N pp 228 - 230

COMMUNICATIONS

NEW BUSINESS

IN CAMERA

ADJOURNMENT

ANNEX A

Chair Lee,

We are reaching out to request your support for an initiative to build All Ages and Abilities (AAA) Active Transportation infrastructure along the Highway 101 corridor from the Langdale Ferry Terminal to West Sechelt. The Sunshine Coast Tourism organization is also working to continue this infrastructure further from West Sechelt to Lund.

> *AAA infrastructure refers to transportation systems that are designed to be accessible and safe for people of all ages and abilities, including multi-use paths, bike lanes, and sidewalks. This type of infrastructure promotes active transportation, which brings numerous benefits to health, the environment, and the community.*

The Highway 101 corridor, spanning approximately 30 km between Langdale and West Sechelt, serves as the primary link between our communities and the Lower Mainland. The Highway 101 corridor has very limited AAA Active Transportation infrastructure, and in many areas is the only connecting road. The implementation of AAA Active Transportation infrastructure along Highway 101 would have a positive impact by:

- improving transportation options, inclusivity, equity and affordability for residents and visitors
- improving safety and community health outcomes
- generating revenue for the region by increasing tourism and improving access to local businesses

TraC commissioned and has received a Preliminary Design Report from consultant firm GJD Planning + Design. The report divides the corridor into 25 segments, analyses relevant GIS and other data, recommends AAA active transportation infrastructure for each segment that will work effectively with the existing transportation infrastructure and surrounding land use patterns, and provides high-level construction cost estimates. The two highest priority segments identified are Gibsons Way from N Fletcher Rd in Gibsons to Lower Road just past Woodcreek Park, and from Bay Road in Davis Bay to Wharf Avenue in Sechelt. There are various recommended infrastructure types through these segments. To give you a sense of what is being proposed, the recommendation for the section leaving Gibsons from King Road to Lower Road is a multi-use path on the ocean side of the highway.

The next step is to study the feasibility of the priority recommendations made in the Preliminary Design Report. This will include assessing the technical feasibility of constructing the proposed infrastructure based on site surveys, conducting conceptual and detailed design work, obtaining more accurate cost estimates, assessing the environmental, social and economic impacts of the proposed infrastructure, and engaging with stakeholders including local governments, First Nations, local businesses, community organizations, and the public.

We hope to fund this feasibility study in part with a Green Municipal Fund - Transportation networks and commuting grant. The scope of the feasibility study will be defined by the funding received and our current priority is the Gibsons segment.

We are seeking input and support from the SCRD and have the following requests:

1. Can the SCRD adopt this preliminary design report as an official planning document so that developments within its area use it as a reference?
2. Can the SCRD write a letter of support for this project and our plans to move forward with a more detailed feasibility study for the highest priority segments that includes support for the project and recognition of the benefits.
3. Can the SCRD assign a staff person to be a contact for the project?
4. Can the SCRD start the budgetary process related to supporting a detailed design for the next phase of this project for 35,000. Our current plan is to apply for a Green Municipal Fund grant. *However, due to budget and granting timing windows we may end up applying for a different or altered grant.*

Thank you for your consideration of this request.

Sincerely
Alun Woolliams

-
Alun Woolliams
TraC President / Connect the Coast Director
alun.woolliams@transportationchoices.ca

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Area Services Committee– October 19, 2023

AUTHOR: Jessica Huntington - Interim Manager, Parks Services

SUBJECT: **'CONNECT THE COAST' THROUGH ALL AGES AND ABILITIES ACTIVE TRANSPORTATION INFRASTRUCTURE PLANNING**

RECOMMENDATION(S)

(1) THAT the report titled 'Connect the Coast' through All Ages and Abilities Active Transportation Infrastructure Planning be received for information;

(2) AND THAT the SCRD Board adopt the 'Connect the Coast Preliminary Design Report' as a planning tool for future active transportation infrastructure planning and as data input for future regional policy and Active Transportation planning within SCRD jurisdiction;

(3) AND FURTHER THAT Staff recommend TraC return as a presenting delegation when grant applications and details for the funding of the feasibility study of priority recommendations from the Connect the Coast Study are duly established.

BACKGROUND

TraC is a member-based grass roots organization on the Sunshine Coast that is engaged in the promotion of healthy communities and carbon footprint reduction through transportation alternatives to private vehicles such as cycling, walking, and transit. TraC's vision is for Sunshine Coast residents to be able to enjoy a safe and efficient network of sustainable and active transportation options.

TraC is actively involved in taking steps to achieve their vision through advocacy of local governments, participating in Vancouver Coastal Health's Healthy Travel for kids committee, supporting initiatives such as free transit for secondary students, organizing volunteer days to improve cycling safety along paved road shoulders, as well as other initiatives that demonstrate how active transportation can be incorporated into our daily lives on the Sunshine Coast.

In addition to the above, TraC commissioned the Connect the Coast: Preliminary Design Report in 2022 for the implementation of an all ages and abilities (AAA) multi-use path along the Highway 101 corridor from Langdale to West Sechelt. The report divides the corridor into 25 segments, provides recommendations for suitable AAA active transportation infrastructure and high-level construction cost estimates. This study was funded through a private donation to TraC.

This staff report is being provided to outline analysis and options for the board to consider when responding to the TraC Delegation requests.

DISCUSSION

The TraC delegation is seeking input and support from the SCRD, and the following analysis is for the board to consider in response to the delegation's requests.

Connect the Coast Preliminary Design Report

The Preliminary Design Report is intended to encourage local and provincial governments to construct the active transportation facilities suggested in the report. The facilities proposed are consistent with Transportation Association of Canada's Geometric Design Guide and BC Ministry of Transportation design standards for Active Transportation facility design, which helps meet eligibility criteria for infrastructure granting opportunities. Several segments in the design report are within SCRD jurisdiction and highlight areas of active transportation network connectivity for neighbourhoods in electoral areas D, E, and F to community service hubs located along the proposed route. The report provides a framework that could guide collaboration and planning between jurisdictions on the Sunshine Coast to develop an integrated, connected, and efficient Active Transportation Network. The Connect the Coast recommendations could also contribute data for regional policy and future regional growth planning by contributing to a more complete picture for policy decision making. If the board is supportive of adoption of the report, this would indicate local government support for numerous grant opportunities. At this time MoTI has not responded to the preliminary design report and it is unknown if they would support the priority segments as presented in the report.

Recommendation:
Staff recommend adopting the Connect the Coast Preliminary Design Report recommendations for contribution of data to future regional policy and ATN planning.

Feasibility Study of Top 2 Priorities Identified in The Preliminary Design Report:

The next step for TraC is to pursue funding for a Feasibility study of the two top priorities identified in the Connect the Coast Preliminary Design Report. This will provide more detailed assessment and design work, increasing accuracy of cost estimates, environmental and economic impact assessments, and feedback from engagement with stakeholders. The top two priorities in the report contain Segments 4 through 7. For priority 1, only Segments 6 & 7 fall within the jurisdiction of the SCRD. (see Map in appendices):

Priority 1, Segment 6 - Carmen Road (parallel to HWY 101), from Hough to King Road, approximately 400 m. Carmen Road is a local neighbourhood street that is paved, approximately 5.8 m wide, has no lane lines, paths, or sidewalks. The recommended approach involves a reduction of the speed limit to 30 km/hr and adding signage and pavement markings to reinforce the lower speed limit. If warranted, physical traffic calming could be installed. No additional changes to the roadway are recommended.

Priority 1, Segment 7 - 1.5 km on Sunshine Coast Highway from King Rd to Highland Rd (Lower Road on southside). This part of the MoTI ROW has a steep drop off on the southside over several creek crossings. The recommendation is to add a multi-use pathway with retaining walls on the south side of HWY 101.

Priority 1 segments 6 and 7 together would enhance the connectivity and functionality of existing SCRD bicycle and walking pathways between Chaster, Hough, King, and Lower Road by providing a safe contiguous AAA ATI facility link along HWY 101 where other options on secondary roads in the vicinity would be more complex and costly for design, construction, and maintenance due to steep unstable slopes and associated geotechnical challenges.

Green Municipal Fund – Transportation Networks and Commuting Grant

TraC's intent is to seek funding for the Feasibility Study partially through an application to the Green Municipal Fund (GMF) Transportation Networks and Commuting grant. This grant will

fund up to 50% of eligible costs up to a maximum of $175,000. TraC current estimates of the total cost of the Feasibility Study to be $450,000.

GMF accepts applications on a rolling basis, however, are currently in the process of updating eligibility criteria for the Transportation Networks and Commuting grant and this is expected to be launched in 2024. It is unknown what types of projects will be eligible within this new criterion, therefore it was recommended to TraC by a GMF advisor to expediate their application before the end of 2023. To facilitate this, TraC will be requesting the Town of Gibsons' support as a primary local government partner and the Connect the Coast Society will donate the 10% financial contribution needed towards project expenses for the GMF grant application. TraC also intends to reach out to the District of Sechelt and the shíshálh Nation Government for support at a later date.

TraC is requesting from the SCRD a $35,000 contribution to be used towards the initiative should they receive the GMF grant. If the GMF grant application is unsuccessful, TraC would like to use the $35,000 to apply towards other granting opportunities. TraC is also requesting a letter from the SCRD that expresses support for the feasibility study that could be used for a broad range of funding opportunities.

Providing a $35,000 financial contribution to TraC to fund the Feasibility Study of priority segments does demonstrate to granting agencies and higher levels of government the support of the SCRD for the Connect the Coast Preliminary Design Report and to continue with the work required to determine the feasibility of priority recommendations. There is risk involved in providing this contribution at this time as there are various unknowns including the success of the GMF application and project eligibility (after 2023), costing of the feasibility study, ToG's support of being the lead municipal partner, as well as other sunshine coast municipal support. Additionally, there is risk in providing a $35,000 contribution to TraC for other grant opportunities as the associated implications with these grants for the SCRD are unknown.

Recommendation:

Staff recommend TraC return as a presenting delegation when grant applications and details for the funding of the feasibility study of priority recommendations from the Connect the Coast Study are duly established.

Organization and Intergovernmental Implications

The Connect the Coast Preliminary Design Plan sets the standard for All Ages and Abilities ATI on the Sunshine Coast. The Plan provides the framework that local governments and MoTI can use to plan for connecting our communities to service hubs with safe alternatives that are accessible to all ages and abilities.

To date, it is unknown if MoTI is in support of the Preliminary Design which presents some risks for utilizing this tool for future planning especially along HWY 101 which is under their jurisdiction.

Financial Implications

The request for a $35,000 financial contribution towards the feasibility study is not currently in the Financial Plan. The request could likely be included as part of future Budget Process' when further information is known.

Timeline for next steps or estimated completion date

If the board is supportive of staff's recommendations, TraC could proceed in utilizing approved supports for the GMF grant application.

STRATEGIC PLAN AND RELATED POLICIES

Trac's vision of safe active transportation alternatives is supported by the 2014 Parks and Recreation Master Plan recommendations for developing paths for alternative transportation that improve connectivity and safety and is in partnership with groups willing to assist in development.

The 2011 Trail Network Plan also identifies as a priority separated infrastructure along HWY 101 to connect Sunshine Coast Communities with a paved muti use pathway for non motorized use.

Support of TraC's initiative is also in alignment with SCRD Board strategic goals of fostering a culture of innovative problem solving and collaboration and building community resilience by working with community groups and supporting active transportation options.

CONCLUSION

TraC's ongoing commitment to achieving their goals of healthy communities and carbon footprint reduction is demonstrated in thoughtfully planning and implementing actions to achieve their vision through a robust active transportation network on the Sunshine Coast suitable for all ages and abilities to carry out their activities of daily living.

The Connect the Coast Preliminary Design Plan is reflective of their vision. To continue and plan accordingly, proceeding to a feasibility study for the priorities identified in the Design Plan, will help enable readiness for future funding and construction opportunities.

ATTACHMENTS

Attachment A – Map of Priority Segments 6 and 7
Attachment B – Preliminary Design Report Connect the Coast: An All Ages and Abilities Active Transportation Route Lining Langdale and Sechelt.

Reviewed by:			
Manager	X - I. Hall	Finance	X - B. Wing
GM	X – S. Gagnon	Legislative	
CAO	X - D. McKinley	Other	

Connect the Coast Design Report: Location of Segments 6 and 7

Attachment A

Index Map

596.2 0 298.10 596.2 Meters

This information has been compiled by the Sunshine Coast Regional District (SCRD) using data derived from a number of sources with varying levels of accuracy. The SCRD disclaims all responsibility for the accuracy or completeness of this information.

10/3/2023

1: 11,736

Legend

- Parcels
- Road Names

Preliminary Design Report
Connect the Coast: An All Ages and Abilities Active Transportation Route Linking Langdale and Sechelt

Pacific Rim Hwy Multi-use Path, Credit Andrew Picard

Prepared by: GJD Planning + Design
November 2022

November 23, 2022

Transportation Choices Sunshine Coast
Attention: Alun Woolliams, President

Preliminary Design Report - Connect the Coast: An All Ages and Abilities Active Transportation Route Linking Langdale and Sechelt

On behalf of GJD Planning + Design, I am pleased to submit this preliminary design report for the proposed all ages and abilities, active transportation route from Langdale to Sechelt on the Sunshine Coast. We are grateful for the opportunity to work with TraC to improve active transportation, recreation, and tourism opportunities on the Sunshine Coast.

We acknowledge that Sunshine Coast from Langdale to Sechelt is on the unceded traditional territory of the shíshálh and the Sḵwx̱wú7mesh Nations.

We would like to acknowledge the support of many individuals and organizations that have dedicated time and resources to help complete this study, including:

- TraC's Leadership Team - Alun Woolliams, Tannis Braithwaite, Stephen Forgacs, Scott Nelson, and Tim Howard
- Sunshine Coast Regional District - Ian Hall, Shelley Gagnon, Raph Shay, Sam Adams, Jessica Huntington and Emilia Walton
- Ministry of Transportation and Infrastructure - Gabriel Lord, and Michael Braun

Our apologies to anyone we may have missed.

Efforts to build an accessible active transportation route along the Sunshine Coast would not have progressed to this stage without the investment of time, money and countless volunteer hours contributed by TraC and its members, supporters and community partners. In particular, this project and report would not have been possible without the financial support, hard work, dedication and detailed understanding of Sunshine Coast Highway 101 corridor offered by members of TraC's Leadership Team and Board. Thank you.

We look forward to continuing to support your team in efforts to realize an AAA AT route along the Sunshine Coast.

Yours Truly,

Gavin Davidson RPP
Principal, GJD Planning + Design

4245 Elgin Street,
Vancouver, BC
Canada V5V 4R5

P: 604 220 0949
E: gvn_dvdsn@yahoo.ca

Contents

Executive Summary

This report presents a preliminary design of an active transportation route for people ages 8 to 80 from Langdale ferry terminal to Sechelt on British Columbia's Sunshine Coast. The design is intended to help and encourage our local and provincial governments to construct this facility.

The Langdale ferry terminal and the town of Sechelt are connected by a 30-kilometre stretch of Highway 101. Although this stretch of highway runs through and connects the region's most densely populated communities, including Gibsons, Roberts Creek, Wilson Creek, Davis Bay and Sechelt, there is only 1.6 kilometres of active transportation infrastructure on or adjacent to the highway outside the Town of Gibsons and the District of Sechelt.

This leaves cyclists, pedestrians and people using mobility scooters without a safe route to travel between the six communities located along this corridor. Many people who might otherwise use active transportation to travel along this corridor, fear for their safety and are discouraged from doing so, perpetuating our reliance on private vehicles.

This report presents the findings of a study of the Highway 101 corridor from Langdale to Sechelt. The study was commissioned by Transportation Choices Sunshine Coast (TraC). The study included a thorough review of GIS (geographic information system) data, including road and property boundaries, existing Ministry of Transportation and Infrastructure and local government plans, costing estimates and site visit analysis. The report breaks this corridor into 25 segments and presents recommendations for appropriate active transportation infrastructure to serve people of all ages and abilities, as well as high-level cost estimates for construction of the recommended infrastructure and assigns a priority for implementation to each segment based on a multiple accounts evaluation, as detailed in the report.

Groups of segments were identified as priorities for implementation, stated in order of ranking:

1. Segments 4, 5, 6, 7 are on Gibsons Way/Hwy 101 from N Fletcher Road to Highland/Lower Road.
2. Segments 18, 19, 20 on Hwy 101 from Bay Road in Davis Bay to Wharf Avenue in Sechelt.
3. Segments 1, 2, 3: Segment 1 is on Marine Drive from Langdale to School Road in Lower Gibsons. Segment 2 is northbound on Gibsons Way from School Road at Marine Drive to N Fletcher Road. Segment 3 is southbound on N Fletcher Road from Gibsons Way to School Road and on the west side of School Road to Marine Drive.
4. Segments 16, 17 are on Hwy 101 from Field Road to Bay Road.
5. Segments 21, 22: Segment 21 is on Hwy 101 (Wharf Avenue and Toredo Street), from Dolphin Street to Shorncliffe Avenue. Segment 22 is on Hwy 101 from Shorncliffe Avenue to Norwest Bay Road.
6. Segments 13, 14, 15 are on Hwy 101 from Roberts Creek Road to Field Road.
7. Segments 8, 9, 10, 11, 12 are on Hwy 101 from Lower/Highland Roads to Roberts Creek Road.

Segments 1A, 2A, 3A are on Hwy 101 from Langdale to Gibsons Way and are an alternative to Segments 1, 2 and 3, and would score 4th of 8, if included in the list above. However, Segments 1A, 2A, and 3A have less Projected Demand, offer less Connectivity and Safety improvements, and have less Community Support than Segments 1, 2 and 3. Further, Segments 1A, 2A and

3A, are more Costly to build, offer more Conflicts with other modes and infrastructure and bypass Lower Gibsons. These segments are thus not recommended, unless Segments 1, 2 and 3 prove impractical to construct.

The total planning level cost estimate for design and construction of the preferred routing is estimated at roughly $94.54 Million, based on planning level cost estimates provided by ISL Engineers, which has recently completed a number of transportation improvement projects on the Sunshine Coast. The total capital cost, if the alternate route (Segments 1A, 2A & 3A) via Hwy 101 from Langdale to Gibsons were constructed, would be approximately $125.44 Million. However, given that the route will likely be built in portions, and over time, it may be useful to consider the cost of various segments. For instance, the cost to construct the highest priority Segments (4 to 7) on Gibsons Way and Hwy 101, from N Fletcher Road to Lower Road/Highland Road, just over 4 km, will cost approximately $7.9 Million, less than $2 Million per km.

INTRODUCTION

1.1 Background

With scattered populations and small to mid-sized towns that are often located some distance from one another, car ownership or access to a car remains essential to many rural residents on British Columbia's Sunshine Coast.

Yet today, with extreme weather events occurring with startling regularity and severity, our relationship with and reliance on fossil-fuel-powered private passenger vehicles is called into question. Rural communities can do more to reduce their reliance on private vehicles. Climate change aside, self-propelled or active transportation, such as walking and cycling, is recognized for its population health benefits. In addition, the lack of access to good active transportation infrastructure and frequent public transit service further disadvantages populations with less ability or desire to drive, such as children, the elderly, and people living in poverty.

What's missing in and between many rural communities, including those that dot the Sunshine Coast, is infrastructure that facilitates the safe and comfortable use of active transportation options. Residents and visitors are forced to drive to run errands, take the kids to school, get to work, visit friends or enjoy the area's sights and attractions. Often there are few to no viable options to do otherwise.

Sadly, Highway 101, the Sunshine Coast's connecting highway, offers safe passage only to motorized vehicles, with next-to-no provisions for active transportation. In fact, except for a 1.6 km stretch of multi-use path parallel to the highway in Roberts Creek, there is no safe and dedicated provision for active transportation along the highway outside the Town of Gibsons and the District of Sechelt.

The goal of this design process is to provide a preliminary design for an active transportation route to serve people of all ages and abilities from Langdale to Sechelt, and to prioritize segments along the route for implementation.

The construction of active transportation infrastructure on or adjacent to Highway 101 from Langdale to Sechelt will provide many benefits to residents, visitors and local businesses, including to:

1. Increase tourism revenue
2. Reduce use of and reliance on private motor vehicles
3. Offer safe transportation alternatives for those who cannot, or who choose not to drive
4. Provide greater equity of access to the transportation network
5. Enhance population health

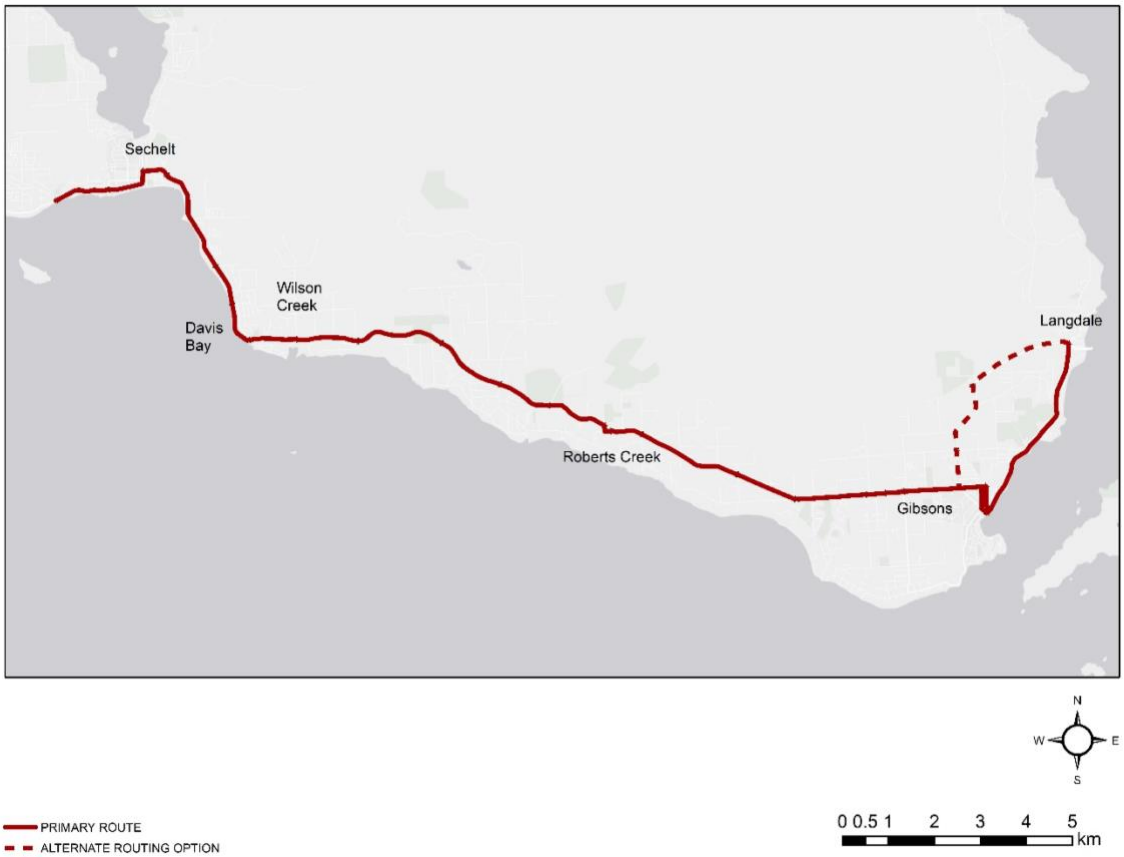
6. Reduce greenhouse gas emissions and vehicle kilometres travelled
7. Increase recreational opportunities.

This report presents the findings of a study of Highway 101 from Langdale to Sechelt. The study was commissioned by Transportation Choices Sunshine Coast (TraC). TraC works to support healthy communities and reduce the Sunshine Coast's carbon footprint by promoting more active and sustainable transportation alternatives to private vehicles, including cycling, walking, and transit.

1.2 Study Area

The study area, shown in **Figure 1** is on the Sunshine Coast in British Columbia, Canada and extends from Langdale Ferry Terminal to Norwest Bay Road in Sechelt, a distance of approximately 30 kilometres.

Figure 1: The Active Transportation Route study area from Langdale to Sechelt



The alignment for the active transportation route generally follows Sunshine Coast Highway 101. However, to provide a direct connection into Lower Gibsons, the preferred route follows Marine Drive from Langdale and links to Gibsons Way before climbing back up to Highway 101. An alternate route follows Highway 101 from Langdale, and bypasses Lower Gibsons.

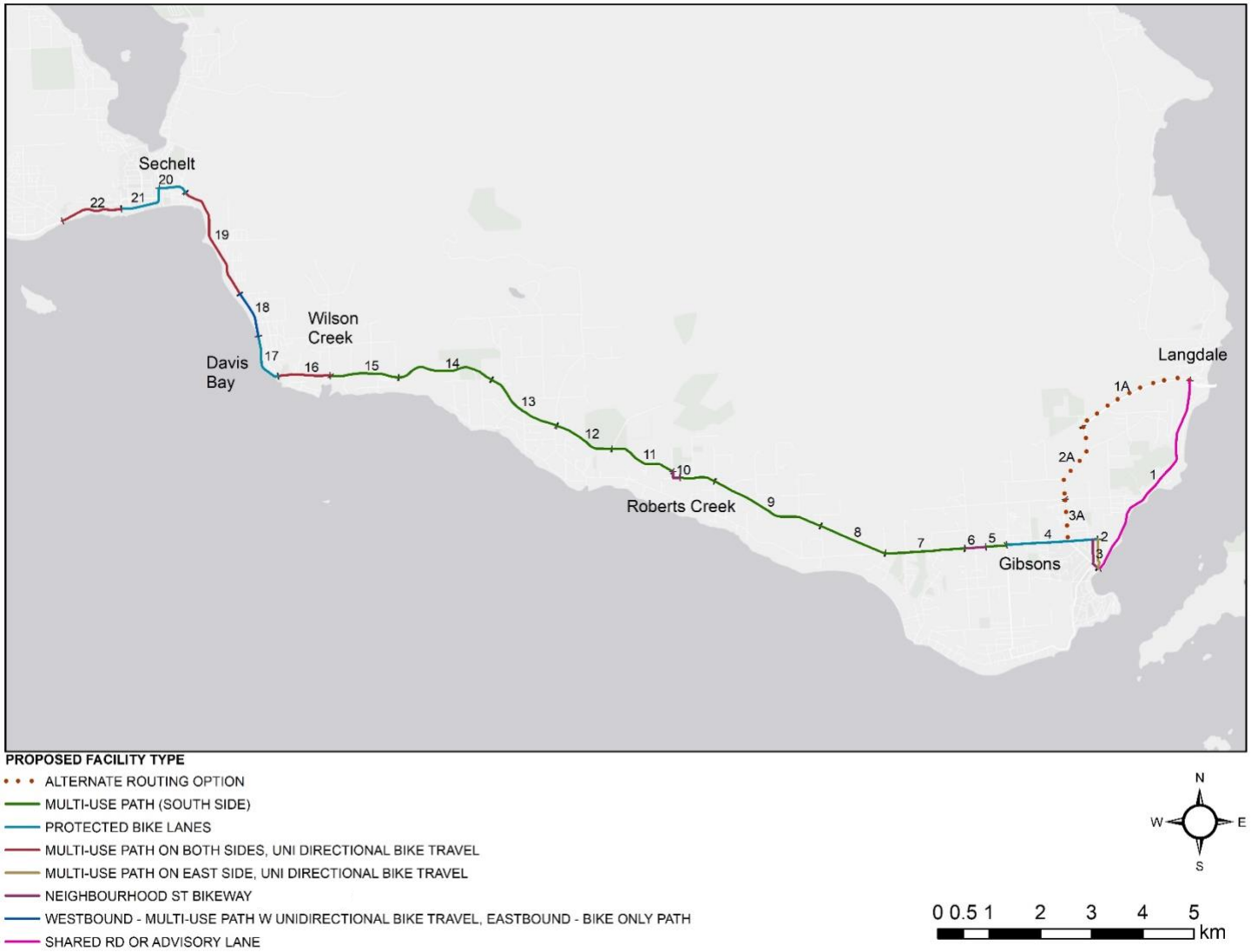
The study area was selected by TraC leadership as a priority for implementation, given existing travel demand and increasing development pressure within this southeastern portion of the Sunshine Coast.

1.3 Scope of Work

A detailed list of tasks associated with this assignment are listed in **Appendix A**. The scope of work included identifying and agreeing a preferred alignment and associated facility types to serve active transportation users of all ages and abilities travelling between Langdale, Gibsons, Robert Creek, Wilson Creek, Davis Bay and Sechelt. Appropriate facility design options were selected and sited by referencing provincial and federal active transportation facility design guidance and consideration of a variety of contextual factors as described in the Methods section of this report.

Given the length of the study area, the consulting team worked with TraC leadership to break the route into segments, as shown in **Figure 2**. This step allowed the consulting team to design active transportation facilities that are appropriate for the surrounding land use and to assess and prioritize segments for implementation.

Figure 2: The AAA AT Route from Langdale to Sechelt broken into segments



To prioritize each segment along the preferred and alternate route for implementation, the consulting team developed a Multiple Accounts Evaluation (MAE) tool. The MAE considers factors relevant to the decision-making process, under various account headings including:

1. Projected demand
2. Preliminary support from the public and relevant authorities
3. Ability to address known safety concerns
4. Connectivity with active transportation routes and transit services
5. Anticipated construction costs, and
6. Conflicts with other modes, private property, and existing infrastructure.

The MAE ranks each route segment on a score that weighs the criteria under Demand, Support, and Safety and Connectivity. Those route segments that score highest on the criteria within these accounts are ranked as highest priorities for implementation.

Anticipated construction costs and conflicts with other modes, infrastructure and private property are scored separately. Those with the lowest scores have the highest cost and are expected to be the most expensive and challenging to implement. Although not part of the ranking, cost and conflict scores serve as a flag to those pursuing implementation, in case a path of less resistance proves a more pragmatic approach.

Planning level construction cost estimates were based on per kilometre construction cost estimates provided by ISL Engineering, see **Appendix B** for details. In their estimates, ISL broke the costs down into low, medium and high complexity facilities. In the case of multi-use paths, for example, the costing was broken down as follows:

- Low Complexity version (simple grading and paving, minor ditch work) $1.706 million/km
- Medium Complexity (Utility challenges, ie. drainage ditch relocation or undergrounding, pole relocation, and challenging tie-ins) $4.497 million/km
- High Complexity (As medium but with steep slopes and retaining walls required) $10.742 million/km

GJD has estimated 10 of the 25 segments to be low complexity multi-us paths. It is possible, however, that the complexity of some or all these segments will be greater than anticipated and that the ultimate cost to construct them will be higher than estimated. Construction costs will be clarified and updated through land surveys and conceptual and detailed facility design.

Going forward, TraC will use this report to support further conceptual and detailed design, stakeholder input, and regulatory review, in order to coalesce the support and resources required for implementation and ongoing operation and maintenance.

METHODS AND DESIGN OVERVIEW

2.1 Background Data

To support selection of an appropriate alignment and AAA active transportation facility designs, the project team collected and mapped the following data:

- Road lines
- Street light points
- Hydro pole points
- Bus stop points
- Property parcels (including jurisdiction)
- Sunshine Coast Regional District active transportation facilities
- Suncoaster trails
- Contours (1 m intervals along associated road right-of-ways)
- Water lines
- 2021 Orthophotos
- Gas lines

This data allowed the consulting team to identify an appropriate alignment for the installation of active transportation facilities suitable for people of all ages and abilities along the recommended and alternate proposed alignments.

2.2 Field Visit

Members of TraC, and the consulting team travelled the entire study area by bicycle on May 7 and 8, 2022. The field visit was focused on considering alternative alignments throughout the study area, documenting existing conditions and assessing routing options through and around private property.

2.3 User Objectives and Design Vehicle

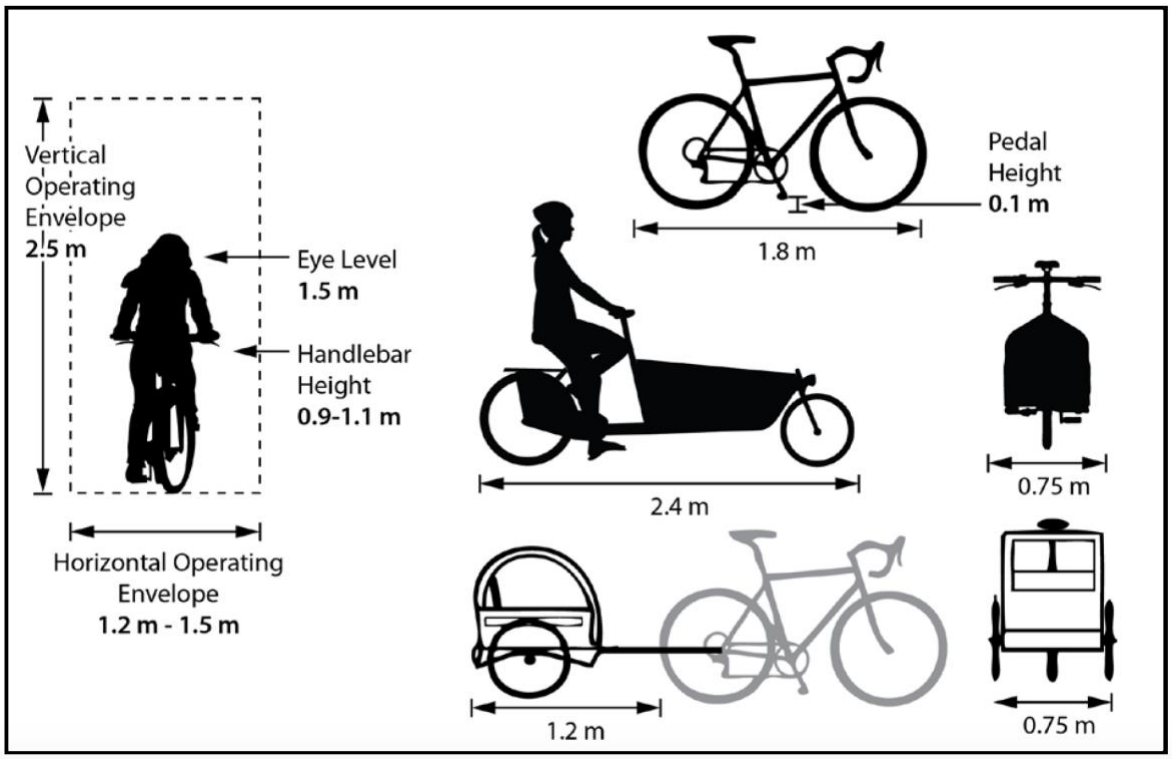
The purpose of this transportation facility is to serve trips by active transportation users from ages 8 to 80 in safety and comfort, throughout the year and who are travelling for a wide range of utilitarian and recreational trips. Active transportation users include pedestrians, people on human powered bicycles and those using wheeled micro-mobility devices that are compatible with human powered bicycles in terms of size, weight and speed.

While the variety of micro-mobility devices is continuously changing and evolving, guidance is emerging through the British Columbia Insurance Corporation and other regulatory agencies

that helps to clarify the characteristics that make a vehicle compatible for use on transportation facilities that may be shared by people on bicycles, pedestrians, and other vulnerable road users. These include:

- Dimensions that are compatible with the bicycle operating space described in Transportation Association of Canada's Geometric Design Guide, and reproduced below in **Figure 3;**
- A weight of less than 30 kg;
- A motor that is not capable of propelling the vehicle at a speed greater than 32 km/hr on level ground;
- A continuous power output that, in total, does not exceed 500 watts; and
- That the vehicle must not be equipped with a generator, alternator or similar device powered by a combustion engine.

Figure 3: Bicycle operating space

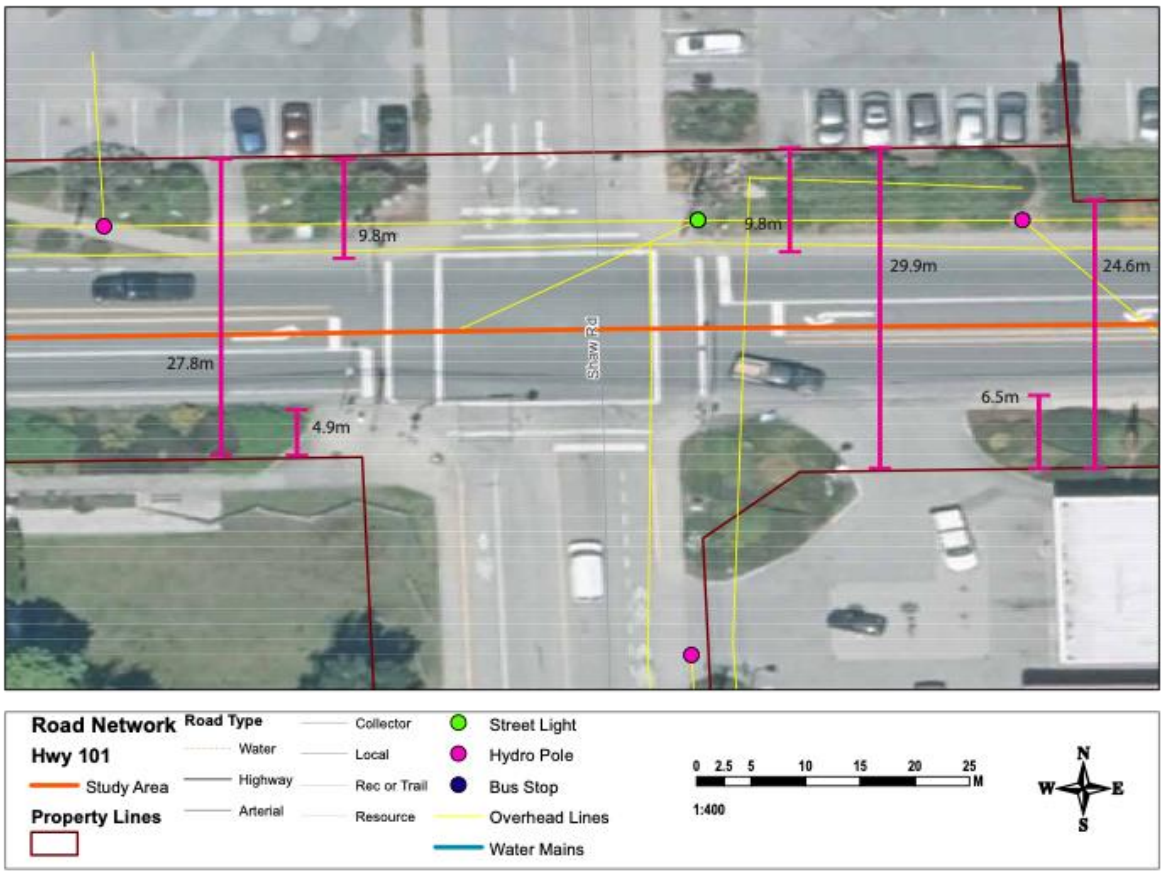


Retrieved from TAC GDG

2.4 Design Process and Considerations

Figure 4 shows a plan view of a portion of Hwy 101 right-of-way and gives a sense of the analysis that was used to identify an appropriate alignment and active transportation facility for each segment. The plan view shows the location of property lines, bus stops, streetlights and hydro poles, the road right-of-way, and approximate measurements from the outer edge of the existing curb or road edge to each property line.

Figure 4: Plan View of the intersection of Shaw Road and Sunshine Coast Highway



Geographic Information System (GIS) data layers and images showing the location of each dataset, offer varying degrees of accuracy. Aerial photographs allow measurements to within +/- 20cm, while the location of elements within the landscape including, for example, street lights, hydro poles, bus stops, property lines, and gas lines are all accurate to within approximately 5 m. The resulting preliminary design is appropriate for this stage in the planning process and to support initial planning level cost estimates. However, more refined conceptual designs, land surveys and detailed design will ultimately be needed to confirm recommended designs and more precise costs for each segment of the proposed active transportation route.

Other factors considered in selecting and siting active transportation facilities included:

- Available road right-of-way
- Surrounding land use and roadway networks, including the frequency of driveways, roadway crossings and other potential points of conflict
- Motor vehicle traffic volumes, speeds and turning movements
- Existing development and anticipated demand
- Safety for active transportation facility users, and
- Provincial and federal design guidance concerning active transportation facility design.

2.5 Design Guidelines

Geometric design guidance and alignment selection was based on the consulting team's experience on similar projects, and involvement in the development of bicycle and pedestrian design guidance for various municipal, regional, provincial and federal agencies, including the most recent update to Transportation Association of Canada's Geometric Design Guidelines for Canadian Roads. Preliminary designs are consistent with the following guidance:

- Transportation Association of Canada's Geometric Design Guidelines for Canadian Roads (TAC, 2017)
- British Columbia Ministry of Transportation's Supplement to TAC's Geometric Design Guide (MOTI, 2007), and
- British Columbia's Active Transportation Design Guide (MOTI, 2019).

2.6 Preliminary Design Overview

The design of the facility will adjust in accordance with the surrounding land use and roadway conditions, but should, in all circumstances, be consistent with facility design guidance in British Columbia's Active Transportation Design Guide and Transportation Association of Canada's Geometric Design Guide. In less developed parts of the study area, specifically between Pratt Road and Field Road, the recommended design consists of a 3-metre wide, paved multi-use path, physically separated from motor vehicle traffic and on the south side of the Highway. Since most residents live on the south-west side of the Highway, this alignment will make access more convenient, and minimize the number of times that vulnerable road users must cross the Highway to access the route. This option thus offers potential for improved traffic safety and reduced delays for motorists and active transportation users. This configuration will also protect the MUP from direct exposure to run-off from the mountains to the north-east, thus offering fewer complications for highway drainage and the possibility of lower maintenance costs.

The facility will include the following geometric characteristics, wherever possible:

- A design speed of 30 km/hr and 50 km/h on any downhill grades of over 4%
- Minimum horizontal clearance of 0.5 m (from vegetation or other fixed objects)
- Minimum horizontal curve, 25 m centreline radius
- All tapers or adjustments to straight path are less than 1:2.5 (1:5 preferred)
- K-Value 2.5
- Vertical crest curve, minimum 30 m
- Vertical clearance 2.5 m
- Average Grade <8%, maximum grade 10% for short pitches only if required.

In urban areas, the preliminary design consists of uni-directional, protected bike lanes, 1.8 metres wide or more, and on both sides of the road, to reduce the potential for conflict between motorists and cyclists at driveways and intersections (where drivers may not expect cyclists to be travelling in two directions on one side of the street). For pedestrians, bi-directional sidewalk facilities of 1.8 metres or wider are proposed on both sides of the street, to allow flexibility and to reduce the impetus for pedestrians to cross Highway 101.

In suburban and constrained highway right-of-ways, the facility will consist of two multi-use paths on either side of the roadway, each 2.5 m or wider. People on bicycles will be required to travel one-way, consistent with motor vehicle traffic, while pedestrians and mobility aid users will be permitted to travel in both directions, on both sides of the road.

In instances where the right-of-way is extremely constrained, or where a local neighbourhood street is available to accommodate active transportation users, the speed limit will be lowered to 30 km/hr and pedestrians and bicycles will share the roadway with motor vehicle traffic.

In urban, suburban and constrained circumstances, all other geometric design characteristics, where appropriate, will be consistent with those of multi-use paths, as described above.

Amenities, furnishings and landscaping will be appropriate to the level of development, ranging from minimal adaptation in rural settings to continually higher levels of accommodation in suburban and urban settings. Space will be provided to accommodate amenities, furnishings and landscaping within the preliminary design, but any further details will be left for consideration in future stages of the design process.

2.7 Stakeholders

Stakeholder consultation for the Langdale to Sechelt, AAA AT Route has largely been led by TraC and no formal consultation or engagement processes have been conducted. For this phase of the design, the consulting team and TraC leadership met with Provincial and Regional representatives from Ministry of Transportation and Infrastructure and the Sunshine Coast

Regional District to:

- Review the scope of work
- Gather data
- Discuss concurrent studies and initiatives, and to
- Explore issues relevant to the preliminary design.

Prior to this study, TraC completed a survey of residents in the study area to ascertain their priorities for implementation of active transportation facilities along the proposed route from Langdale to Sechelt. The public's preferences are reflected in the Multiple Accounts Evaluation, and the full survey findings are available in **Appendix C**.

PRELIMINARY DESIGN

3.1 Facility Design

The route will consist of the following active transportation facilities:

- 5.6 km of shared roadways, each with a recommended speed limit of 30 km/hr to facilitate shared use by motor vehicles and vulnerable road users
- 5.2 km of protected bike lanes and sidewalks, and
- 19.8 km of paved multi-use paths.

The configuration of these facilities varies from segment to segment and is more fully described in Section 3.3, Segment Description and Scoring.

3.2 Multiple Accounts and Criteria Overview

Segments favoured for implementation will exhibit the highest scores for criteria within the categories of Projected Demand, Community Support, and Connectivity and Safety. Projected Demand is deemed the most important consideration, Community Support the next most important and lastly Connectivity and Safety. Scores under each heading are weighted accordingly. The definition and scoring system for each criteria is described as follows:

- Projected Demand
    - Proximity to Priority Origins and Destinations
        - This criteria measured distance decay from priority destinations. Segments within 3 km of Langdale, Gibsons, and Sechelt scored 5 points. Segments within 3 km from Roberts Creek, Davis Bay and Wilson Creek scored 3 points. Those outside 3 km from these communities scored 1 point.
    - Population Density
        - Population density per hectare in associated census tracts. 10 points for those with 15+ people per hectare, 8 points for 10-14, 6 points for 9-5, 4 points for 4-1, and those with less than 1 get 1 point.
    - Cycling Mode Share
        - Drawn from Census Canada 2016, Journey to Work data from local census tracts. Those with greater than 5% of the adult population who commute regularly by bicycle earned 5 points, those with 4-5% got 4, those with 3-4% got 3, those with 2-3% got 2 and those with 0-2% got 1.
    - Pedestrian and Bicycle Counts
        - TraC has undertaken and reported periodic bicycle and pedestrian counts along the route (see **Appendix D** for details). Each segment receives a score in accordance with the highest hourly counts recorded within that segment. Those segments without a count are based on the average

score of counts within nearby segments. Counts occurred at 8 locations along the route, including 3 in Sechelt, 1 in Davis Bay, 4 in Roberts Creek and 2 in Gibsons and 1 in Langdale. Those locations with a tally of over 40+ active transportation users per hour received 5 points, those with 20-39 received 3 points, those with 1-19 got 1 point.

- Total possible score 25 points.

- Community Support
  - SCRD Preliminary Input
    - SCRD staff provided preliminary feedback for the route, ranking segments from high importance to low importance. Segments ranked very high were given a score of 5, those ranked high were given a score of 4, those ranked medium-high were given a score of 3, those medium-low a score of 2, those low a score of 1 and those very low or unranked were given a score of 0.
  - TraC Support
    - The TraC leadership team ranked each segment by their perceived importance to those on the leadership team, ranking segments from high importance to low importance. Segments ranked very high were given a score of 5, those ranked high were given a score of 4, those ranked medium-high were given a score of 3, those medium-low a score of 2, those low a score of 1 and those very low or unranked were given a score of 0.
  - Public Support
    - TraC conducted a public survey in 2020, asking people to identify priorities for improvement in active transportation infrastructure. Almost 200 people responded to the survey. Segments ranked first, second and third by the public were given a score of 5. Segments ranked fourth, fifth and sixth were given a score of 3. Lower ranked segments were given a score of 1. Unranked segments were given a score of 0.
  - Alignment w/ Provincial Grant Criteria
    - BC Provincial Active Transportation grants require projects funded to be part of an active transportation plan, and to be shovel ready in order to be considered for grant funding. While none of the projects are shovel ready, the bulk of the proposed alignment and alternative alignment form part of planned AT routes, as identified within local and regional planning documents. Segments fully on existing or planned AT routes were given a score of 5, Segments which partly followed a planned route were given a score of 3. Segments that did not follow planned routes were given a score of 1.
  - Total possible score 15 points.

- Connectivity and Safety
    - Connections to Existing AT Routes
        - Segments were scored based on their level of connectivity to existing active transportation routes. Segments which attached to 2 or more existing routes were given a score of 5, and those which connected to a single route were given a score of 3. Segments with no connection to an existing route were given a score of 0.
    - Availability of Reasonable Alternative Parallel Route
        - Routing was scored based on the quality of alternative routes in the area. Segments with no alternative route available were given a score of 5. Those segments that have an alternative route available, but of a lower quality, were given a score of 3. Those segments with an obvious and reasonable alternative route were given a score of 0.
    - Collisions Involving Vulnerable Road Users (VRUs).
        - This project aims to address protection of VRU's within the Sunshine Coast area. Segments with a history (last 5 years) of pedestrian or cyclist collisions were seen as priority to address the underlying safety issue by giving these VRUs a facility separate from vehicle traffic. Segments with 2 or more collisions (or a single fatality), with a VRU were given a score of 5, and those with a single collision were given a score of 3.
    - Connection to transit stops
        - This route can be seen as complementary to transit as a connection between SC communities. Assessed on a per km basis. Those with 3 or more stops per km along the section were given a score of 5. Those with between 1 stop and 3 stops, were given a score of 3. Those with less than a single stop per km were given a score of 1. Segments that did not have any transit stops were given a score of 0.
    - Total possible score 20 points.

The MAE ranks each route segment on a score that weights the criteria as follows:

- Projected Demand is considered most important and as such, these scores are multiplied by 3, for a possible total of 75 points;
- Preliminary Support scores are multiplied by 2, for a possible total of 30; and
- Safety and Connectivity are given no multiplier, for a possible total of 20.

Those route segments that score highest on these accounts are ranked as highest priorities for implementation, with a possible grand total of 125 points.

Anticipated costs and conflicts with other modes, infrastructure and private property are scored separately from Demand, Support, Connectivity and Safety. Those with the lowest scores have higher costs and are expected to be the most expensive and challenging to implement. Although not part of the ranking for implementation, cost and conflict scores serve as a flag to those pursuing implementation, in case a path of less resistance proves a more pragmatic approach.

- Costs
    - Estimated Construction Cost Per Kilometre
        - Sections were scored based on their relative construction cost per km. Those facility types which are less than $1million per km are given a score of 5. Those in the $1-3 mil range are given a score of 3. Those greater than $3 mil per km are given a score of 1.
    - Private Property Conflicts
        - Property conflicts were broken into two types, Minor and Major, and were scored per km. Minor property conflicts are those where the routing will likely require the facility to encroach on an edge of a privately held lot. Major conflicts are those where the route will cross private property. Segments without any conflicts were given a full score of 5. Segments with a smaller number of minor conflicts (less than 10), were given a 3. Segments with a higher number of minor conflicts (10-20), or a single major conflict, were given a score of 1 pt. Segments with more than 20 minor conflicts (or 2+ Major) were given a score of 0.
    - Alignment with Planned Projects
        - Coupling this project with other roads projects will help facilitate completion. While individual sections may seem costly, they can be seen as rounding errors in the terms of the cost to complete major road construction projects, such as adding left turn or passing lanes. Sections that take place where MOTI or municipal roadway construction is planned, are given a score of 5.
    - Total possible score 15 points.

- Conflicts with other Modes and Infrastructure
    - Driveways and Intersections Crossed per KM
        - Intersections and driveways can negatively influence a segment's relative safety, as such features add potential conflict points between motor vehicles and VRUs. Scored at a per km basis. Segments with few conflict points (0-10) received a score of 5. Those with a higher number of conflicts (11-40) got a score of 3. Those with numerous (40+) conflict points got a score of 0.
    - Hydro and Streetlight Pole Conflicts per KM
        - Having to relocate hydro and streetlight poles can increase the cost of implementation. As such, those segments with few poles per km (0-5), that fall within the active transportation route right-of-way, received a score of 5. Segments with a higher number of poles (6-10) per km within the right-of-way, got a score of 3, while those with 11-20 poles received a single point. Those segments with over 20 potential poles within the AT route right-of-way scored 0.
    - Need to Eliminate or Narrow Shoulders

        - Segments that require narrowing or elimination of shoulders are both going to be more expensive to construct, and will likely garner less support than those that do not require reallocation of roadway space. Segments that do not require any narrowing or elimination of shoulders received a score of 5. Those that are expected to require narrowing got a score of 3, while segments with shoulders that will likely need to be removed were given a score of 0.
    - Need to Remove or Narrow Travel Lanes
        - Similar to the above, segments that will require narrowing or removal of vehicle travel lanes are expected to be more expensive to construct, and will likely garner less support than those that do not require reallocation of roadway space. Segments that do not expect any narrowing or elimination of travel lanes were given a score of 5. Those that are expected to require narrowing were given a score of 3, while segments with travel lanes expected to be removed were given a score of 0.
    - Total possible score 20 points.

The MAE ranks each route segment on a score that weights the criteria as follows:

- Cost has a potential score of 15, and with a multiplier of 2, for a possible total of 30
- Conflicts with other modes and infrastructure has a maximum score of 20, and
- The possible grand total is thus 50 points.

3.3 Segment Description and Scoring

This section of the report describes existing conditions, the proposed facility and summarizes multiple accounts evaluation scores for each segment of the route. Measurements, data and criteria scores concerning existing and proposed cross sections are drawn from the multiple accounts evaluation in **Appendix E**. Images showing typical conditions for each segment, as well as examples of favourable and unfavourable conditions for active transportation users are available in **Appendix F**.

Segment 1.

- This segment is on Marine Drive from the Langdale ferry terminal to School Road and approximately 4.3 km. The right-of-way varies from 13.5 to 24 m wide with some portions expanding to 32 m in some locations. The total of the existing constrained elements is 13.5 m, as follows:

  Existing

Constrained	2.5	8.5	2.5
	setback	roadway	setback

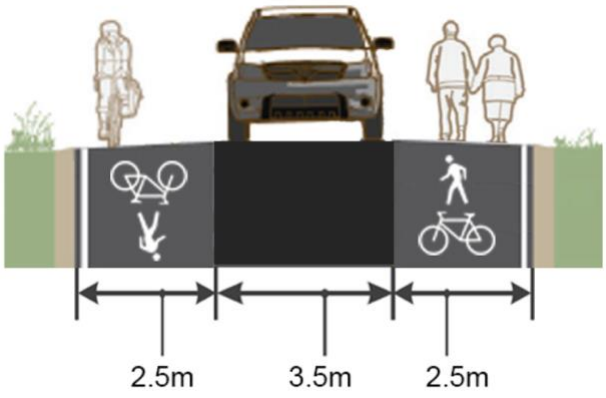
- The recommended design includes reducing the speed limit from 50 to 30km/hr, removal of all lane lines on the road, and installation of 2.5 m wide pedestrian and bicycle stencils on both sides of the road, highlighting the area where active transportation users will be given priority on the roadway, see **Figure 5** below. Motor vehicles travelling in opposing directions will share a 3.5 m wide travel lane, thus obliging them to shift into the pedestrian and bicycle priority area, yielding to vulnerable road users, to pass one another. This design is a hybrid between advisory lanes and a shared roadway, and is illustrated on page 2-17 of the Small Town and Rural Design Guide. The design is likely one of the cheapest to implement, but may be one of the most controversial, as it requires a reduced speed limit, thus adding approximately 3.5 minutes to motorists' travel time between Langdale and Gibsons. Yet improved access for active transportation users will benefit the many seniors and youth that live along this segment and will encourage visitors and residents to use active transportation when travelling between Langdale and Gibsons. There are no expected private property impacts associated with this option. The proposed design includes the following elements with a total width of 13.5 m:

  Recommended

2.5	2.5	3.5	2.5	2.5
setback	ped/bike priority area	bi-directional travel lane	ped/bike priority area	setback

- This segment has a combined score of 107, ranking 8 out of 25 for Demand, Connectivity & Safety, and Support and with a combined score of 38, ranking 23rd for Cost and Conflicts, thus suggesting that this segment has a relatively low estimated construction cost ($460,000) and relatively few anticipated conflicts with existing infrastructure.

Figure 5: Shared Road



Adapted from FHWA STAR Guide

Segment 2.

- This segment is 600 m long and on Gibsons Way from North Fletcher Road to School Road at Marine Drive. The right-of-way is 19.7 m on average, with a paved area of about 9.5 to 10 m. Active transportation facilities on this section vary. From the south end a bike lane, sidewalk and period curb-side parking are included on the east side of the road. At Seaview Road the facility transitions to a shared walking and cycling lane, a sidewalk appears again beside the bike lane just before Hicks Lane, and this configuration continues beyond the end of this segment at N Fletcher Road.

  Existing

7.7	7.5	2	2.5
setback	Roadway	Walk/Bike Accessible Shoulder	setback

- The Recommended design involves a continuous 2.5 m wide paved MUP on the east side of the roadway from Marine Drive at School Road to Gibsons Way at N Fletcher Road. Bikes will be permitted to ride only north in the MUP while pedestrians will be permitted to travel in both directions. Those cyclists travelling south will use N Fletcher and School Roads to rejoin the route on Marine Drive. This approach allows pedestrians and cyclists to safely share a relatively narrow MUP, given that cyclists climbing this steep hill (with a grade of ~8.5%), will invariably be travelling at a slower speed that is compatible with those walking. Southbound cyclists who are confident and brave, may choose to use Gibsons Way and travel single file with cars in the general-purpose travel lane. The majority, however, will choose to turn right at N Fletcher Rd, using that quiet, local street to avoid having to merge with higher speed motor vehicle traffic. Pedestrians too will tend to use N Fletcher when travelling southbound, avoiding crossing Gibsons Way on a steep hill with higher speed motor vehicle traffic and following a curve in the road which suffers from poor sightlines. Wayfinding will be important at the top of N Fletcher to encourage cyclists and pedestrians to use that route to access Lower Gibsons. The recommended dimensions are listed below and are consistent with the existing cross section.

  Recommended

6.2	3.3	3.3	0.5	2.5	3.9
setback	travel lane	travel lane	buffer	shared MUP bikes NB only	setback

- This segment has a combined score of 97 (ranking 10 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 22, ranking 8th highest for Cost and Conflicts. The estimated construction cost for this segment is $3.2 Million.

Segment 3.

- This segment is 600 m long and designed to serve south and eastbound trips via N Fletcher Rd, from Gibsons Way to School Rd at Marine Drive. The total right-of-way is approximately 20 m wide, with a paved roadway of approximately 7.5 to 8 m wide.

Existing and Recommended

6.5	7.5	6
setback	Roadway (4.5m shared road and 1.5m concrete paths on each side)	setback

- The recommended design involves no changes to the road cross section on N Fletcher Rd, however further signage and pavement markings might be added to reinforce the existing speed limit of 30 km/hr. If necessary, physical traffic calming could be installed if motor vehicle traffic tends to travel at speeds higher than 30 km/hr, even after signage and pavement markings denoting the lower speed limit are added. Along School Road from N Fletcher to Marine Drive would involve adding a protected bike lane, and changing the curbside parking to parallel or reverse angle parking.

- This segment has a combined score of 70 (ranking 17 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 40, ranking tied in 24th place for Cost and Conflicts, (indicating low cost and minimal conflicts). The estimated construction cost for this segment is $140,000, assuming physical traffic calming is needed.

Segment 4.

- This segment is 1.8 km long and on Gibsons Way, from N Fletcher Rd to Payne Rd. The right-of-way varies considerably, from 18.4 m to as wide as 34.8 m. The width of the roadway meanwhile, is relatively consistent, at around 14 m wide.

Existing

1.3	4	3.7	3.8	1.2
bike lane	travel lane	turn lane	travel lane	bike lane

- Because of the variability of the total right-of-way, the focus is on the roadway from curb to curb. The proposed cross section includes protected bike lanes of 1.8 m and flexible bollards in a buffer of 0.4 m. Concrete jersey barriers are often recommended along this route to protect vulnerable road users. However, in this instance, flexible bollards are considered adequate in an urban setting where the speed limit is 50 km/hr. Much of this

segment already includes sidewalks of 1.8 m or wider. Impacts on private property are expected to be minimal for this proposed option.

Recommended

1.8	0.4	3.3	3	3.3	0.4	1.8
bike lane	buffer and barrier	travel lane	turning lane	travel lane	buffer and barrier	bike lane

- This segment has a combined score of 128 (ranking 3 out of 25) for Demand, Connectivity & Safety, and Support, and a combined score of 32 (ranking tied for 19th) for Cost and Conflicts, (indicating low cost and minimal conflicts). The estimated construction cost for this segment is $150,000.

Segment 5.

- This segment is on Sunshine Coast Hwy, from Payne Rd to Hough Rd, just over 400 m. There is a small 200 m segment of multi-use path and sidewalk on the south side of the highway just east of Hough Road. The entire right-of-way is approximately 32.5 m wide.

Existing

10	10.8	11.7
setback	Roadway	setback

- The recommended cross section takes advantage of the relatively wide right-of-way, to provide a 3 m wide multi-use path on the south side of the roadway. The proposed design includes generous setbacks from both the roadway and from adjacent private property, thus making full use of the entire right-of-way. The existing traffic signal at Payne/Pratt Road will allow users to transition from the active transportation facilities on both sides of the road east of Payne/Pratt, to AT facilities on one side of the road to the west.

Recommended

3.4	3	4.5	1.5	3.3	3.3	1.5	12
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 127 (ranking 4 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 30 (ranking tied for 15th) for Cost and Conflicts. The estimated construction cost for this segment is $690,000.

Segment 6.

- This segment is on Carmen Road, a local neighbourhood street, from Hough to King Road, just over 400 m. The right-of-way includes a local neighbourhood street that is

paved, approximately 5.8 m wide, and which has no lane lines or associated paths or sidewalks.

- The recommended option involves no changes to the roadway, however we recommend reducing the speed limit from 50 to 30 km/hr and adding signage and pavement markings to reinforce the lower speed limit. If necessary, physical traffic calming could be installed if motor vehicle traffic travels at speeds higher than 30 km/hr, even after signage and pavement markings are added denoting the lower speed limit. Care will be required at Veterans Road to highlight a safe crossing for vulnerable road users, given the proximity of Carmen to Hwy 101 at this intersection.

- This segment has a combined score of 130 (ranking 2 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 40 (ranking tied for lowest in 24th) for Cost and Conflicts (indicating low cost and minimal conflicts). The estimated construction cost for this segment is $100,000.

Segment 7.

- This segment is 1.5 km and on Sunshine Coast Highway, from King Rd to Highland Rd. The right-of-way along this segment varies from 60+ m in some locations to as narrow as 29.6 m. Note however, that part of this right-of-way drops precipitously to the south for about 110 metres, just west of King Road, and crosses a creek that has a span of approximately 75 metres between the Poplars trailer park and Oceanview Drive. Two sections of multi-use paths with retaining walls are proposed to overcome these two challenges.

  Existing

4.2	14.9	10.5
setback	Roadway	setback

- The recommended approach involves adding a multi-use path on the south side of the road. The dimensions for elements within much of the segment are described below and can be accommodated with ease, even at locations that are as narrow as 29.6 m.

  Recommended

0.5	3	5.6	1.5	3.5	3.5	1.5	10.5
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 131 (ranking 1 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 26 (ranking 11th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $7.0 million, due in part, to the need for a retaining wall through a total of 185 m within this Segment.

Segment 8.

- This segment is 1.4 km and on Sunshine Coast Highway, from Highland Rd to Leek Rd. Much of the right-of-way is approximately 28.5 m, as described in the following list of elements:

Existing

10.4	11.6	6.5
setback	roadway	setback

- The recommended approach in this rural setting, involves a multi-use path on the south side of the roadway, bordered by a generous setback from private property and from the road right-of-way. At the cemetery at 1710 Hwy 101 and at 740 Leek Road, the path will likely encroach upon private property, or trees and landscaping for those properties that are on public lands.

Recommended

2.5	3	6.5	1.5	3.5	3.5	1.5	6.5
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 67 (ranking tied for 20th out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 32 (ranking tied for 19th) for Cost and Conflicts, (indicating relatively low cost and conflicts). The estimated construction cost for this segment is $2.3 million.

Segment 9.

- This Segment is 2.3 km and on Sunshine Coast Highway, from Leek Rd to Orange/Joe Rd. Much of the right-of-way is approximately 30 m wide and shrinks to 19 m wide at various points. The Ministry of Transportation and Infrastructure is in the process of building a left-hand turn bay at Orange/Joe Road. This will likely impede the addition of a multi-use path through this segment, and require easements across, or purchase of, private property. The total of the constrained elements is approximately 19 m, as follows:

Existing

3	12.2	3.8
setback	roadway	setback

- The recommended approach is to construct a 3 m wide shared use path on the south side of the roadway. The total width of the proposed elements is consistent with the existing, constrained right-of-way. There are a number of anticipated impacts on private property as listed in **Appendix G**.

Recommended

0.5	3	0.6	1.5	3.5	3.5	1.5	4.9
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 60 (ranking tied for last, at 24 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 23 (ranking 9th) with relatively high Costs and Conflicts. The estimated construction cost for this segment is $3.9 million.

Segment 10.

- This segment is on Sunshine Coast Highway, from Orange Rd to Malcolm Creek Rd, approximately 850 m. Most of the right-of-way is about 30 m wide. The narrowest portion is 26 m wide, as reflected in the following elements.

Existing

7.4	9.8	8.8
setback	Roadway	setback

- The recommended means to accommodate active transportation for people of all ages and abilities involves adding a 3 m wide path on the south side of the roadway. However, on Robson Road and Malcolm Creek Road (a stretch of about 300 m) it is recommended that the facility transition to a shared street, with a speed limit of 30 km/hr to better accommodate shared use by motor vehicles and vulnerable road users. This detour will avoid crossing private property on the Highway 101 right-of-way.

Recommended

2	3	3	1.5	3.5	3.5	1.5	8
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 72 (ranking 16 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 30 (ranking tied for 15th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $1.2 million.

Segment 11.

- This segment is approximately 1.3 km and on Sunshine Coast Highway, from Malcolm Creek Rd to Largo Rd. Most of the right-of-way is 25 m wide, however there is a pinch point measuring 21.5 m wide, the elements of which are described in the following table.

Existing

6.1	8.9	6.5
setback	roadway	setback

- The recommended option involves adding a 3 m wide multi-use path on the south side of the roadway with a small setback from private property and from the roadway, as described in the table below. Note however, that concrete jersey barriers are just 0.6 m wide, allowing adequate space to install a barrier that will protect vulnerable road users on the path from errant motor vehicles. There are 5 anticipated instances in which the path may stray onto private property. Those properties, and other properties that pose a potential conflict, are listed in **Appendix G**).

Recommended

0.5	3	1.5	1.5	3.5	3.5	1.5	6.5
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 74 (ranking 15 out of 25) for Demand, Connectivity & Safety, and Support, and a combined score of 25 (ranking 10th highest of 25) for Cost and Conflicts. The estimated construction cost for this segment is $2.3 million.

Segment 12.

- This segment is approximately 1.2 km and on Sunshine Coast Highway, from Largo Rd to Roberts Creek Rd. Most of the right-of-way is a minimum of 30 m wide. The dimensions for the existing right-of-way are as follows:

Existing

15.6	11.2	3.2
setback	roadway	setback

- The recommended approach is to add a 3 m wide shared path on the south side of the road. The total of all the elements listed below is consistent with the existing available right-of-way. There are no expected property impacts. It's assumed that the multi-use path will be relatively straightforward to build, however, there is a challenging portion, of about 150 metres, on the south side of the highway near Cliff Gilker Park, in which the

landscape falls away sharply from the roadway. This challenge may increase construction costs but has not been investigated as part of this study.

Recommended

9.3	3	4.5	1.5	3.5	3.5	1.5	3.2
setback	multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 69 (ranking tied for 18 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 36 (ranking 22nd of 25) for Cost and Conflicts (indicating low cost and minimal conflicts). The estimated construction cost for this segment is $2 million.

Segment 13.

- This segment is approximately 1.6 km and on Sunshine Coast Highway, from Roberts Creek Rd to West of Pell Rd. Most of the right-of-way is 31.2 m wide, with a pinch point of 24.4 m. The total of all the constrained elements listed below is 24.4 m. This segment has an existing multi-use path on the northeast side of the highway that has not been properly maintained.

Existing

3.7	9.8	6.8	3	1.1
setback	roadway	setback	existing MUP	setback

- The recommended approach for this segment of the route, is to install a 3 m wide multi-use path on the south side of the roadway. That MUP will be separated from the shoulder by a jersey barrier, and setback 0.5 m from private property. There are two instances, listed in **Appendix G**, in which private property may be impacted as this segment is built, and other locations where shoulders may need to be narrowed to accommodate the separated path.

Recommended

0.5	3	0.6	1.5	3.5	3.5	1.5	6.2	3	1.1
setback	MUP	setback	shoulder	travel lane	travel lane	shoulder	setback	existing MUP	setback

- This segment has a combined score of 82 (ranking tied for 11 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 27 (ranking tied for 12th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $2.7 million.

Segment 14.

- This segment is approximately 2 km and on Sunshine Coast Highway, from West of Pell Rd to Jack Rd. Most of the right-of-way is 30 m or wider, with no pinch points along the route. The total of the combined existing elements listed below is 30 m.

Existing

8.2	16.5	5.3
setback	roadway	setback

- The recommended approach is to install a traffic protected multi-use path on the south side of the roadway. The recommended approach can be accomplished without disrupting the current configuration or widths of motor vehicle travel lanes.

Recommended

4.2	3	4.0	1.5	3.5	3.5	3.5	1.5	5.3
setback	Multi-use path	setback	shoulder	travel lane	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 67 (ranking tied for 20 out of 25) for Demand, Connectivity & Safety, and Support and with a combined score of 30 (ranking tied for 15th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $3.4 million.

Segment 15.

- This segment runs 1.3 km along Sunshine Coast Highway, from Jack Rd to Field Rd. Most of the right-of-way is 20m wide, as described in the table below.

Existing

5	11.4	3.6
setback	Roadway	setback

- The recommended approach is to install a 3 m wide, multi-use path on the south side of the roadway, setback 0.5 m from private property and 2.9 m from the paved portion of the road. The distance of 2.9 m is not adequate to maintain the clear zone recommended in Transportation Association of Canada guidance, and as such, a jersey barrier, or some similar physical protection will be needed to protect vulnerable road users from errant motor vehicle traffic. The preliminary design anticipates 5 instances in which the path may stray onto private property, as shown in **Appendix G**.

Recommended

0.5	3	2.9	1.5	3.5	3.5	1.5	3.6
setback	Multi-use path	setback	shoulder	travel lane	travel lane	shoulder	setback

- This segment has a combined score of 69 (ranking tied in 18 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 30 (ranking tied for 15th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $2.3 million.

Segment 16.

- This segment is just over 1 km long and on Sunshine Coast Highway, from Field Rd to Whitaker Rd. Most of the right-of-way is 20m wide, with short, intermittent sections that are 25 m wide. The elements below are consistent with the constrained portions of the right-of-way.

Existing

0.5	16.7	2.8
setback	Roadway	setback

- The recommended approach involves installing 2.5 m wide multi-use paths on both sides of the roadway. These paths will be setback 2.9 m from private property on the south side and 0.5 m on the north side and protected by a physical barrier within a 1 m buffer adjacent to traffic. An existing traffic light at Field Road allows active transportation users to transition from a facility on one side of the Highway to AT facilities on both sides. To enhance safety, people on bicycles and micro-mobility devices will be obliged to travel only in the same direction as motor vehicle traffic on both sides of the road. It is expected that the multi-use paths will come into conflict with private property in 12 instances along the segment. The existing 33 m footbridges across Chapman Creek are well protected from motor vehicle traffic, but do not meet Transportation Association of Canada guidelines for the width of a facility designed to accommodate shared use by a variety of active transportation users. Yet, these facilities are safe and adequate to serve existing and anticipated demand. With that in mind, we recommend retaining the existing footbridges, rather than investing approximately $1.48 million to build bridges that have the recommended 2.5 m clear width.

Recommended

2.9	2.5	1	1.5	3.3	3.3	1.5	1	2.5	0.5
setback	one-way bike travel MUP	buffer	shoulder	travel lane	travel lane	shoulder	buffer	one-way bike travel MUP	setback

- This segment has a combined score of 82 (ranking tied for 11 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 12 (ranking tied for 3rd highest) for Cost and Conflicts. The estimated construction cost for this segment is $9.2 million.

Segment 17.

- This segment is 1 km long and on Sunshine Coast Highway, from Whitaker Rd to Bay Rd. The right-of-way through this segment varies from 20 to 26.8 m wide, with intermittent curb-side parking. This segment runs through Davis Bay and there are restaurants on one side of the roadway and a beachfront path on the other. The constrained elements of the roadway are apportioned as follows:

  Existing

4.5	10	5.5
setback (sidewalk/furnishing zone/parking)	Roadway and shoulders	setback (furnishing zone/parking)

- The recommended approach in this segment is to install:
  - Sidewalks on both sides of the roadway, 3 m wide at the waterfront and 2 m wide on the land side
  - A furnishing zone or buffer between pedestrians and cyclists of between 0.8 and 1.1 m
  - A buffer of 1 m between the bike lane and parking
  - Parking lanes of 2.5 m wherever space allows, and
  - Travel lanes of 3.3 m, thus offering an appropriate design for the commercial and recreational land uses along this stretch.

  This configuration will allow the proposed elements to fit within the available right-of-way, even in a location that is constrained to 20 m wide. Calculating construction costs for this segment was challenging given that it combines elements of protected bike lanes and multi-use paths. The cost is thus calculated as involving both protected bike lanes and multi-use paths on both sides of the roadway, hence the relatively high cost for this segment.

  Recommended

3	1.1	2	1	0	3.3	3.3	0	1	2	0.8	2	0.5
sidewalk	furnishing zone	bike lane	buffer	parking	travel	travel	parking	buffer	bike lane	buffer	side walk	Set back

- This segment has a combined score of 76 (ranking 14 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 16 (ranking 6th highest) for Cost and Conflicts. The estimated construction cost for this segment is $22 million.

Segment 18.

- This segment is just over 900 m long and on Sunshine Coast Highway, from Bay Rd to Havies Rd. The right-of-way includes stretches that are 20 m wide, some that are 25.5 m wide, and some of 32 m. For this preliminary design we assumed a constrained right-of-way of 20 m.

Existing

5.7	10.3	4
setback	Roadway	setback

- The recommended approach for this segment involves a setback of 3 m to property lines on the south side, a protected bike lane to accommodate cyclists travelling eastbound downhill. Shoulders and travel lanes in each direction, a barrier and buffer of 1 m, then a multi-use path that accommodates two-way pedestrian travel and one-way westbound bikes in the uphill direction. This proposed configuration just fits within the constrained right-of-way of 20 m.

Recommended

3	2	1	1.5	3.5	3.5	1.5	1	2.5	0.5
setback	one-way bike lane	setback and barrier	shoulder	travel lane	travel lane	shoulder	buffer & barrier	one-way bike travel MUP	setback

- This segment has a combined score of 105 (ranking 9 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 11 (ranking 2nd highest) for Cost and Conflicts. The estimated construction cost for this segment is $4.7 million.

Segment 19.

- This segment is 2.4 km long and on Sunshine Coast Highway, from Havies Rd to Chelpi Ave. Most of the right-of-way is 20 m wide, apportioned as shown in the table below, with a pinch point of 18.7 m.

Existing

5.3	10.9	3.8
setback	Roadway	setback

- The recommended approach for this segment involves a setback from private property of 0.5 m, multi-use paths on both sides of the road that accommodate two-way pedestrian travel and one-way bicycle travel. MUPs are protected from traffic by buffers

of 2.3 to .8 m and jersey barriers, while shoulders vary from 1.9 - 2.0 m. Yet, these elements fit within the 20 m right-of-way. At the pinch point, the buffers between shoulders and the MUP could be narrowed by a total of 1.3 m to accommodate all other elements as shown in the Table below. Along this segment, numerous private properties are likely to be impacted.

Recommended

0.5	2.5	2.3	1.9	3.5	3.5	2	0.8	2.5	0.5
setback	one-way bike travel MUP	buffer	shoulder	travel lane	travel lane	shoulder	buffer	one-way bike travel MUP	setback

- This segment has a combined score of 119 (ranking 6th highest out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 2 (ranking highest) for Cost and Conflicts. The estimated construction cost for this segment is $21.2 million.

Segment 20.

- This segment is 600 m long and on Sunshine Coast Highway, from Chelpi Ave to Wharf Ave. The width of the right-of-way varies through this segment with most stretches being 30+ or 23 m wide, with a pinch point of 20 m at the intersection with Dolphin Street. The elements below show the dimensions at a portion of the segment that is 23 m wide.

Existing

2	1.4	18	1.4	0.2
setback	sidewalk	Roadway	sidewalk	setback

- The recommended approach to accommodate active transportation users of all ages and abilities is to include small setbacks from private property of 0.5 m, sidewalks 2 m wide, a buffer of 0.3 m, protected bike lanes that are 2 m wide, a buffer of 0.6 m and two travel lanes in each direction that are each 3.3 m wide. The total width of this proposed option is 23 m, consistent with a relatively narrow portion of the existing right-of-way. At the pinch point at Dolphin Street, it is anticipated that setbacks and buffers could be removed and bike lanes and/or sidewalks narrowed to find the 3 m required to accommodate this constraint.

Recommended

0.5	2	0.3	2	0.6	6.6	6.6	0.6	2	0.3	2	0.5
setback	side walk	buffer	bike lane	buffer and curb	travel lanes	travel lanes	buffer and curb	bike lane	buffer	sidewalk	setback

- This segment has a combined score of 121 (ranking 5 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 20 (ranking 7th highest) for Cost and Conflicts. The estimated construction cost for this segment is $630,000.

Segment 21.

- This segment is 1 lm long and includes Wharf Ave and Teredo St, from Dolphin St to Shorncliffe Ave. The existing right-of-way is typically 20 m wide, with a short pinch point of 17.3 m. The elements within the road right-of-way vary considerably, from approximately 12.5 m wide to 16 m where angle parking exists.

Existing

2.3	1.8	12.7	3.2
setback	sidewalk	Roadway	setback

- The recommended approach within this segment is to provide setbacks from private property of between 2.3 and 0.5 m. Sidewalks of between 1.8 and 2.1 m, buffers of 0.6 m, bike lanes of 2 m, buffers and curbs of between 0.7 and 0.8 m and travel lanes in each direction of 3.3 m wide (widths that are appropriate for an urban setting with a speed limit of 50 km/hr). The elements in the table below sum to 20 m, consistent with the existing right-of-way. At the pinch point, setbacks and buffers could be reduced to find the 2.7 m required to accommodate the narrower right-of-way. Within this segment, some portions of the proposed right-of-way may encroach on private property and will cross private property on at least one occasion. It should be noted too that protected bike lanes and sidewalks implemented or planned on Dolphin Street and Trail Avenue may function as an alternative to this segment, though there is some concern that these facilities will not be wide enough to serve anticipated demand.

  Recommended

2.3	1.8	0.6	2	0.8	3.3	3.3	0.7	2	0.6	2.1	0.5
setback	sidewalk	buffer	bike lane	buffer/ curb	travel lane	travel lane	buffer/ curb	bike lane	buffer	sidewalk	setback

- This segment has a combined score of 66 (ranking 22 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 15 (ranking 5th highest) for Cost and Conflicts. The estimated construction cost for this segment is $1.1 million.

Segment 22.

- This segment is 1.2 km and on Sunshine Coast Highway, from Shorncliffe Ave to Norwest Bay Rd. Most of the right-of-way is 30 m wide, with a portion 20 m wide. The total of typical elements measures 30 m wide.

Existing

4.4	15.6	10
setback	Roadway	setback

- The recommended approach fits within the constrained portion of the segment and includes 3 m wide multi-use paths on both sides of the roadway. There is an existing 3 m wide, paved multi-use path that is approximately 200 m long and on the north side of the road. This facility has been factored into the cost for this segment. Despite the width, people on bicycles will be permitted to travel only in the direction of motor vehicle traffic, to reduce the potential for conflicts with other vulnerable road users and motor vehicle traffic.

Recommended

0.7	3	1.5	1.5	3.4	3.4	1.5	1.5	3	0.5
setback	one-way bike travel MUP	buffer	shoulder	travel lane	travel lane	shoulder	buffer	one-way bike travel MUP	setback

- This segment has a combined score of 82 (ranking tied in 11 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 12 (ranking tied for 3rd highest) for Cost and Conflicts. The estimated construction cost for this segment is $3.7 million.

Alternative Routing Segments

The following three segments are recommended as an alternative to Segments 1, 2 and 3, covering a similar portion of the route:

Segment 1A.

- This segment is 2.4 km long and on Sunshine Coast Highway, from Port Mellon Hwy to Stewart Rd. The right-of-way is quite wide, greater than 100 m for most of this segment, with a pinch point of 61.4 m near the western end, which forms the basis for the proposed design.

Existing

7.7	26	27.7
setback	Roadway	setback

- The recommended design involves establishing two active transportation paths on the north side of the highway, including a 2.5 m wide multi-use path to serve pedestrians travelling east and west and cyclists travelling westbound. Cyclists travelling eastbound, down this steep section, will be provided a traffic separated path with a clear width of at

least 2 m. Both paths will be separated from the roadway by a setback of at least 16 metres. Placing the paths on the northside of Hwy 101 will allow vulnerable road users to avoid coming into conflict with high volumes of motor vehicles turning northbound to eastbound and westbound to southbound at Stewart Road.

Recommended

7.7	2.5	3.6	4	4.3	3.6	3.7	4.3	19	2	1	2.5	3.2
Set back	shoulder	travel lane	travel lane	shoulder & barrier	travel lane	travel lane	shoulder	Set back	Bike Lane	Buffer & Curb	Multi-use Path	Set back

- This segment has a combined score of 60 (ranking tied for last) for Demand, Connectivity & Safety, and Support and a combined score of 27 (ranking tied for 12th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $27.2 million.

Segment 2A.

- This segment is 1.2 km and on Stewart Rd and North Rd, from Sunshine Coast Highway to Reed Rd. Most of the right-of-way is 20.2 m wide. Private properties at the south end of this segment extend into the existing roadway and will be crossed by the proposed active transportation facility.

Existing

1	12.2	7
setback	Roadway	setback

- The recommended approach involves adding a multi-use path on the northwest side of the roadway with a setback from the road of approximately 3 m.

Recommended

1	2.1	4	4	2.1	3	3	1
setback	shoulder	travel lane	travel lane	shoulder	setback	Multi-use path	setback

- This segment has a combined score of 62 (ranking 23 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 28 (ranking 14th of 25) for Cost and Conflicts. The estimated construction cost for this segment is $2.8 million.

Segment 3A.

- This segment is just over 800 m and runs on North Rd, from Reed Rd to Gibsons Way. Most of the right-of-way is approximately 26 m wide, with a pinch point of 20.3 m.

Existing

6.7	2	1.7	0.9	3.4	3.4	0.9	1.7	1.6	1.9	1.8
setback	sidewalk	bike lane	buffer	travel lane	travel lane	buffer	bike lane	furnishing zone	sidewalk	setback

- The recommended option is consistent with the 26 m wide right-of-way and involves no changes to the existing configuration, except that barriers will be added to protect cyclists from motor vehicle traffic. Note that in the last two blocks from Kiwanis Way to Hwy 101 that the right-of-way narrows, and additional space appears to be needed to accommodate right turning motor vehicles. Through this section the recommended cross section can be maintained by simply reducing the setback on the west side of the road to 1 m.

Recommended

6.7	2	1.7	0.9	3.4	3.4	0.9	1.7	1.6	1.9	1.8
setback	sidewalk	bike lane	buffer and barrier	travel lane	travel lane	buffer and barrier	bike lane	furnishing zoner	sidewalk	setback

- This segment has a combined score of 110 (ranking 7 out of 25) for Demand, Connectivity & Safety, and Support and a combined score of 34 (ranking 21st of 25) for Cost and Conflicts. The estimated construction cost for this segment is $900,000.

3.4 Segment Amalgamation and Evaluation

The entire 30 km route was broken into 8 groups of segments, some with as few as 2 segments, and some with as many as 5 segments. We totalled the scores for each group of segments and divided by the number of segments to get average scores. The rankings are listed below.

Stretch	Segments	Ranking: Demand, Connectivity & Safety Community Support 1 highest priority 8 lowest	Ranking: Cost Conflicts 1 high 8 low
Langdale to Gibsons, via Marine Dr.	1-3	3	8
Langdale to Gibsons, Via Hwy 101	1A-3A	4	6
N Fletcher Rd in Gibsons to Highland/Lower Rd	4-7	1	7
South/East of Roberts Creek, Lower Rd to Roberts Ck Rd	8-12	8	5
Roberts Creek to Wilson Creek, Roberts Creek Rd to Field Rd	13-15	7	4
Wilson Creek through Davis Bay, Field Rd to Bay Rd	16-17	4	3
Davis Bay to Sechelt, Bay Rd to Wharf Ave	18-20	2	1
Through Sechelt, Dolphin Ave to Norwest Bay Rd	21-22	6	2

The segments 4-7, from N Fletcher Rd in Upper Gibsons to the turn off to Roberts Creek at Lower/Highland Road have the strongest case for early implementation, with the highest ranking for Projected Demand, Connectivity, Safety and Community Support and the second lowest ranking for Cost and Conflicts, ranking 7th of 8. Davis Bay to Sechelt (segments 18-20), by contrast, is a high priority for implementation, scoring 2nd highest for Demand, Connectivity, Safety and Community Support, but with the highest anticipated Cost and Conflicts of any option. The preferred routing from Langdale to Gibsons via Marine Drive (segments 1-3), also has a strong case for implementation with the 3rd highest ranking for potential Demand, Connectivity, Safety and Community Support, and the lowest anticipated Cost and Conflicts. Meanwhile the segments through Sechelt (21-22) rank relatively low at 6th of 8 for Projected Demand, Connectivity, Safety and Community Support, and one of the highest for Costs and Conflicts, ranking 2nd highest of 8.

CONCLUSION

4.1 Overview and Limitations

This report offers a preliminary design for a proposed active transportation route from Langdale to Sechelt. The alignment and facility design were based on an understanding of:

- The available right-of-way
- Physical and jurisdictional constraints
- Surrounding land uses and development
- Preliminary stakeholder input
- Relevant orthophotos and GIS data provided by local, regional, provincial and federal agencies, and
- Reference to appropriate provincial, federal and international design guidance.

This report is not accompanied by comprehensive stakeholder or public engagement and does not purport to fully reflect the input of all stakeholders. Instead, the focus was on completing a preliminary design, involving a determination of an appropriate and technically feasible alignment and associated facility design options. These are supported by planning level capital cost estimates for each segment of the route. The outcome is a report that will support TraC leadership and government agencies in completing a business case, stakeholder engagement, conceptual and detailed designs, and fundraising required for implementation.

4.2 Next Steps

There are a number of significant steps that must be taken to progress this project to construction and operation. Any further work should be supported by a formalized consultation process to document all stakeholder input for incorporation in the detailed design. The following initiatives should be undertaken to coalesce community support and resources required to support such a major capital investment. The following project components are discrete and require expertise from different disciplines but may occur simultaneously for efficiency and continuity.

- *Operations and Management Agreement* - the long-term success of any transportation facility relies on effective operations and management. Relevant authorities must maintain the infrastructure, manage risks and liability, plan for emergencies, respond to user feedback, and guide day to day operations. Given the scope of this project and jurisdictional overlap, agreement concerning roles, responsibilities, resource requirements and funding sources are needed in advance of construction to effectively manage this infrastructure.

- *Business Case Development* - a value proposition is required to evaluate the benefit, cost and risks associated with the proposed active transportation facilities, to generate public support and to convince decision makers to invest public funds in this project.
- *Stakeholder and Public Engagement* - formalized engagement will garner public interest and assist all levels of government in considering policies and funding arrangements to support this project.
- *Conceptual and Detailed Design* - Land surveys, conceptual and detailed designs, supported by stakeholder input, will each be needed to clarify infrastructure design, and construction costs.
- *Permitting & Land Acquisition* - Stakeholders such as regulatory agencies, local governments and utility owners must be consulted through formal review and permitting processes. Land acquisition or easements will be required from private landowners.

4.3 Closing

This report has been prepared by GJD Planning + Design for the benefit of Transportation Choices (TraC) - Sunshine Coast. The information and data contained in this report represents the author's best professional judgement considering the knowledge, information, and data available at the time of preparation.

GJD Planning + Design denies any liability to other parties that may obtain access to this report for any injury, loss or damage suffered by such parties arising from their use of, or reliance upon this report without the express written permission of GJD Planning + Design and TraC.

REFERENCES

British Columbia Ministry of Transportation and Infrastructure. (2019) British Columbia Active Transportation Design Guide. Retrieved from https://www2.gov.bc.ca/assets/gov/driving-and-transportation/funding-engagement-permits/grants-funding/cycling-infrastructure-funding/active-transportation-guide/2019-06-14_bcatdg_compiled_digital.pdf

British Columbia Ministry of Transportation and Infrastructure. (2019) BC Supplement to TAC Geometric Design Guide, 2019 3rd Edition. Retrieved from https://www2.gov.bc.ca/assets/gov/driving-and-transportation/transportation-infrastructure/engineering-standards-and-guidelines/highway-design-and-survey/tac/tac-2019-supplement/bctac2019-bcsupplementtotac.pdf?forcedownload=true

Transportation Association of Canada. (2017) Geometric Design Guide for Canadian Roads. Retrieved from https://www.tac-atc.ca/en/publications-and-resources/geometric-design-guide-canadian-roads

U.S. Department of Transportation, Federal Highway Administration. (2016) Small town and Rural Design Guide. Retrieved from https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf

FIGURES

APPENDICES

Appendix A: List of Tasks identified in the Scope for Connect the Coast

HWY 101 AT INFRASTRUCTURE ASSESSMENT & DESIGN
1. Data Acquisition and Review
2. Site Visit and Assessment of Current Infrastructure
3. Identify and Agree Appropriate Design Guidance
4. Preliminary Alignment, Facility Design & Segmentation
5. Identify Unit Costs
6. Agree Criteria to Prioritize Segments for Implementation
7. Scoring and Prioritization
REPORTING
1. Draft Report
2. Final Report
3. Present the Findings

Appendix B: Planning Level Cost Estimates

Planning Level Cost Estimates
Highway 101 Langdale to Sechelt

Cost Estimate Prepared by Roy Symons P.Eng. On August 9, 2022. Cost estimates are based on real projects and tender bids and/or engineers estimates for detailed design. Source of cost estimates is confidential but reflect similar projects per assumptions denoted below. Where costs are from prior years, inflation has been added per Bank of Canada rates, and all costs were converted to a per km rate based on real project length.

Per Engineers and Geoscientists British Columbia (EGBC) guidance with respect to project cost estimating *"It is important to recognize that, until a project is actually constructed, a cost estimate represents the best judgement of the professional engineer in the light of their experience and knowledge and the information available at the time. Its completeness and accuracy is influenced by many factors, including the project status and development stage. Estimates have a limited life, and are subject to inflation and fluctuating market conditions. The estimates above are Class D estimate (±50%) described by EGBC as: a preliminary estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from lump sum or unit costs for a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects."*

Original Scope:
1. 2 way Multi-use path - 3 m wide, paved with a .5 m gravel shoulder on each side
2. Protected Bike Lanes - unidirectional, 2.0 m wide with a casted curb
3. Protected Bike Lanes - unidirectional, 2.0 m wide with a pin in place curb, topped with flexible bollards
4. Protected Bike Lanes - unidirectional, 2.0 m wide with flexible bollards
5. Bike only path - unidirectional 2.5 m wide, paved
6. Cost for a jersey barrier (with dimensions)
7. MUP on both sides of the street - unidirectional for bikes and bi-directional for pedestrians - 2.4 m wide, paved with a .5 m gravel shoulder on each side
8. Bike boulevard - basic traffic calming to achieve 30 kmh speed limits, signage and pavement markings
9. Advisory lanes involving taking a 10 m paved cross section (3.5 m lanes each direction and 1.5 m shoulder each direction), removing the existing lane line markings and re-striping to include marked shoulders of 3.0 m and a single travel lane of 4 m

Adjsuted Facility Types as Discussed:

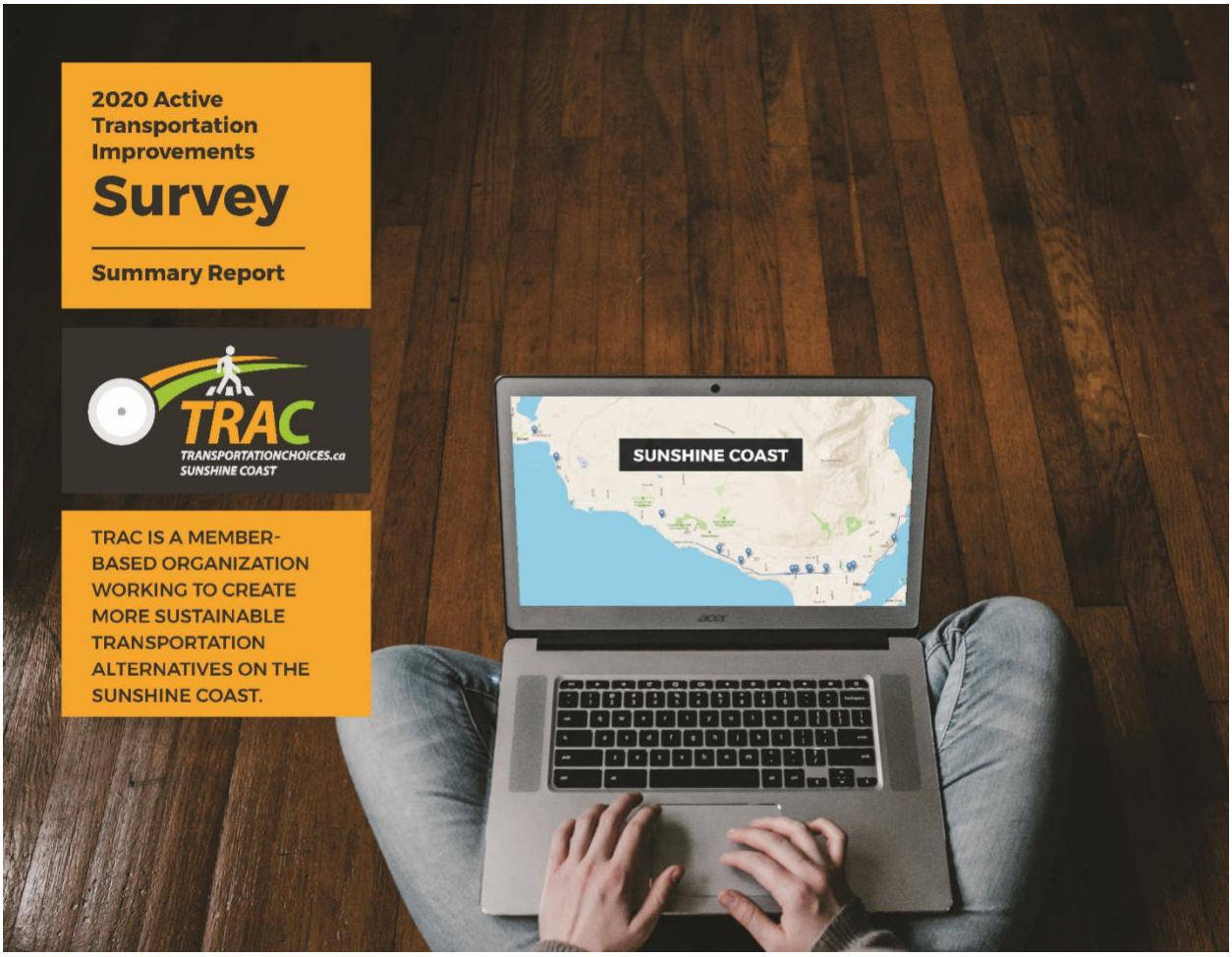
Facility	Assumptions	2022 Construction Cost per km	Engineering 10%	Contingency 50%	Total Planning Level Cost per km
Low Complexity MUP	Simple grading and paving, minor ditch work	$ 1,033,922	$ 103,392	$ 568,657	$ 1,705,971
Medium complexity MUP	Utility challenges, i.e., drainage ditch relocation or undergrounding, pole relocations, challenging tie-ins	$ 2,725,744	$ 272,574	$ 1,499,159	$ 4,497,477
High Complexity MUP	As medium but with steep slopes and retaining walls required	$ 6,510,345	$ 651,034	$ 3,580,690	$ 10,742,069
Basic Bike Boulevard	Centre line eradication, speed cushions, sharrow pavement markings	$ 140,400	$ 14,040	$ 77,220	$ 231,660
Advisory Bike Lanes	Line eradication and replacement	$ 64,947	$ 6,495	$ 35,721	$ 107,162
Protected bike lanes with pre-cast curb	Both directions, line eradication, precast curbs (2.5m length), plus flex posts, pavement markings & signage, no widening or repaving*	$ 661,277	$ 66,128	$ 363,702	$ 1,091,107
Protected bike lanes with Jersey Barrier	Both directions, line eradication, precast barrier (3.0m length), pavement markings & signage, no widening or repaving*	$ 720,319	$ 72,032	$ 396,176	$ 1,188,527
Protected bike lanes with flex posts	Both directions, assumes posts added along existing bike lane pavement marking at 10m spacing, no widening or repaving*	$ 53,058	$ 5,306	$ 29,182	$ 87,546

* if widening required, combine with MUP costs above and adjust for widths

Appendix C: TraC survey of residents regarding priorities for implementation of an all ages and abilities active transportation route along the Sunshine Coast

Full report:
https://transportationchoices.ca/wp/wp-content/uploads/2020/09/2020-AT-Survey-Supplementary-Report.pdf

Summary Report:
https://transportationchoices.ca/wp/wp-content/uploads/2020/09/TraC_2020-Survey-Results-Final.pdf



Overview

Marine Dr between Town of Gibsons and Langdale ferry

"The road is so narrow and often has piled up debris - urgently needs improvement."

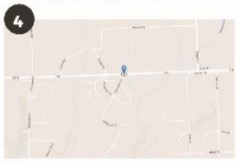
Hwy 101 eastbound from Selma Park Rd to Nestman Rd

"I have ridden it for 25 years with many close calls and one sideswipe hit...does not allow riding and large trucks side by side."

Hwy 101 multi-use path from Pratt Rd to Oceanview Dr

"Most adults I talk to tell me they don't cycle along the highway because it is too dangerous with cars going over 80km."

Hwy 101 at Poplars Trailer Park

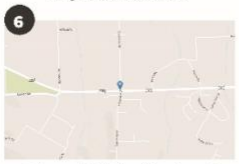


"Very difficult to cross during high traffic times, feel like I'm risking my life every time...won't let my child ride his bike to school due to crossing risk."

Gibsons Way from School Rd to Sunnycrest Rd

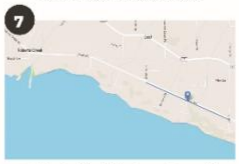
"Heavy ferry traffic and lots of foot traffic makes this a danger zone."

Hwy 101 at Oceanview Dr



"The speed limit should be dropped to 50km/h...there are always people on the highway either walking, running, or bicycling."

Lower Rd oceanside shoulder

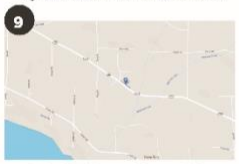


"This shoulder is high use often with young children and families. Widening will greatly reduce risk to all users."

Hwy 101 and Wharf St westbound

"A green bike lane is a good idea as this is a heavy traffic congestion area with many left and right turns, including pedestrians."

Hwy 101 westbound at Oldershaw Road

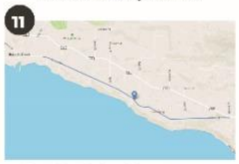


"The sight lines on this part of the highway are extremely poor (on a corner, with a hill, and a blind intersection)."

North Rd southbound from Hillcrest Rd to School Rd

"With a high school and an elementary school in close proximity, either one separated path or bike lanes in both directions is needed."

Lower Rd Advisory Bike Lane



"Repairing the shoulder or outer areas of the roadway would likely suffice."

Hwy 101 and Marlene Rd

"Putting crossing lights at Flume and Highway 101 might be even better as it is a dangerous intersection."

Background

Walking or cycling on the Sunshine Coast can range from safe and enjoyable to very dangerous, depending on the user and the location. Unfortunately, certain high-risk locations are unavoidable and still a part of many trips. In early 2020, members of TraC met with regional management at the Ministry of Transportation and Infrastructure (MOTI) to review active transportation infrastructure issues. One item discussed was the Community Safety Enhancement Program. Under this program active transportation enhancement projects are chosen by MOTI through consultation with local governments and law enforcement.

In June 2020 TraC developed a survey to provide more information regarding active transportation infrastructure needs on the Sunshine Coast. The survey identified twelve locations of concern and asked respondents to indicate which ones posed the highest risk to cyclists and pedestrians. The survey was distributed to over 1,000 subscribers on TraC's mailing list A public notice was also placed in the local newspaper inviting all coastal residents to participate.

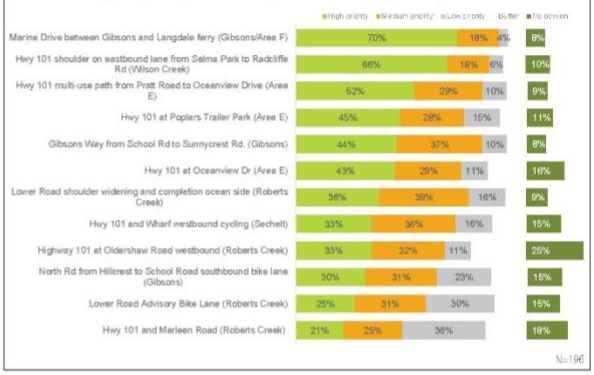
For a more detailed version of this report visit
http://transportationchoices.ca/wp/survey-results-2020/

A Call to Action

Survey respondents clearly indicated that:

- Much of the cycling and walking infrastructure on Sunshine Coast roadways is unsafe or not enjoyable in locations.
- There is inadequate separation from vehicles and dangerous highway crossings.
- Road shoulders are poorly-constructed and not maintained.
- There is a strong demand for a continuous coast-wide cycle route completely separated from vehicle travel.

Responses varied by where respondents lived, but Marine Drive between Gibsons and the Langdale ferry and Highway 101 in Wilson Creek were indicated as the highest priority areas for improvement among all respondents.



To view an interactive version of this chart visit **http://transportationchoices.ca/wp/survey-results-2020**

Key actions to rectify these issues include:

- The rapid completion of bikeable shoulders along Highway 101.
- Regular ongoing maintenance of these shoulders.
- Creation of a continuous coast-wide non-highway route using secondary roads.

Appendix D - Pedestrian and Bicycle Count Report for 8 locations along the Hwy 101 alignment from Langdale to Sechelt

Location	Sum of Ped and Bike, To Hourly	MUP Section	Date	Day	Time	Weather	# of Cyclists	# of Pedestrians
BC101@Davis Bay Wharf	137.5	**17**	2022-08-25	Thursday	12:00 – 14:00	hot sunny	13	262
BC101@Field Road	17.5	**15 and 16**	2022-09-23	Friday	12:30 – 14:30	cool cloudy	9	26
BC101@Field Road	29	**15 and 16**	2022-06-02	Thursday	10:15 – 12:15	warm sunny	9	49
BC101@Jack Road	4.5	**14 and 15**	2021-06-01	Tuesday	13:00 – 15:00	hot sunny	8	1
BC101@Jack Road	7	**14 and 15**	2021-06-26	Saturday	16:30 – 18:30	hot sunny	14	0
BC101@Jack Road	7.5	**14 and 15**	2021-08-06	Friday	09:30 – 11:30	cool cloudy	13	2
BC101@Jack Road	3	**14 and 15**	2022-07-14	Thursday	15:00 – 17:00	hot sunny	5	1
BC101@Joe Road	10	**9 and 10**	2021-08-10	Wednesday	15:30 – 17:30	warm sunny	13	7
BC101@Lower Road	11	**7 and 8**	2021-05-31	Monday	16:00 – 18:00	warm sunny	14	8
BC101@Lower Road	8.5	**7 and 8**	2021-06-27	Sunday	16:30 – 18:30	hot sunny	13	4
BC101@Lower Road	11	**7 and 8**	2021-07-31	Saturday	09:00 – 11:00	warm cloudy	18	4
BC101@Lower Road	10	**7 and 8**	2022-08-05	Friday	13:15 – 15:15	warm sunny	20	0
BC101@RCPP	4	**14**	2021-06-05	Saturday	15:30 – 17:30	cool cloudy	8	0
BC101@RCPP	1.5	**14**	2021-07-08	Thursday	18:30 – 20:30	warm sunny	3	0
BC101@RCPP	12	**14**	2021-08-29	Sunday	10:30 – 12:30	wam sunny	21	3
BC101@RCPP	8	**14**	2022-08-01	Monday	14:15 – 16:15	hot sunny	15	1
BC101@Reed Road	26	**3A**	2022-06-11	Saturday	12:00 – 14:00	cool rainy	30	22
BC101@Tsain-Ko Mall	9.5	**19 and 20**	2021-06-03	Thursday	07:00 – 09:00	warm sunny	9	10
BC101@Tsain-Ko Mall	16.5	**19 and 20**	2021-07-04	Sunday	13:30 – 15:30	warm sunny	19	14
BC101@Tsain-Ko Mall	11	**19 and 20**	2021-09-23	Thursday	17:30 – 19:30	warm sunny	9	13
BC101@Tsain-Ko Mall	24	**19 and 20**	2022-08-06	Saturday	10:45 – 12:45	warm sunny	15	33
BC101@Veteran's Road	16	**6 and 7**	2021-06-02	Wednesday	15:50 – 17:50	hot sunny	16	16
BC101@Veteran's Road	10.5	**6 and 7**	2021-06-25	Friday	12:00 – 14:00	hot sunny	10	11
BC101@Veteran's Road	31	**6 and 7**	2021-08-28	Saturday	09:30 – 11:30	warm sunny	36	26
BC101@Veteran's Road	25.5	**6 and 7**	2022-07-24	Sunday	15:00 – 17:00	warm sunny	30	21
Beach@Cedar Grove	9	**N/A**	2022-06-07	Tuesday	11:00 – 13:00	warm sunny	7	11
Beach@Cedar Grove	13.5	**N/A**	2022-06-08	Wednesday	16:00 – 18:00	warm sunny	9	18
Beach@Cedar Grove	14	**N/A**	2022-06-12	Sunday	12:00 – 14:00	wam sunny	19	9
Beach@Marlene	22.5	**N/A**	2022-06-06	Monday	16:30 – 18:30	warm sunny	15	30
Marine@Central	7.5	**1**	2022-06-07	Tuesday	15:00 - 17:00	warm cloudy	8	7
Marine@Central	17	**1**	2022-07-30	Saturday	10:00 – 12:00	hot sunny	28	6

Appendix E - Multiple Accounts Evaluation Segment Scoresheet for Connect the Coast

Online version
https://docs.google.com/spreadsheets/d/1n5MLD7B3NFHfhDdRGDjv1qC0GZCn5DAB/edit?usp=sharing&ouid=114173457544647101410&rtpof=true&sd=true

MAE Segment Descriptions

Segment ID	On From To	Side of Road	Facility Type	Length of Segment (M)
1	Marine Dr Langdale Ferry School Rd	Both	SHARED RD OR EDGE LANE	4278
2	Gibsons Way School Rd N Fletcher Rd	East	MULTI-USE PATH, ONE WAY BIKES	713
3	N Fletcher Rd Gibsons way School Rd	Both	NEIGHBOURHOOD ST BIKEWAY	601
4	Gibsons Way N Fletcher Rd Payne rd.	Both	PROTECTED BIKE LANE	1693
5	SCH Payne Rd Hough Rd	South	MULTI-USE PATH	403
6	Carmen Rd. Hough Rd. King Rd	ON	NEIGHBOURHOOD ST BIKEWAY	413
7	SCH King Rd Highland	South	MULTI-USE PATH	1559
8	SCH Highland rd Leek Rd.	South	MULTI-USE PATH	1367
9	SCH Leek Rd. Orange rd.	South	MULTI-USE PATH	2267
10	SCH Orange Rd. Malcolm Creek rd.	South	MULTI-USE PATH AND NEIGHBOURHOOD STREET BIKEWAY	868
11	SCH Malcom Creek Rd Largo Rd	South	MULTI-USE PATH	1338
12	SCH Largo Rd Roberts Creek Rd.	South	MULTI-USE PATH	1195
13	SCH Roberts Creek Rd W of Pell Rd.	South	MULTI-USE PATH	1605
14	SCH W of Pell Rd. Jack Rd.	South	MULTI-USE PATH	1969
15	SCH Jack Rd Field Rd.	South	MULTI-USE PATH	1341
16	SCH Field Rd. Whitaker Rd.	Both	MULTI-USE PATH ON BOTH SIDES, UNI DIRECTIONAL BIKE TRAVEL	1025
17	SCH whitaker rd Bay rd.	Both	PROTECTED BIKE LANES & PEDESTRIAN PATHS ON EACH SIDE	977
18	SCH Bay Rd. Havies Rd.	Both	WESTBOUND - MULTI-USE PATH W UNIDIRECTIONAL BIKE TRAVEL, EASTBOUND - BIKE ONLY PATH	921
19	SCH Havies Rd chelpl Ave	Both	MULTI-USE PATH ON BOTH SIDES, UNI DIRECTIONAL BIKE TRAVEL	2362
20	SCH chelpl ave. wharf ave	both	PROTECTED BIKE LANES	578
21	wharf Ave, Teredo St Dolphin st Shorecliffe Ave	both	PROTECTED BIKE LANES	1009
22	SCH Shorecliffe ave Norwest Bay Rd	Both	MULTI-USE PATH ON BOTH SIDES, UNI DIRECTIONAL BIKE TRAVEL	1221
ALTERNATE ROUTES				
1A	SCH Port Mellon Hwy Stewart Rd	North	MULTI-USE PATH	2407
2A	Stewart Rd, North Rd SCH Reed Rd	West and North	MULTI-USE PATH	1620
3A	North Rd Reed Rd Gibsons Way	Both	PROTECTED BIKE LANES	822

MAE Segment Scores: Projected Demand

				Projected Demand							
		Distance Decay between Priority Destinations		Population Density		Mode Share of Cycling		Ped and Bike Counts	Highest Count per Segment	Score	Project Demand Total
Segment ID	On From To	Segment Destination	Langdale, Gibsons, Sechelt = 5 Roberts Creek, Davis Bay, Wilson Creek = 3 Outside 3 km of Community = 1	Population Density / hectacre	15+, 10 pts. 10-14, 8 pts. 9-5, 6 pts. 1-4 4 pts. <1 2 pt.	From local Muni data (2016 Census)	>5%, 5 pts 4-5%, 4 pts 3-4%, 3 pts 2-3%, 2 pts 0-2%, 1 pt	Location observed	Highest Count per Segment (per hr) and Date	40 +, 5 pts 20 - 39, 3 pts 1 -19, 1 pt	/25 max
1	Marine Dr Langdale Ferry School Rd Gibsons Way	Langdale/Gibsons	5	2.06	4	0	0	Marine@Central	17 - 220607	1	10
2	School Rd N Fletcher Rd N Fletcher Rd Gibsons way	Gibsons	5	15.58	10	0	0	**Average of Nearest Counts**	24	3	18
3	School Rd Gibsons Way N Fletcher Rd	Gibsons	5	15.58	10	0	0	**Average of Nearest Counts**	24	3	18
4	Payne rd. SCH Payne Rd	Gibsons	5	5.63	6	5.2	5	**Average of Nearest Counts**	24	3	19
5	Hough Rd Carmen Rd. Hough Rd.	Gibsons	5	3.8	4	5.2	5	**Average of Nearest Counts** BC101@Veteran's Road	24	3	17
6	King Rd SCH King Rd	Gibsons	5	6.18	6	0	0	BC101@Veteran's Road	31 - 210828	3	14
7	Highland SCH Highland rd	Gibsons	5	6.18	6	2.5	2	BC101@Lower Road	31 - 210828	3	16
8	Leek Rd. SCH Leek Rd.	Roberts Creek/Gibsons	1	1.01	4	4.5	4		11 - 210731	1	10
9	Orange rd. SCH Orange Rd.	Roberts Creek	1	1.01	4	4.5	4	**Average of Nearest Counts**	11.5	1	10
10	Malcolm Creek rd. SCH Malcom Creek Rd	Roberts Creek	3	1.49	4	6.9	5	**Average of Nearest Counts**	11.5	1	13
11	Largo Rd SCH Largo Rd	Roberts Creek	3	1.49	4	6.9	5	**Average of Nearest Counts**	11.5	1	13
12	Roberts Creek Rd. SCH Roberts Creek Rd	Roberts Creek	3	7.21	6	0	0	**Average of Nearest Counts**	11.5	1	10
13	W of Pell Rd. SCH W of Pell Rd.	Roberts Creek	3	4.14	4	5.6	5	**Average of Nearest Counts**	11.5	1	13
14	Jack Rd. SCH Jack Rd	Roberts Creek	3	1.45	4	0	0	BC101@RCPP BC101@Field Road	12 - 210829	1	8
15	Field Rd. SCH Field Rd.	Roberts Creek	3	1.45	4	0	0	BC101@Field Road	29 - 220602	3	10
16	Whitaker Rd. SCH whitaker rd	Wilson Creek / Davis Bay	3	1.45	4	0	0	BC101@Davis Bay Wharf	29 - 220602	3	10
17	Bay rd. SCH Bay Rd.	Davis Bay	3	1.45	4	0	0		137.5 - 220825	5	12
18	Havies Rd. SCH Havies Rd	Davis Bay / Sechelt	3	1.99	4	0	0	**Average of Nearest Counts** BC101@Tsain-Ko Mall	80.75	5	12
19	chelpi Ave SCH chelpi ave.	Sechelt	5	1.99	4	0	0	BC101@Tsain-Ko Mall	24 - 220806	3	12
20	wharf ave wharf Ave, Teredo St Dolphin st	Sechelt	5	14.63	8	4.8	4		24 - 220806	3	20
21	Shorecliffe Ave SCH Shorecliffe ave	Sechelt	5	9.95	6	0	0	**Nearest Count**	24 - 220806	3	14
22	Norwest Bay Rd	Sechelt	5	4.9	4	2.8	2	**Nearest Count**	24 - 220806	3	14
ALTERNATE ROUTES											
1A	SCH Port Mellon Hwy Stewart Rd Stewart Rd, North Rd	Langdale/Gibsons	5	0.02	2	0	0	**Average of Nearest Counts**	15	1	8
2A	SCH Reed Rd North Rd	Gibsons	5	0.02	2	0	0	**Average of Nearest Counts** BC101@Reed Road	15	1	8
3A	Reed Rd Gibsons Way	Gibsons	5	5.63	6	5.2	5		13 - 220611	1	17

MAE Scores: Connectivity and Ease of Use

		Connectivity & Ease of Use								
		Connection to existing AT Routes		Parrallel Alternative Route Connections	Good Alternative Exists, 0 pts Problematic or Circuitous Alternative, 3 pts No Real Alternative, 5 pts.	Addresses Challenges or Conflicts		Transit Stops per km		Connectivity / Ease of Use Total
Segment ID	On From To	From SCRD bike layer	2+ connections, 5 pts 1 connection, 3 pts	Reasonable alternative available.		Segment has bike or pedestrian related collision within last 5 years (ICBC)	2+ Collisions or Fatality, 5 pts 1 Collision, 3 pts	Transit Stops per km	3+ Stops, 5 pts 1 - 2 Stops, 3 pts >0 and<1, 1 pts	20
	Marine Dr Langdale Ferry									
1	School Rd Gibsons Way	2	5	Problematic	3	none	0	4.7	5	**13**
	School Rd N Fletcher Rd									
2	N Fletcher Rd Gibsons way	1	3	Problematic	3	1 bike	3	3.4	5	**14**
	School Rd Gibsons Way									
3	N Fletcher Rd Payne rd.	0	0	Problematic	3	1 ped, 1 bike	5	0.0	0	**8**
	SCH Payne Rd									
4	Hough Rd Carmen Rd.	1	3	Problematic	3	4 ped, 3 bike	5	5.0	5	**16**
	Hough Rd. King Rd									
5	SCH Highland	2	5	Problematic	3	none	0	0.0	0	**8**
	Highland rd Leek Rd.									
6	SCH Leek Rd.	2	5	Problematic	3	1 bike	3	2.4	3	**14**
	Orange rd. SCH									
7	Orange Rd. Malcolm Creek rd.	2	5	None	5	none	0	1.9	3	**13**
	SCH Malcom Creek Rd									
8	Largo Rd SCH	2	5	Problematic	3	none	0	1.5	3	**11**
	Largo Rd Roberts Creek Rd.									
9	SCH Roberts Creek Rd	0	0	Problematic	3	none	0	1.3	3	**6**
	W of Pell Rd. SCH									
10	W of Pell Rd. Jack Rd.	2	5	Good	0	1 bike	3	1.2	3	**11**
	SCH Jack Rd									
11	Field Rd. SCH	1	3	None	5	none	0	1.5	3	**11**
	Field Rd. Whitaker Rd.									
12	SCH whitaker rd	0	0	None	5	1 ped	3	0.7	1	**9**
	Bay rd. SCH									
13	Bay Rd. Havies Rd.	0	0	None	5	1 ped	3	2.9	3	**11**
	SCH Havies Rd									
14	chelpi Ave SCH	0	0	Good	0	none	0	7.2	5	**5**
	chelpi ave. wharf ave									
15	wharf Ave, Teredo St Dolphin st	0	0	Problematic	3	none	0	2.2	3	**6**
	Shorecliffe Ave SCH									
16	Shorecliffe ave Norwest Bay Rd	0	0	None	5	1 ped	3	7.0	5	**13**
	SCH chelpi ave.									
17	wharf ave wharf Ave, Teredo St	0	0	None	5	none	0	1.7	3	**8**
	Dolphin st Shorecliffe Ave									
18	SCH Shorecliffe ave	0	0	Good	0	8 ped, 1 bike	3	0.0	0	**3**
	Norwest Bay Rd SCH	0	0	None	4	none	0	0.8	1	**5**
ALTERNATE ROUTES										
	SCH Port Mellon Hwy									
1A	Stewart Rd Stewart Rd, North Rd	1	3	Problematic	3	none	0	0.0	0	**6**
	SCH Reed Rd									
2A	North Rd Reed Rd	0	0	Problematic	3	1 bike	3	0.6	1	**7**
3A	Gibsons Way	1	3	Problematic	3	2 bike	5	4.9	5	**16**

MAE Scores: Community Support

			Support							
		SCRD Prelim Input		TRAC Support		Public Survey Ranking		Alignment with Prov Infrastructure Grant Requirements		**Support Total**
Segment ID	**On From To**	Prelim ranking of segment from SCRD Staff	Very High - 5pts High - 4pts Medium High - 3pts Medium Low - 2pts Low - 1 Very Low - 0 pts	Ranking of segment by TRAC	Very High - 5pts High - 4pts Medium High - 3pts Medium Low - 2pts Low - 1 Very Low - 0 pts	Ranking from 2020 AT Survey Supplementary Report 1	High Ranking, 5pts Medium Ranking, 3 pts Low Ranking, 1 pt Unranked, 0 pts	Fully Qualifies, partially qualifies, does not qualify	Entire segment is on planned route, 5 pts Part of Segment is on planned route, 3 pts No Part of Segment is on planned route, 0 pts	**/15 max**
1	Marine Dr Langdale Ferry School Rd Gibsons Way	Medium High	3	High	4	Rank 1	5	Entire, SCRD BP Area G	5	**17**
2	School Rd N Fletcher Rd N Fletcher Rd Gibsons way	Very Low	0	Very Low	0	Unranked	0	Entire, TC Map 3	5	**5**
3	School Rd Gibsons Way	Very Low	0	Very Low	0	Unranked	0	No part on planned route	0	**0**
4	N Fletcher Rd Payne rd. SCH	Very High	5	Very Low	0	Rank 5	3	Entire, TC Map 3	5	**13**
5	Payne Rd Hough Rd Carmen Rd.	Very High	5	Very High	5	Rank 3	5	Entire, TC Map 3	5	**20**
6	Hough Rd. King Rd SCH	Very High	5	Very High	5	Rank 3	5	Entire, SCRD BP Area G	5	**20**
7	King Rd Highland SCH	Very High	4	Very High	5	Rank 4, Rank 6	5	Entire, SCRD BP Area D	5	**19**
8	Highland rd Leek Rd. SCH	Very Low	0	Very Low	0	Unranked	0	Entire, SCRD BP Area D	5	**5**
9	Leek Rd. Orange rd. SCH	Very Low	0	Very Low	0	Rank 8	1	Entire, SCRD BP Area D	5	**6**
10	Orange Rd. Malcolm Creek rd. SCH	Medium Low	2	Very Low	0	Unranked	0	Entire, SCRD BP Area D	5	**7**
11	Malcom Creek Rd Largo Rd SCH	Medium Low	2	Very Low	0	Unranked	0	Entire, SCRD BP Area D	5	**7**
12	Largo Rd Roberts Creek Rd. SCH	Very Low	0	Very Low	0	Unranked	0	Entire, SCRD BP Area D	5	**5**
13	Roberts Creek Rd W of Pell Rd. SCH	Very Low	0	Medium Low	2	Unranked	0	Entire, SCRD BP Area D	5	**7**
14	W of Pell Rd. Jack Rd. SCH	Very Low	0	Medium Low	2	Unranked	0	Entire, SCRD BP Area D	5	**7**
15	Jack Rd Field Rd. SCH	Very Low	0	Medium Low	2	Unranked	0	Entire, SCRD BP Area D	5	**7**
16	Field Rd. Whitaker Rd. SCH	Very High	5	Very Low	0	Unranked	0	Entire, SCRD BP Area S	5	**10**
17	whitaker rd Bay rd. SCH	Very High	5	Very Low	0	Unranked	0	Entire, SCRD BP Area S	5	**10**
18	Bay Rd. Havies Rd. SCH	Very High	5	High	4	Rank 2	5	Entire, SCRD BP Area S	5	**19**
19	Havies Rd chelpi Ave SCH	Very High	5	High	4	Rank 2	5	Entire, SCRD BP Area S	5	**19**
20	chelpi ave. wharf ave wharf Ave, Teredo St	Very High	5	High	4	Rank 8	1	Entire, SCRD BP Area S	5	**15**
21	Dolphin st Shorecliffe Ave SCH	Very Low	0	Very Low	0	Rank 8	1	Entire, SCRD BP Area S	5	**6**
22	Shorecliffe ave Norwest Bay Rd	Very High	5	Very Low	0	Unranked	0	Entire, SCRD BP Area S	5	**10**
ALTERNATE ROUTES										
1A	SCH Port Mellon Hwy Stewart Rd Stewart Rd, North Rd	Medium High	3	Very Low	0	Unranked	0	Entire, SCRD BP Area F	5	**8**
2A	SCH Reed Rd North Rd	Medium High	3	Very Low	0	Unranked	0	Entire, SCRD BP Area F	5	**8**
3A	Reed Rd Gibsons Way	Medium High	3	Very Low	0	Rank 10	1	Entire, SCRD BP Area F	5	**9**

MAE Scores: Cost, Conflicts with Private Property and Project Alignment

			Cost					
		Fac type per km		Private Property Conflicts	0 Expected Property Conflicts, 5 pts 1 - 10 Minor Conflicts, 3 pts 11 - 20 Minor Conflicts, or 1 Definite Impact , 1 pt 20+ Minor Conflicts, or 2+ Definite Impacts, 0 pts	Planned Projects		Cost Total
Segment ID	On From To	$/km	< 1 Mil$, 5 pts 1 - 3 Mil$, 3 pts >3 Mil$, 0 pts	# of likely property conflicts, degree of conflicts		Project aligns with planned MOTI or Muni road project	Aligns with planned road project, 5 pts Partial alignment, 3 pts	/15 max
1	Marine Dr Langdale Ferry School Rd	$ 107,162	5	NA	5	None	0	10
2	Gibsons Way School Rd N Fletcher Rd	$ 4,497,477	0	1 minor (565 Seaview Rd) Local gvt lot that extends to middle of intersection (417 Marine, uncscored)	3	None	0	3
3	Gibsons way School Rd Gibsons Way	$ 231,660	5	NA	5	None	0	10
4	N Fletcher Rd Payne rd. SCH	$ 87,546	5	None	5	None	0	10
5	Payne Rd Hough Rd Carmen Rd.	$ 1,705,971	3	1 Minor (1103 SCH)	3	None	0	6
6	Hough Rd. King Rd SCH	$ 231,660	5	NA	5	None	0	10
7	King Rd Highland SCH	$ 4,480,573	0	7 Minor (1542 - 1572 Larchberry Way)	3	None	0	3
8	Highland rd Leek Rd. SCH	$ 1,705,971	3	1 Minor (740 Leek Rd)	3	None	0	6
9	Leek Rd. Orange rd. SCH	$ 1,705,971	3	2 Major (2089 SCH, 2475 SCH) and 3 Minor	0	None	0	3
10	Orange Rd. Malcolm Creek rd. SCH	$ 1,360,997	3	4 Minor (2534, 2572 Miles Rd, and 2643, 2563 SCH)	3	Highway 101 - Joe Road Intersection Improvements underway	0	6
11	Malcom Creek Rd Largo Rd SCH	$ 1,705,971	3	5 Minor (2781, 2945, 2897 SCH, 1152 Blackburn Rd, and PID 010053875)	3	Highway 101 - Joe Road Intersection Improvements underway	0	6
12	Largo Rd Roberts Creek Rd. SCH	$ 1,705,971	3	None	5	None	0	8
13	Roberts Creek Rd W of Pell Rd. SCH	$ 1,705,971	3	2 Minor (3299 SCH and 1319 Roberts Creek Rd)	3	None	0	6
14	W of Pell Rd. Jack Rd. SCH	$ 1,705,971	3	1 Minor (1570 Jack Rd)	3	None	0	6
15	Jack Rd Field Rd. SCH	$ 1,705,971	3	5 Minor (416 Browning, 4315 SCH, 4339 SCH, pid 005430861)	3	None	0	6
16	Field Rd. Whitaker Rd. SCH	$ 8,994,954	0	12 Minor (4433 - 4595 SCH)	1	None	0	1
17	whitaker rd Bay rd. SCH	$ 22,575,245	0	6 Minor (4636 - 4648 SCH, 4684 SCH, 4748 SCH)	3	None	0	3
18	Bay Rd. Havies Rd. SCH	$ 5,091,741	0	5 Minor (4902 - 4908 SCH, 4913 Geer Rd, 5021 SCH, 5021 Geer Rd)	3	None	0	3
19	Havies Rd chelpi Ave SCH	$ 8,994,954	0	60 Minor Conflicts	0	None	0	0
20	chelpi ave. wharf ave wharf Ave, Teredo St	$ 1,091,107	3	2 Minor (5629 SCH and Band Lands)	3	None	0	6
21	Dolphin st Shorecliffe Ave SCH	$ 1,091,107	3	8 Minor (5559 - 5549 Wharf Ave, 5485 - 5477 Wharf Ave, 5454 Trail Ave, 5729 Teredo St), 1 Major (5655 Teredo St)	1	None	0	4
22	Shorecliffe ave Norwest Bay Rd	$ 3,054,261	0	6 Minor (5849 - 5860 Barnacle St, 5872 SCH, 6010 - 6014 Silverstone Ln, 6133 SCH) 1 Major (5860 Barnacle St)	1	None	0	1
ALTERNATE ROUTES								
1A	SCH Port Mellon Hwy Stewart Rd Stewart Rd, North Rd	$ 11,287,623	0	1 possible (1405 Port Mellon Hwy is crown land with the existing hwy built on it)	5	None	0	5
2A	SCH Reed Rd North Rd	$ 1,705,971	3	1 Minor (1125 Stewart Rd)	3	None	0	6
3A	Reed Rd Gibsons Way	$ 1,091,107	3	NA	5	None	0	8

MAE Scores: Conflicts with other Modes and Infrastructure

		Conflicts with Other Modes and Infrastucture								
		Driveways and Intersections crossed per km		Hydro and Streetlight Poles Potential Conflicts		Need to Remove or Narrow Shoulders		Need to Narrow or Remove Travel Lanes		Conflicts on Other Modes and Infrastructure Total
Segment ID	On From To	Driveways and Intersections crossed per km	0 - 10 crossed, 5 pts 11 - 40 crossed, 3 pts >40 crossed, 0 pts (NSB = 5)	Streetlight and Hydro poles within 5m of path per km	0 - 5 conflicts, 5 pts 6 - 10 conflicts, 3 pts 11 - 20 conflicts, 1 pt >20 conflicts, 0 pts	No Change, Narrow Shoulders, Remove Shoulders	No Change, 5 pts Narrow, 2 pts Remove, 0 pts	No Change, Narrow of Travel Lane, Removal of Travel Lane	No Change, 5 pts Narrow, 2 pts Remove, 0 pts	/20 MAX
1	Marine Dr Langdale Ferry School Rd	22	3	NA	5	NA	5	NA	5	18
2	Gibsons Way School Rd N Fletcher Rd	7	5	15	1	No Change	5	No Change	5	16
3	N Fletcher Rd Gibsons way School Rd	NA	5	NA	5	NA	5	NA	5	20
4	Gibsons Way N Fletcher Rd Payne rd. SCH	40	3	NA	5	Narrow	2	Narrow (@ intersections with left turn lane)	2	12
5	Payne Rd Hough Rd Carmen Rd.	10	5	7	3	No Change	5	No Change	5	18
6	Hough Rd. King Rd SCH	NA	5	NA	5	NA	5	NA	5	20
7	King Rd Highland SCH	4	5	5	5	No Change	5	No Change	5	20
8	Highland rd Leek Rd. SCH	4	5	4	5	No Change	5	No Change	5	20
9	Leek Rd. Orange rd. SCH	2	5	5	5	Narrow	2	No Change	5	17
10	Orange Rd. Malcolm Creek rd. SCH	10	5	10	3	No Change	5	No Change	5	18
11	Malcom Creek Rd Largo Rd SCH	6	5	18	1	Narrow	2	No Change	5	13
12	Largo Rd Roberts Creek Rd. SCH	7	5	5	5	No Change	5	No Change	5	20
13	Roberts Creek Rd W of Pell Rd. SCH	6	5	8	3	Narrow	2	No Change	5	15
14	W of Pell Rd. Jack Rd. SCH	2	5	9	3	No Change	5	No Change	5	18
15	Jack Rd Field Rd. SCH	1	5	7	3	No Change	5	No Change	5	18
16	Field Rd. Whitaker Rd. SCH	28	3	35	0	Narrow	2	No Change	5	10
17	whitaker rd Bay rd. SCH	29	3	35	0	Narrow	2	No Change	5	10
18	Bay Rd. Havies Rd. SCH	51	0	61	0	Remove	0	No Change	5	5
19	Havies Rd chelpi Ave SCH	41	0	37	0	Remove	0	Narrow	2	2
20	chelpi ave. wharf ave wharf Ave, Teredo St	31	3	33	0	No Change	5	Remove	0	8
21	Dolphin st Shorecliffe Ave SCH	36	3	26	0	Narrow	2	Narrow	2	7
22	Shorecliffe ave Norwest Bay Rd	16	3	25	0	Remove	0	No Change	5	8
ALTERNATE ROUTES										
1A	SCH Port Mellon Hwy Stewart Rd	2	5	2	5	Narrow (as MUP begins)	2	No Change	5	17
2A	Stewart Rd, North Rd SCH Reed Rd	6	5	12	1	No Change	5	No Change	5	16
3A	North Rd Reed Rd Gibsons Way	39	3	NA	5	No Change	5	No Change	5	18

MAE Weighted and Combined Scores & Estimated Construction Cost for Each Segment

Segment ID	On / From / To	Projected Demand	Connectivity & Safety	Support	PD/C&S/S Grand Total	*PD/C&S/S Ranking*	Cost	Conflicts w/ Other Modes and Infrastructure	C/C Grand Total	*C/C Ranking*	Appx Cost
		75	30	20	125		30	20	50		
	Marine Dr										
	Langdale Ferry										
1	School Rd	30	26	51	107	*8*	20	18	38	*23*	$460,000
	Gibsons Way										
	School Rd										
2	N Fletcher Rd	54	28	15	97	*10*	6	16	22	*8*	$3,210,000
	N Fletcher Rd										
	Gibsons way										
3	School Rd	54	16	0	70	*17*	20	20	40	*24*	$140,000
	Gibsons Way										
	N Fletcher Rd										
4	Payne rd.	57	32	39	128	*3*	20	12	32	*19*	$150,000
	SCH										
	Payne Rd										
5	Hough Rd	51	16	60	127	*4*	12	18	30	*15*	$690,000
	Carmen Rd.										
	Hough Rd.										
6	King Rd	42	28	60	130	*2*	20	20	40	*24*	$100,000
	SCH										
	King Rd										
7	Highland	48	26	57	131	*1*	6	20	26	*11*	$6,990,000
	SCH										
	Highland rd										
8	Leek Rd.	30	22	15	67	*20*	12	20	32	*19*	$2,330,000
	SCH										
	Leek Rd.										
9	Orange rd.	30	12	18	60	*24*	6	17	23	*9*	$3,900,000
	SCH										
	Orange Rd.										
10	Malcolm Creek rd.	39	12	21	72	*16*	12	18	30	*15*	$1,180,000
	SCH										
	Malcom Creek Rd										
11	Largo Rd	39	14	21	74	*15*	12	13	25	*10*	$2,280,000
	SCH										
	Largo Rd										
12	Roberts Creek Rd.	30	24	15	69	*18*	16	20	36	*22*	$2,040,000
	SCH										
	Roberts Creek Rd										
13	W of Pell Rd.	39	22	21	82	*11*	12	15	27	*12*	$2,740,000
	SCH										
	W of Pell Rd.										
14	Jack Rd.	24	22	21	67	*20*	12	18	30	*15*	$3,360,000
	SCH										
	Jack Rd										
15	Field Rd.	30	18	21	69	*18*	12	18	30	*15*	$2,290,000
	SCH										
	Field Rd.										
16	Whitaker Rd.	30	22	30	82	*11*	2	10	12	*4*	$9,220,000
	SCH										
	whitaker rd										
17	Bay rd.	36	10	30	76	*14*	6	10	16	*6*	$22,060,000
	SCH										
	Bay Rd.										
18	Havies Rd.	36	12	57	105	*9*	6	5	11	*3*	$4,690,000
	SCH										
	Havies Rd										
19	chelpi Ave	36	26	57	119	*6*	0	2	2	*1*	$21,250,000
	SCH										
	chelpi ave.										
20	wharf ave	60	16	45	121	*5*	12	8	20	*7*	$630,000
	wharf Ave, Teredo St										
	Dolphin st										
21	Shorecliffe Ave	42	6	18	66	*22*	8	7	15	*5*	$1,100,000
	SCH										
	Shorecliffe ave										
22	Norwest Bay Rd	42	10	30	82	*11*	2	8	10	*2*	$3,730,000
ALTERNATE ROUTES											$ 94,540,000
	SCH										
	Port Mellon Hwy										
1A	Stewart Rd	24	12	24	60	*24*	10	17	27	*12*	$27,200,000
	Stewart Rd, North Rd										
	SCH										
2A	Reed Rd	24	14	24	62	*23*	12	16	28	*14*	$2,800,000
	North Rd										
	Reed Rd										
3A	Gibsons Way	51	32	27	110	*7*	16	18	34	*21*	$900,000
											$ 125,440,000

MAE Scores and Ranking for Grouped Segments

SEG Groups	Demand Weighted	Connections Weighted Adjusted	Support Weighted	Sum Total, Weighted	Rank, Weighted,
4,5,6,7	49.5	25.5	36	**111**	*1*
18,19,20	44	18.0	35.3	**97.3**	*2*
1,2,3	46	23.3	14.7	**84.0**	*3*
16,17	33	16.0	20	**69**	*4*
1A,2A,3A	33	19.3	16.7	**69**	*4*
21,22	42	8.0	16	**66**	*6*
13,14,15	31	20.7	14.0	**65.7**	*7*
8,9,10,11,12	33.6	16.8	12	**62.4**	*8*

SEG Groups	Cost Weighted	Conflicts Weighted	Sum Total, Weighted	Rank, Weighted
18,19,20	6.0	5.0	**11.0**	*1*
21,22	5.0	7.5	**12.5**	*2*
16,17	4.0	10.0	**14.0**	*3*
13,14,15	12.0	17.0	**29.0**	*4*
8,9,10,11,12	11.6	17.6	**29.2**	*5*
1A,2A,3A	12.7	17.0	**29.7**	*6*
4,5,6,7	14.5	17.5	**32.0**	*7*
1,2,3	15.3	18.0	**33.3**	*8*

Appendix F: Images showing Existing Typical, Best and Worst conditions within each Route Segment Identified within the Connect the Coast Study Area

Representative samples are show on the following page, a full listing can be found at the following address.
https://drive.google.com/drive/folders/1dsQurjXtSHWf5VmpiEUA2OSNcm1HnP4Z

SEGMENT 1 – Marine Drive: Langdale to Lower Gibsons

SEGMENT 2 – Gibsons Way: School Road at Marine Drive to North Fletcher at Highway 101

SEGMENT 3 – North Fletcher: Gibsons Way at Highway 101 to School Road at Marine Drive

SEGMENT 4 - Highway 101: North Fletcher to Payne

SEGMENT 5 – Highway 101: Payne to Hough

SEGMENT 6: Hough to King on Carmen Road

SEGMENT 7: King to Highland/Lower Road

SEGMENT 7: King to Highland/Lower Road

SEGMENT 8: Highland to Leek

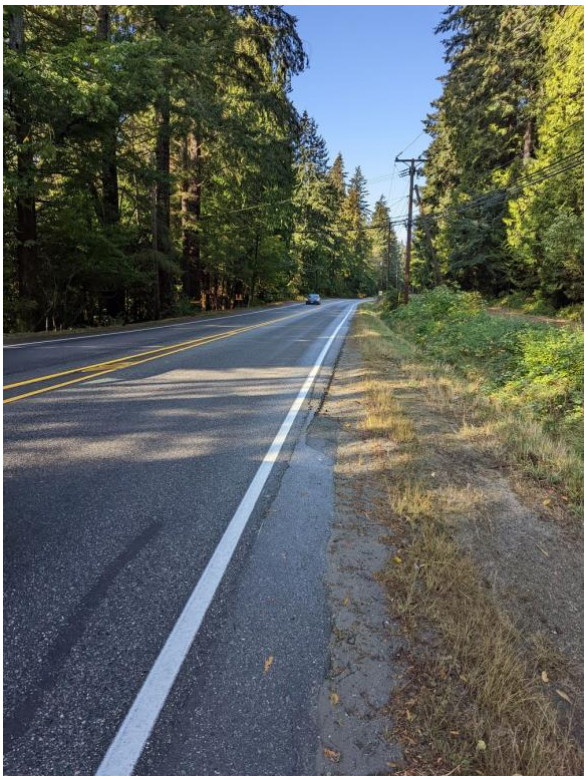
SEGMENT 9 – Leek to Orange/Joe

SEGMENT 10 – Orange/Joe to Malcolm Creek

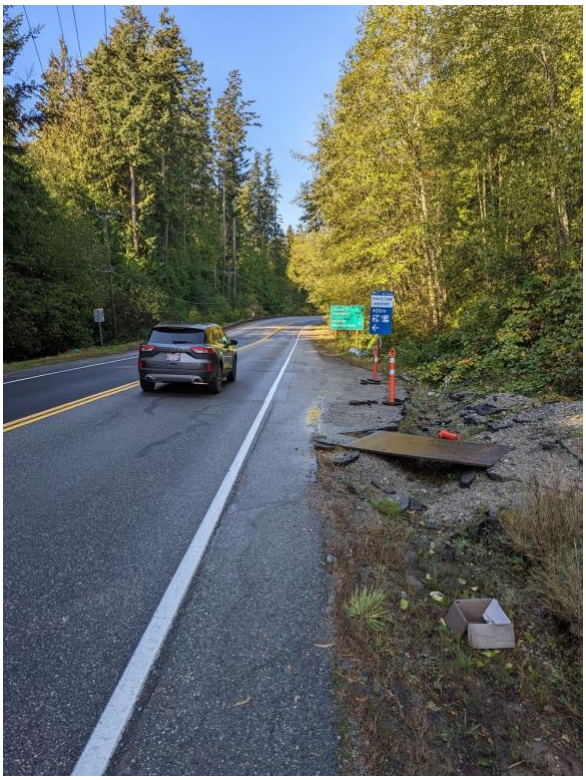
SEGMENT 11 – Malcolm Creek to Largo

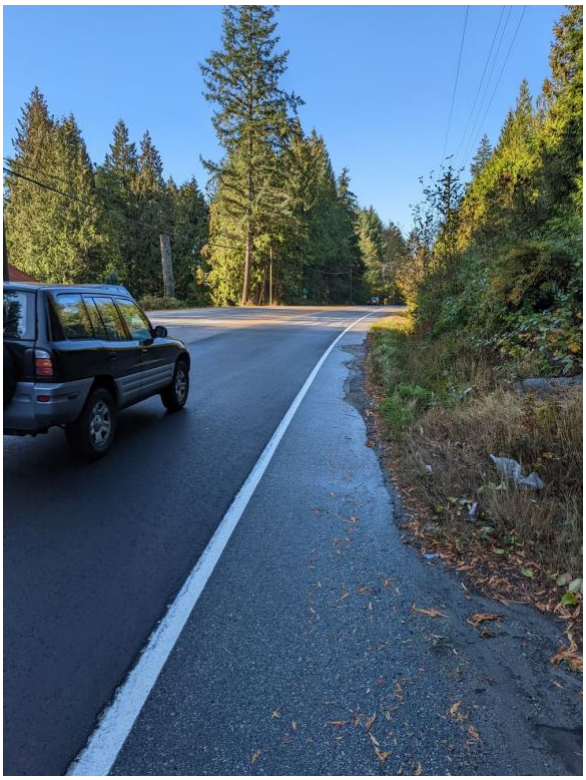
SEGMENT 12 – Largo to Roberts Creek Road

SEGMENT 13 – Roberts Creek Road to West of Pell



SEGMENT 14 – West of Pell to Jack Road





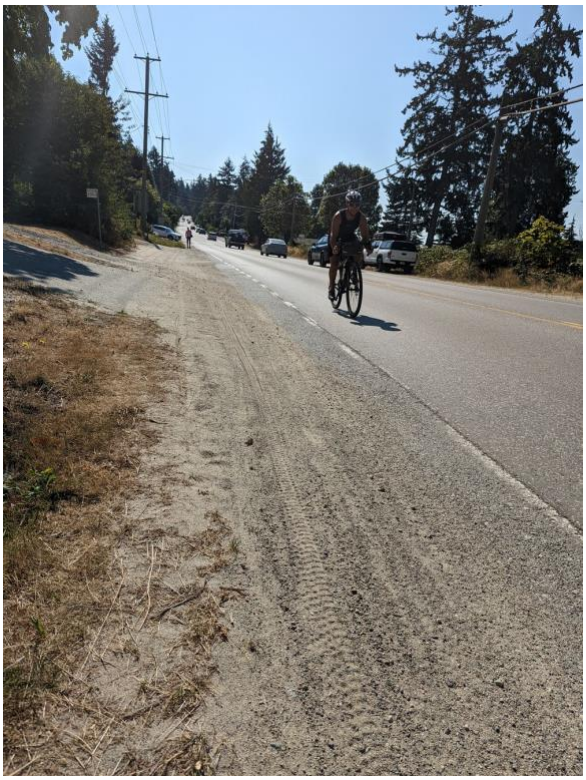
SEGMENT 15 – Jack to Field

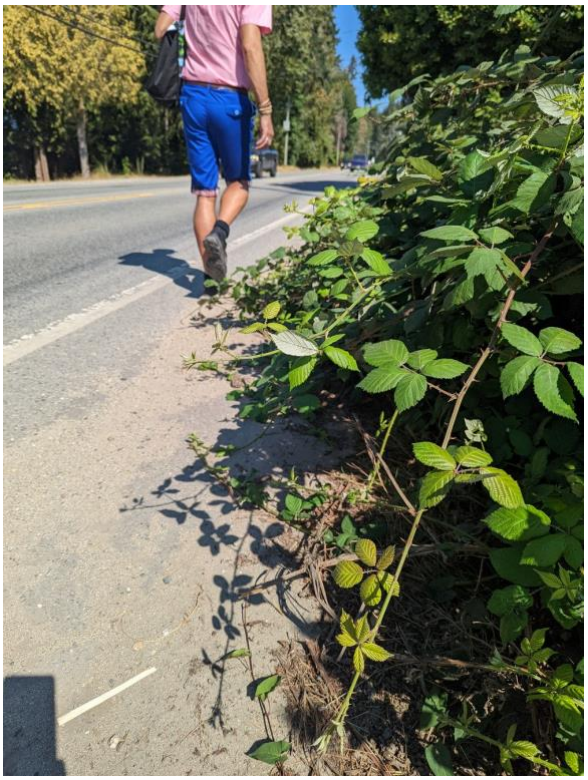
SEGMENT 16 – Field to Whitaker

SEGMENT 17 – Whitaker to Bay

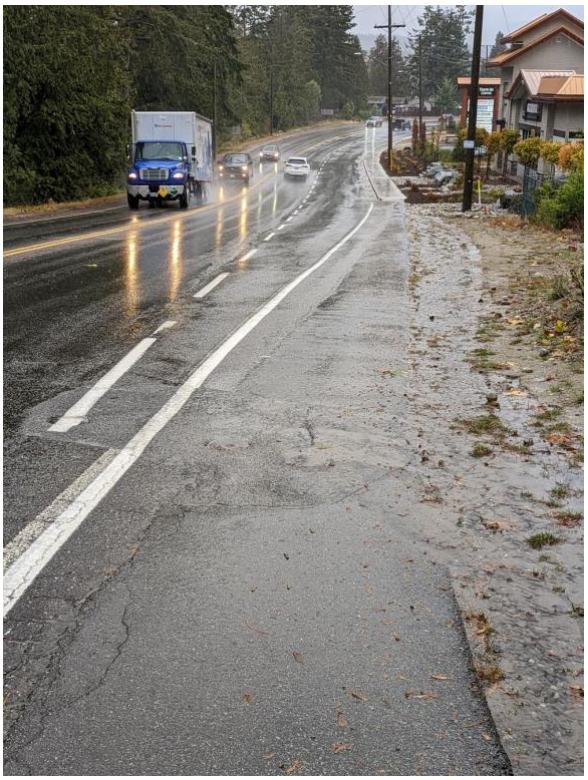
SEGMENT 18 – Bay to Havies

SEGMENT 19 – Havies to Chelpi





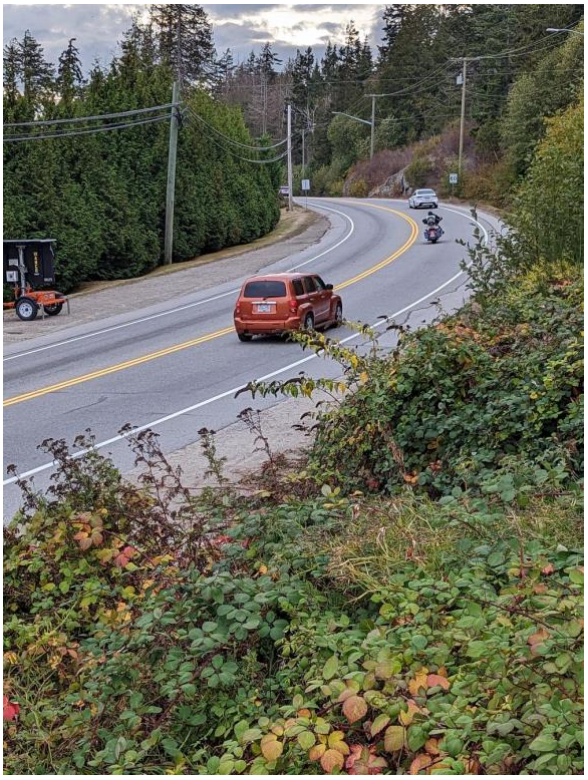
SEGMENT 19 – Havies to Chelpi (continued)



SEGMENT 20 – Chelpi to Wharf

SEGMENT 21 – Wharf and Teredo Streets: from Dolphin to Shorncliff

SEGMENT 22 – Shorncliff to Norwest Bay Road



SEGMENT 1A - Highway 101: Langdale Ferry Terminal to Stewart Road

SEGMENT 2A – Stewart Road and North Road: Highway 101 to Reed Road

SEGMENT 3A – North Road: from Reed to Gibsons Way

COMING SOON

Appendix G: Property Conflicts within each Segment of the Connect the Coast Route

Segment ID	# of likely property conflicts, degree of conflicts
1	NA
2	1 minor (565 Seaview Rd) Local gvt lot that extends to middle of intersection (417 Marine, unscored)
3	NA
4	None
5	1 Minor (1103 SCH)
6	NA
7	7 Minor (1542 - 1572 Larchberry Way)
8	1 Minor (740 Leek Rd)
9	2 Major (2089 SCH, 2475 SCH) and 3 Minor
10	4 Minor (2534, 2572 Miles Rd, and 2643, 2563 SCH)
11	5 Minor (2781, 2945, 2897 SCH, 1152 Blackburn Rd, and PID 010053875)
12	None
13	2 Minor (3299 SCH and 1319 Roberts Creek Rd)
14	1 Minor (1570 Jack Rd)
15	5 Minor (416 Browning, 4315 SCH, 4339 SCH, pid 005430861)
16	12 Minor (4433 - 4595 SCH)
17	6 Minor (4636 - 4648 SCH, 4684 SCH, 4748 SCH)
18	5 Minor (4902 - 4908 SCH, 4913 Geer Rd, 5021 SCH, 5021 Geer Rd)
19	60 Minor Conflicts
20	2 Minor (5629 SCH and Band Lands)
21	8 Minor (5559 - 5549 Wharf Ave, 5485 - 5477 Wharf Ave, 5454 Trail Ave, 5729 Teredo St), 1 Major (5655 Teredo St)
22	6 Minor (5849 - 5860 Barnacle St, 5872 SCH, 6010 - 6014 Silverstone Ln, 6133 SCH) 1 Major (5860 Barnacle St)
ALTERNATE ROUTES	
1A	1 possible (1405 Port Mellon Hwy is crown land with the existing hwy built on it)
2A	1 Minor (1125 Stewart Rd)
3A	NA

Project Definition Report

Halfmoon Bay Community Hall
Connor Park / ch'emalak

Presentation to SCRD Board

Connor Park / ch'emalak is located on the traditional ancestral, and unceded territory of the shíshálh Nation

The Sunshine Coast Regional District is located on the traditional ancestral, and unceded territories of the shíshálh and Skwxwú7mesh Nations

October 19th 2023
Principle Architecture

Principle architecture

Background Information

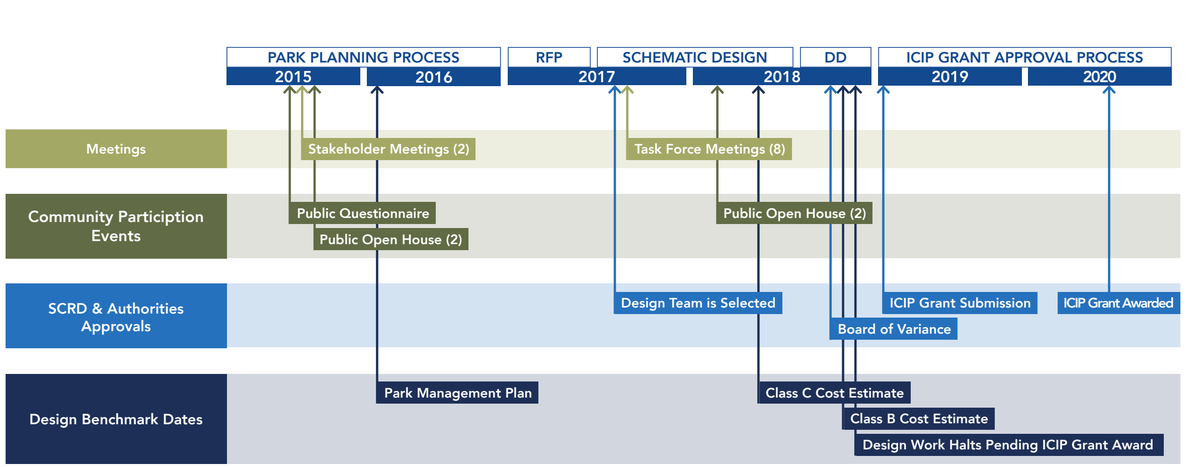
Connor Park Concept Plans 1987-2010

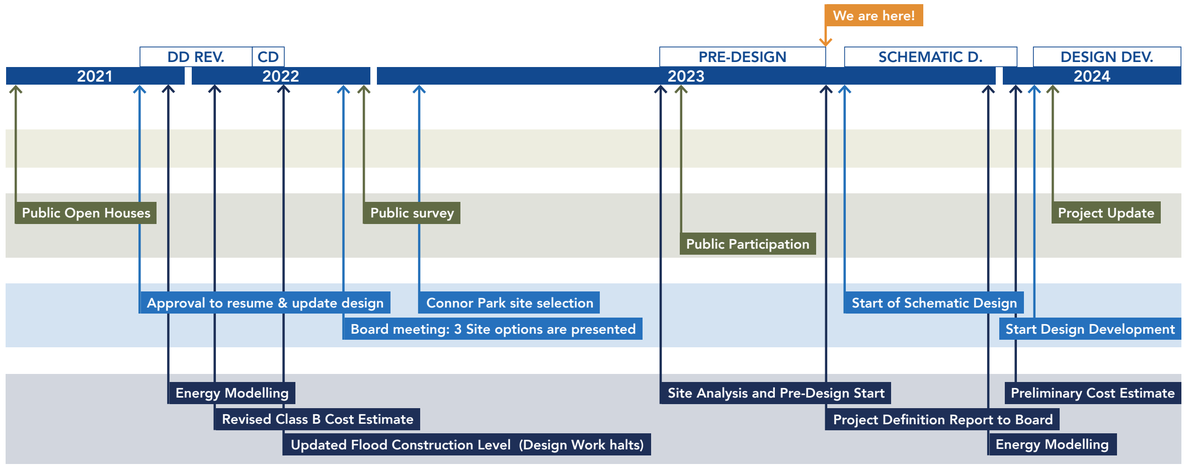
- 2003 Park Concept plan
- 2007 Park Concept plan

Coopers Green Park Management Plan

Halfmoon Bay Community Hall - Pre Design phase

- Community input
- Technical data (survey, geotech, environmental, archaeological)
- Project Definition Report





Community Input & Project Vision

SCRD Public Participation

- June 21st open house
- Other public events
- Let's Talk webpage
- Other stakeholders (shíshálh Nation, MOTI, SD-46)

Project Vision

- A hall for the community
- A hall within Connor Park
- Inclusivity & universal design
- Sustainability & durability
- Affordability & budget
- Transportation & parking

"This is a vitally important project for the Halfmoon Bay Community"

Community check-in survey respondent

Scope of Work

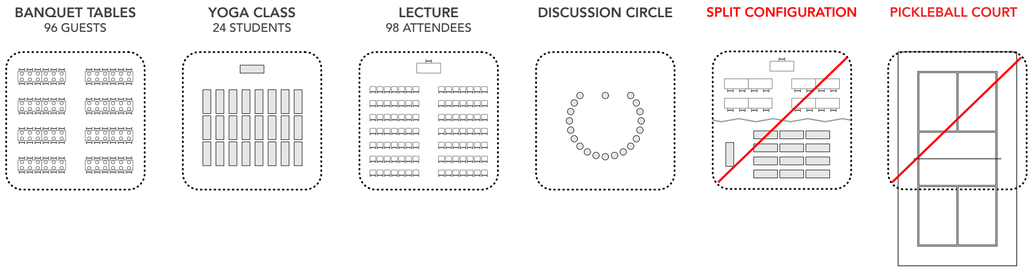
Functional Program

- The "what" of the project
- Assumptions about room sizes, functions, equipment & finishes
- Defining adjacency requirements

Main Hall Space

Occupant load: *100* **Net Area:** *112 m² (1200 ft²)*

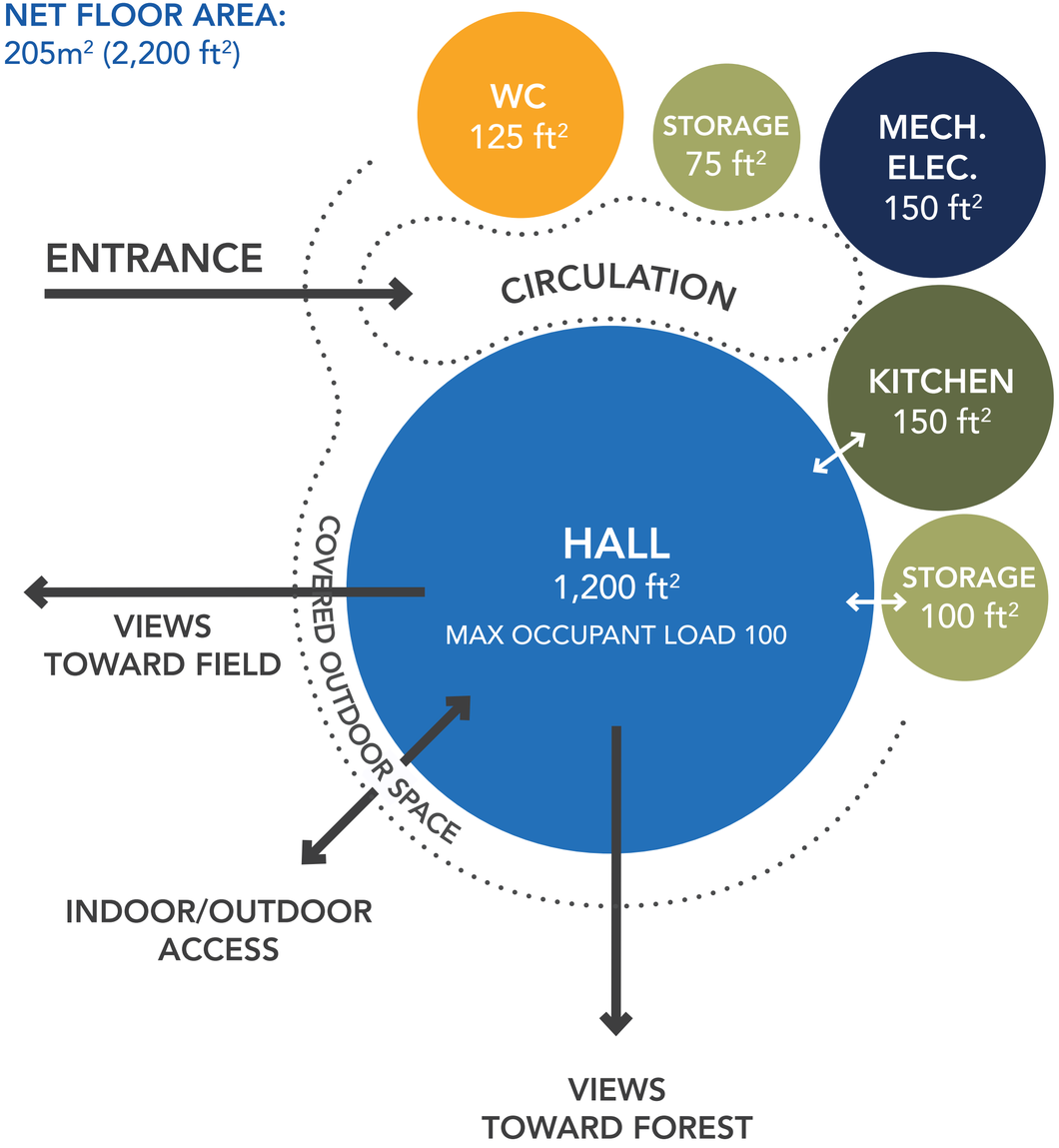
- *Exposed wood finish*
- *Views to outdoor*
- *Access to outdoor covered area*
- *Audio visual rough-ins*
- *Acoustic treatment*
- *High performance windows*
- *Resilient flooring*
- *Wall protection*
- *Sloped ceiling*
- *Dedicated table and chair storage*



Technical Design Assumptions

- Sustainability objectives
- Engineered systems assumptions (Structural, Mechanical, Electrical)
- Civil design & site improvements
- Landscape design & insertion into the park

NET FLOOR AREA:
205m² (2,200 ft²)



Site Analysis

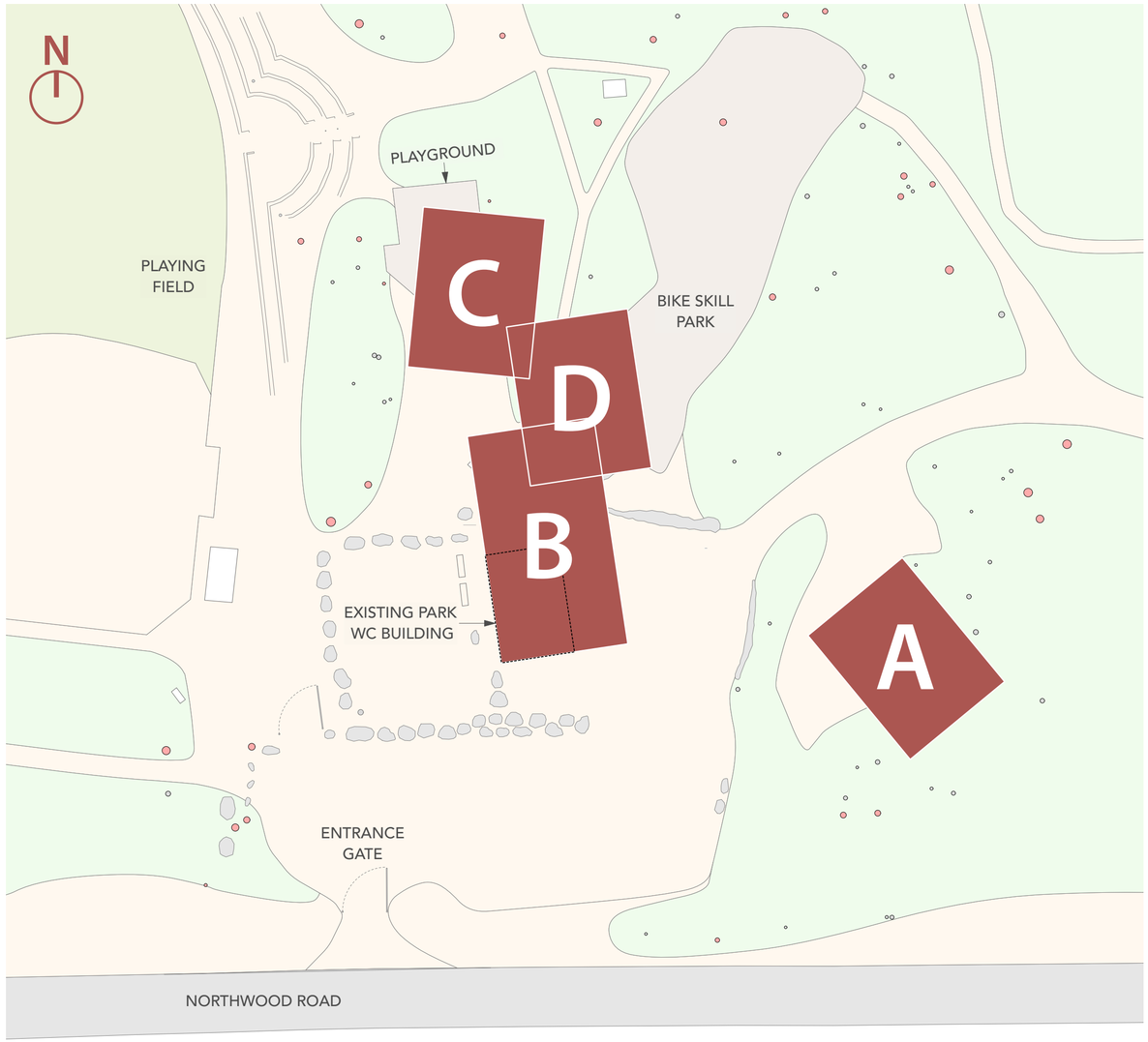
Identifying Potential Sites

- Level area
- Previously disturbed ground
- Minimized proximity to significant tree specimens
- Proximity to existing circulation
- Minimized impact on park functions & Circulation

Testing and ranking each option

- Test fit & 3D modelling
- Site plan
- Site evaluation categories:

1. Land use planning
2. Site design qualities
3. Impact on existing amenities
4. Site selection budget impact
5. Safety & security
6. Accessibility
7. Fire safety
8. Environmental impact
9. Soil & topography
10. Utilities & services



△ *Potential building sites thumbnail map*

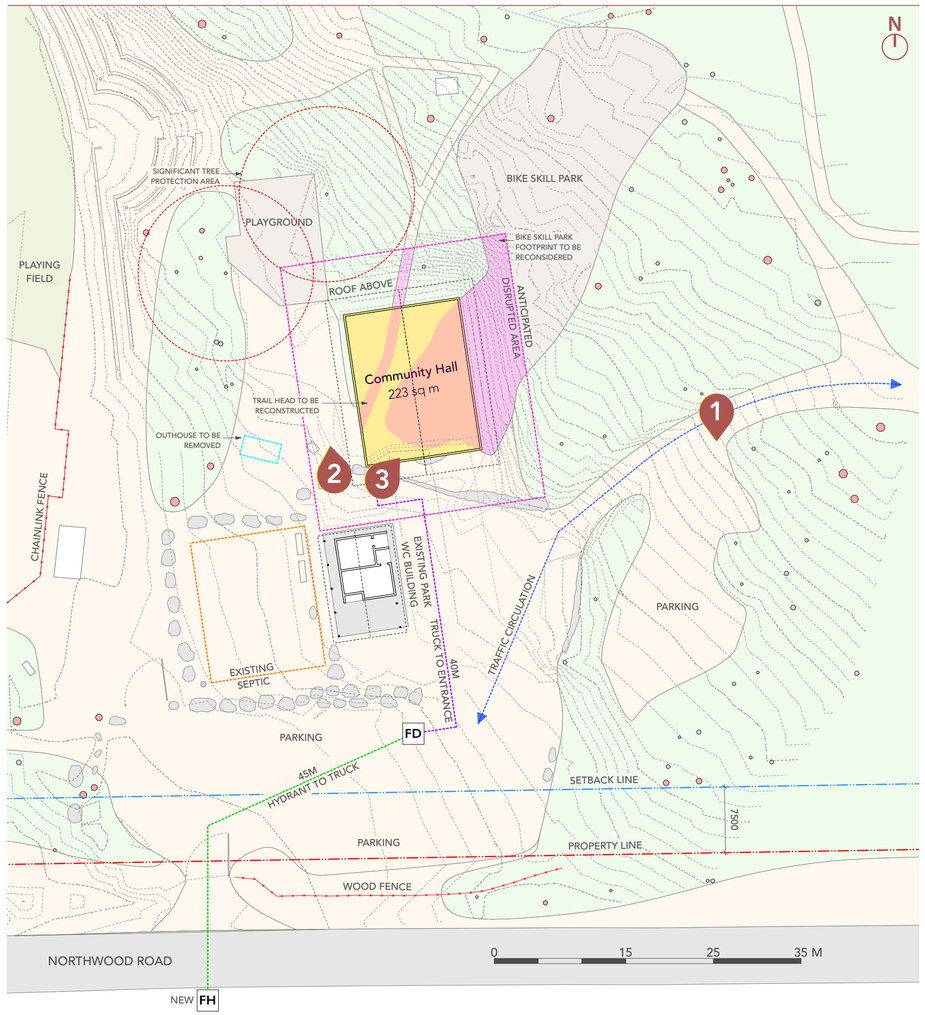
Site Analysis

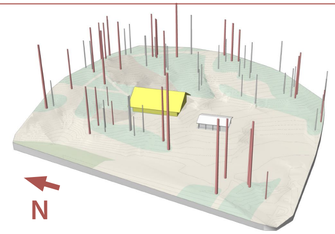
Site Plan Option D

Forested
Non-forested
Pavement
Dirt / Mulch
Playing field

Impacted existing facilities
Significant tree specimens
Other tree specimens
FH *New fire hydrant*
FD *Fire department vehicle*

Proposed floor area
Anticipated disrupted landscape
Extent of roof overhang (above)
Tree Protection Area (TPA)
1 *Keyed site photos*





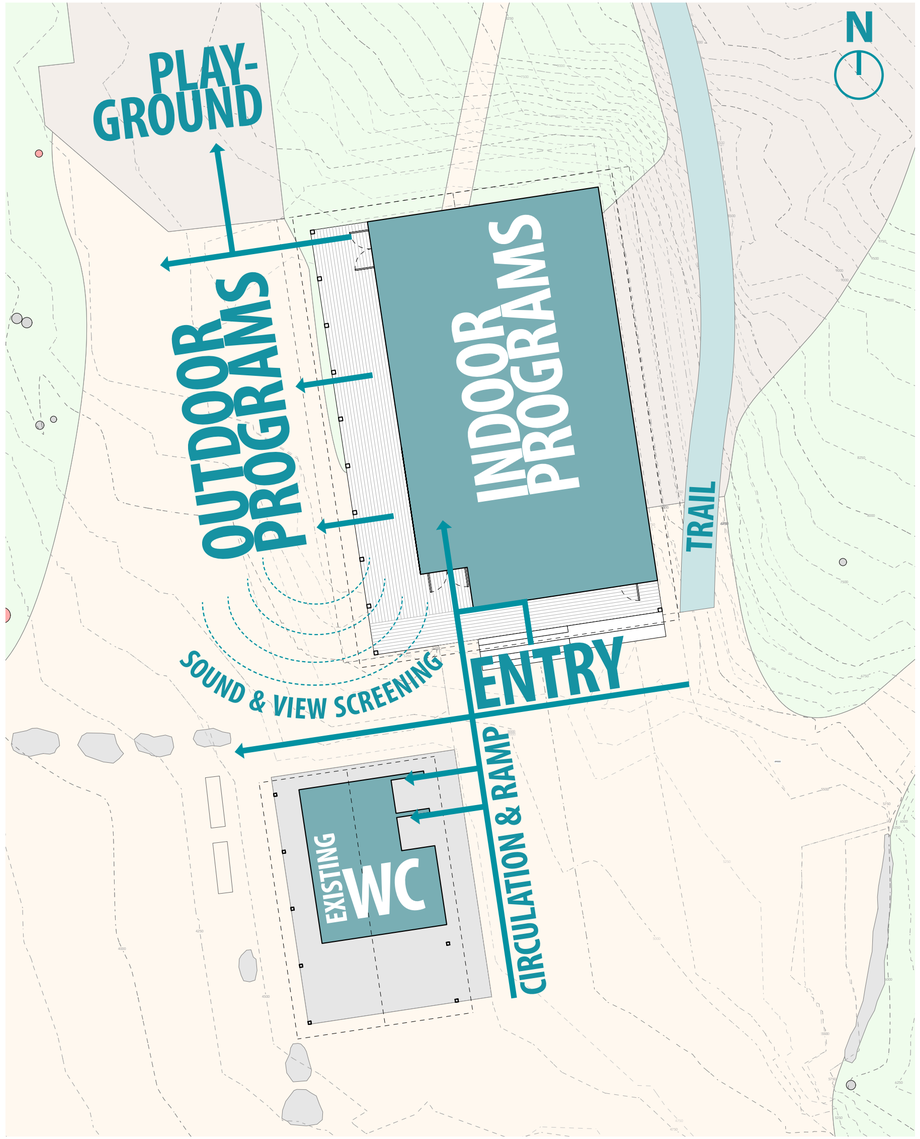
Evaluation Matrix
Option D

* Subject to confirmation from the fire department
** Refer to Environmental Impact Report 23/07 by Coastal Raintree Consulting Ltd.
*** Subject to advice from qualified professional Arborist regarding tree health and risk
**** Refer to Archaeological report 22/10/19 by In Situ Archaeology
***** Refer to Professional Geotechnical report 23/07/13 by Frontera Geotechnical
****** Subject to advice from qualified professional septic design consultant

Evaluation Criteria

Land Use Planning		100% good
Meet setback requirements	✓	
Construction zone can be hoarded off without impacting park activities	✓	
No pedestrian or vehicle traffic control measures required	✓	
Site design qualities		100% good
Insertion within existing site assets and activities	✓	Well connected to play field and trail access
Significant natural light opportunities	✓	Far enough removed from West tree grove
No significant requirement for solar shading	✓	West tree grove minimizes excessive solar heat gain during summer
Opportunities for outdoor spaces	✓	West façade (views toward the field & trailhead gateway point)
Hall main entrance is removed from traffic and park circulation	✓	
Building location does not impede vehicle circulation through site	✓	
Building is easily recognizable from the street	✓	Only the West façade and the outdoor patio screened by WC
Impact on Existing Amenities		60% good
Hall Building does not reduce existing parking capacity	✗	Informal parking along the existing WC and rock-wall deleted
Hall Building does not impact playground area	✓	Or very marginally during construction
Hall Building does not impact bike skill area	✗	
Hall Building does not impact existing park WC facility	✓	
Hall Building does not impact existing covered picnic area	✓	
Site selection budget impact		100% good
Added demolition cost from removal of existing, functional amenities	✓	No demolition required
Significant added project cost to replace existing, functional amenities	✓	Bike skill park needs upgrades
Site development cost to accommodate larger building footprint	✓	
Safety + Security		100% good
No specific safety hazard to note	✓	
Accessibility		100% good
Continuous wheelchair accessible route from street and from parking area	✓	Ramp as hardscape separation between WC building and Hall
Pick-up/Drop-off area may be accommodated close to the main entrance	✓	
Fire Safety		100% good
Fire truck access to within 15m of main entry*	✓	
Fire hydrant & Fire department vehicle access (New hydrant needed)*	✓	
Environmental Impact		78% good
Low environmental impact of demolition/disposal of existing, functional amenities	✓	
Low environmental impact of rebuilding existing, functional amenities	✓	
Environmental leadership through preservation of existing, functional amenities	✓	
No removal of significant trees **	✓	
No encroachment on Tree Protection Area (TPA) **/***	✗	2 (Arbutus, White Pine)
No removal of non-significant tree specimens**	✗	2 non-significant tree specimens to be removed
No archaeological material, feature or potential ****	✓	
No impact on endangered habitats or wetlands**	✓	
Acoustic line of sights and proximity to neighbour properties	✓	Building is partially screened by the park WC
Soils / Topography		33% good
Suitable bearing soils for permanent foundation *****	✓	
Minimal clearing and grading required	✗	
No special building perimeter drainage required	✗	
Utilities + Services		100% good
Electrical (Hydro) service availability	✓	Across Northwood Road
Potable water service connected directly to municipal system	✓	Across Northwood Road
Suitable septic field area available downslope from site ******	✓	Existing playground location or upgrade to existing septic system
Communication service available (cable, telephone, fibre)	✓	Across Northwood Road
	Total Rating:	**87%**

Conceptual Design Option

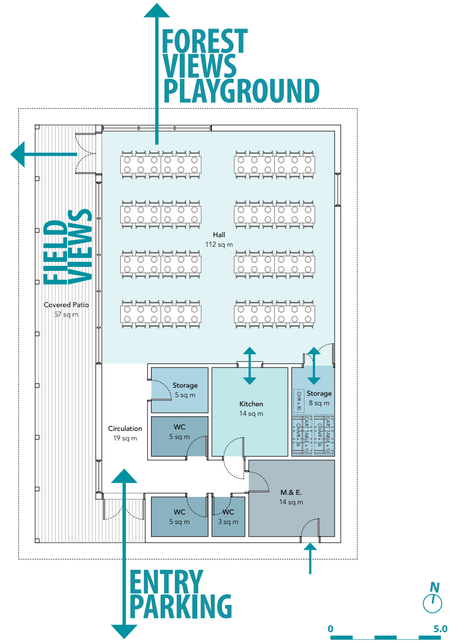


Site Synergies:

- Entrance facade facing the parking
- Entry sequence integrated with field WC
- Entrance plaza as a meeting point for park users
- Hall & Patio facing the field & playground
- Field WC acts as a screen
- Proximity of flat level ground for septic

The floor plan is a synthesis of the information gathered through:

- Project vision
- Functional program
- Adjacency diagram
- Site analysis
- Existing site amenities



◁ *Conceptual Site Circulation Diagram*

▷ *Conceptual Floor Plan*

Project Risk Assessment

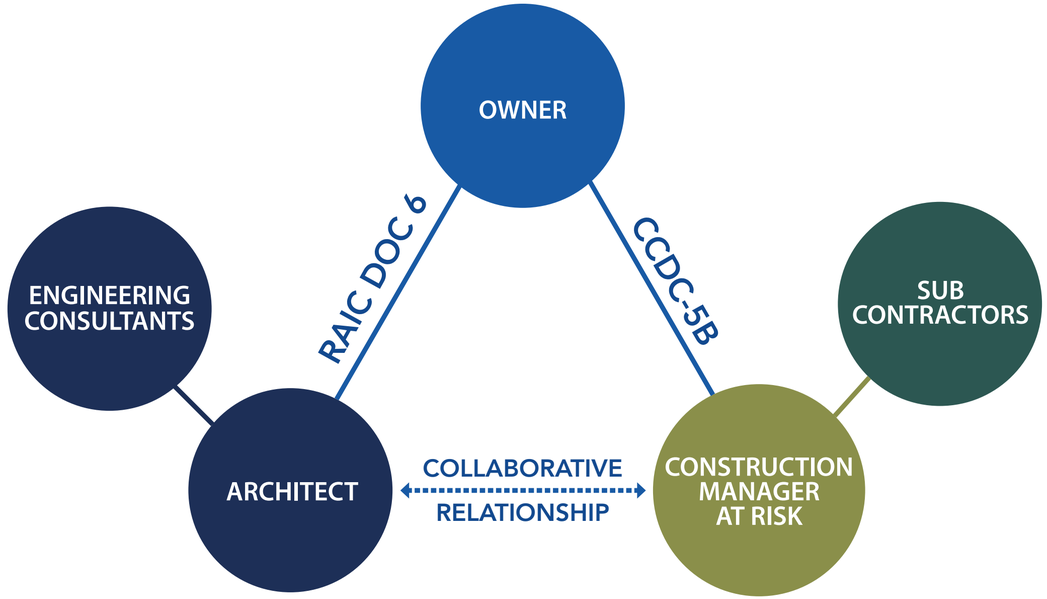
RISK #	RISK DESCRIPTION	PROBABILITY	TIMELINE	IMPACT	MITIGATION STRATEGY	RISK RESERVE COST
1	Unforeseen soil conditions or bearing capacity	Very low	Early construction stages	Medium	Geotechnical investigations carried out in June 2023 investigated 5 pits including one at the building's anticipated location. With consistent results across all 5 pits, the occurrence of soil with lesser structural capacity within the building footprint could be resolved with localized foundation re-design. Another approach would be to obtain additional test pits specifically targeting the building footprint during subsequent design phases.	The unlikely probability of occurrence does not warrant a reserve cost
2	Unforeseen excavation volumes	Low	Early construction stages	Medium	The soil type reasonable predictability does not warrant significant concerns about additional excavation to reach load bearing soil. However, grading is costly and estimating cut & fill volumes can prove difficult to predict with precision. Civil consultant to provide estimate volumes. Particular care should be taken in the procurement documents phrasing around excavation costs.	Reserve amount should be allocated to excavation contingencies
3	Weather delays	Low	Construction	Medium (ICIP Grant)	Winter months may affect construction and impose delays. Delays are more likely with construction starting in the winter, delaying concrete pours. Time sensitive grant funding can be affected by delays.	No cost can be identified
4	Trade shortages / Market conditions	Medium	Tender	Medium/ High	Budget control is a critical aspect of this project. Construction costs have been volatile and quantity surveyor estimates reflect this climate with conservative estimates. Investigating alternative project delivery methods, like design stage construction management mitigates such risks. Refer to procurement method sections.	Upfront cost of alternative project delivery methods
5	Soil contamination remedial	Medium	Early construction stages	Low	Soil contamination may be identified during the removal of the decommissioned outhouse. A preliminary assessment of the outhouse integrity and the soil beneath would help identify risk and mitigate uncertainty.	Identify assessment cost
6	Budget creep	Medium	Design stages	Medium	Defining a precise and complete project scope prior to starting design is critical to avoid budget creep. Design changes impact on schedule and budget increase dramatically as the design progresses. Alternative project delivery methods where a construction professional is involved early in the process can help mitigate budget creep (see Section 10)	No cost can be identified

Project Delivery Methods

Project delivery method refers to the processes used to successfully complete the design and construction of a building project

- Halfmoon Bay community hall: **Time and schedule constraints**
- Would **benefit** from design **team/builder collaboration at design stages**

- Alternative delivery method to the traditional Design-Bid-Build
- During design phases a **construction manager provides input** on:
    1. Constructibility
    2. Cost estimating
    3. Cost control
    4. Scheduling
    5. Smooth transition into construction phase



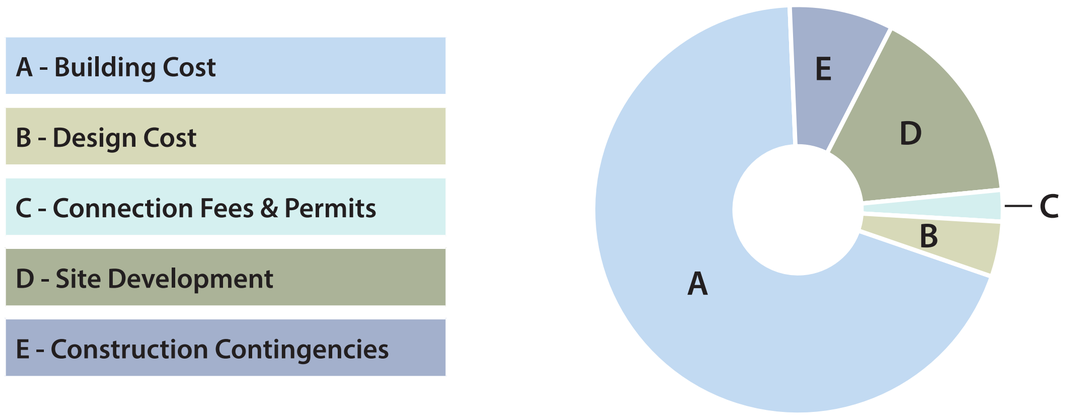
Construction management - Contractual relationships diagram

Project Budget Summary

Project Funding Summary Chart

FUNDING SOURCE	AMOUNT	REMAINING	DEADLINE
Investing in Canada Infrastructure Program (ICIP)	$2,013,642	$1,933,631	25/03/31
SCRD Approved Debt Funding	$1,478,233	$1,478,233	N/A
Amenity Funding	$29,887	$0	N/A
TOTAL	**$3,521,762**	**$3,411,864**	

Anticipated Funding Allocations



Project Timeline & Schedule

We are here!

Current ICIP deadline

ICIP extension: February 2027

June 2023 — *November 2023* — *February 2024* — *April 2024* — *August 2024* — *October 2025*

PRE DESIGN
15 Weeks

- Community participation event 1
- Site legal survey
- Geotechnical testing and Recommendation
- Community participation event 2
- Environmental Impact Assessment Report
- Community participation event 3
- **MTG 01** - Project Definition Report kick-off
- **MTG 02** - Project Definition Report draft review
- **MTG 03** - Project definition Report final draft review
- **MTG 04** - Project definition Report presentation

SCHEMATIC DESIGN
12 Weeks

- **MTG 01** - Project scope validation
- Consolidation of site and building information for use by consultants
- **MTG 02** - Review schematic design options with SCRD staff
- Energy modelling workshop
- Preparation of coordinated design package for cost estimate (Class D)
- **MTG 03** - schematic design and costing presentation
- Design presentation to local community at public event

IN PARALLEL...

- Request for proposal document preparation
- Proposal application period
- Suitable candidate selection

Construction Manager RFP process (CCDC-5B)
8 Weeks

DESIGN DEVELOPEMENT
9 Weeks

- **MTG 01 -** Construction management kick-off
- Drawing package preparation for consultant design coordination
- Internal quality control review
- **MTG 02** - Coordinated design package presentation for review session and feedback
- Further design documentation
- Internal quality control review
- Preparation of coordinated design package for cost estimate (Class C)
- **MTG 03** - Coordinated set of development permit drawings, outline specifications and costing presentation

- Construction manager provides input on constructibility, cost estimating, scheduling and cost control.

CONSTRUCTION DOC.
15 Weeks

- Preparation of coordinated Working Drawings (WD) and specifications
- Preparation of coordinated design package for cost estimate (Class B)
- Internal quality control review
- **MTG 01** - Design and costing presentation to decision making group for approval
- Preparation of building permit application package
- Submission of 95% WD package for cost estimate (Class A pre-tender estimate)
- Internal quality control review
- **MTG 02** - Final design and costing presentation
- Submit building permit application

- Construction manager provides input on constructibility, cost estimating, scheduling and cost control.

CONTRACT ADMIN
13 Months

- Architect assists owner in reviewing the final constrution budget
- Architect prepares the change order defining the price and terms of the construction scope
- Architect reviews the work and ensure it is in general conformity with the contract documents
- Architect reviews shop drawings

- Construction manager prepares final construction budget
- Owner and CM execute a change order to finalize their agreement on the price and terms of the construction scope
- Construction starts
- Closeout and takeover procedures

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Area Services Committee – October 19, 2023

AUTHOR: Kyle Doyle, Manager, Asset Management

SUBJECT: **HALFMOON BAY COMMUNITY HALL – PROJECT DEFINITION REPORT**

RECOMMENDATION(S)

(1) THAT the report titled Halfmoon Bay Community Hall - Project Definition Report be received for information.

BACKGROUND

The following Sunshine Coast Regional District (SCRD) Board resolution was adopted on March 23, 2023, and further amended by SCRD Board resolution (in part) 075/23 on April 6, 2023.

059/23 **Recommendation No. 2** *Coopers Green Hall Replacement Construction Project*

THAT the location for the Coopers Green Hall Replacement construction project is Option B: Connor Park;

(…)AND FURTHER THAT staff bring forward regular reports providing updates on the progress of the Halfmoon Bay Community Hall project.

A report was brought to the May 11, 2023 Committee of the Whole to provide a project update and specific actions planned to facilitate the development of a Project Definition Report (PDR). This included site analysis, community engagement, and stakeholder consultations.

On September 28, 2023 an update on the project was provided to the Committee of the Whole summarizing the work done to date. That report indicated that the PDR was nearing completion and would be brought to a subsequent committee.

The purpose of this report is to present the Project Definition Report and identify the next steps in this project. A copy of the Report is attached (Attachment A).

DISCUSSION

The Project Definition Report (PDR) sought to provide guidance for the design and development of the new community hall at Connor Park. By establishing a clear project vision and scope, this report will facilitate efficient design and construction planning phases. The development of this PDR involved consideration of the results from the preliminary investigations through the lens of the community values identified during the community participation events. Site evaluations by Qualified Professional Engineers, Archaeologists, and Biologists informed technical constraints that the project will face. Feedback from residents and various community stakeholders helped to shape the opportunities that can be leveraged to deliver a functional hall to best serve the community.

Options and Analysis

The Project Definition Report synthesized information collected through community engagement with existing Parks plans to articulate a Project Vision. This describes the key considerations that should be factored into the design of the new community hall. Functionality and broad design targets were established to ensure the future community hall can deliver services which align with the Project Vision.

Evaluation criteria were developed that include Project Vision and Functionality targets as well as the technical site constraints identified through the site investigation. Four potential locations within Connor Park were evaluated using these criteria to determine the most suitable siting option.

The process determined the best site for the new community hall in Connor Park is Option D, located between the existing washroom structure and the playground. This location was found to best balance the site constraints while still providing the most benefits to park users. Residents voiced significant concerns regarding potential conflicts with mature trees, which Option D ranked the most favorable in that specific regard. The complete analysis of all four potential sites can be found in the report**.**

The PDR identified a series of risks the project may face and provided preliminary mitigation strategies. This will equip the design and construction teams with valuable information and allow them to avoid costly pitfalls.

Acknowledging the time and budgetary constraints faced by this project, the PDR indicates that an alternative project delivery method may be best suited for this project. Staff support the recommendation in the PDR to utilize a Construction Manager method of project delivery for this project. Under this process the design and construction teams work together to integrate creativity, cost effectiveness, and constructability to develop a design that is affordable and effectively meets the project requirements. The SCRD project team will have opportunities to provide input throughout this process, however they will be weighed with consideration to producing an efficient design that will be constructed within the project budget.

The team will look to develop a schematic design in parallel with the preparation of Tender Documents to facilitate a project delivery method that incorporates the construction and design teams through the detailed design process. The schematic design provides a starting point for the detailed design process by summarizing the recommendations of the PDR into an actual design drawing.

Discussions with the Grantors regarding the application for an extension to the project timeline have occurred and no significant concerns have been identified. Staff continue to await the official decision from ICIP.

Organizational and Intergovernmental Implications

Concerns were raised during community engagement that identified issues outside of the scope of SCRD Parks service delivery such as the enforcement of noise bylaws, traffic control along the neighboring roads, and potential for increased fire hazards. Addressing these issues will require interdepartmental (ie. Bylaw, Protective Services) and intergovernmental (ie. MoTI, SD46, shíshálh Nation) coordination.

Financial Implications

The remaining budget for this project, ~$3.4 million, is anticipated to be sufficient. High-level cost estimates suggest that a 2,200 sq.ft. community hall currently costs ~$2.5 million to construct. The remaining budget will fund design, site servicing, and site development fees. Employing a project delivery method that limits the risk of cost overruns as recommended by the PDR is also supported by staff.

Timeline for next steps or estimated completion date

Employing an alternative project delivery method will eliminate the need for provision of a conceptual design prior to the construction contract being awarded. The preparation of Tender Documents for a project delivery method that maximizes project efficiency will be the next undertaking for this project. The remainder of the projected schedule is unchanged.

Milestone	**Anticipated Completion**	**Status**
Site Investigation	July 2023	✓
Community Design Input	Sept 2023	✓
Consulting Stakeholders	Sept 2023	✓
Project Definition Report	October 2023	✓
Conceptual Design Selection	November 2023	✘
Tender Documents Issued	Q2 2024	
Contract Award/ Construction Begins	Q4 2024	

Communications Strategy

Project updates will continue to be posted to the Let's Talk Page and through other channels of communication like social media, news releases, etc. Any development of significance may result in a subsequent staff report.

STRATEGIC PLAN AND RELATED POLICIES

The provision of a community hall in Halfmoon Bay is aligned with the Parks and Recreation Master Plan. Appropriately leveraging grants and community support contributes to Ensuring Fiscal Sustainability. Working with the community aligns with Engagement and Communications.

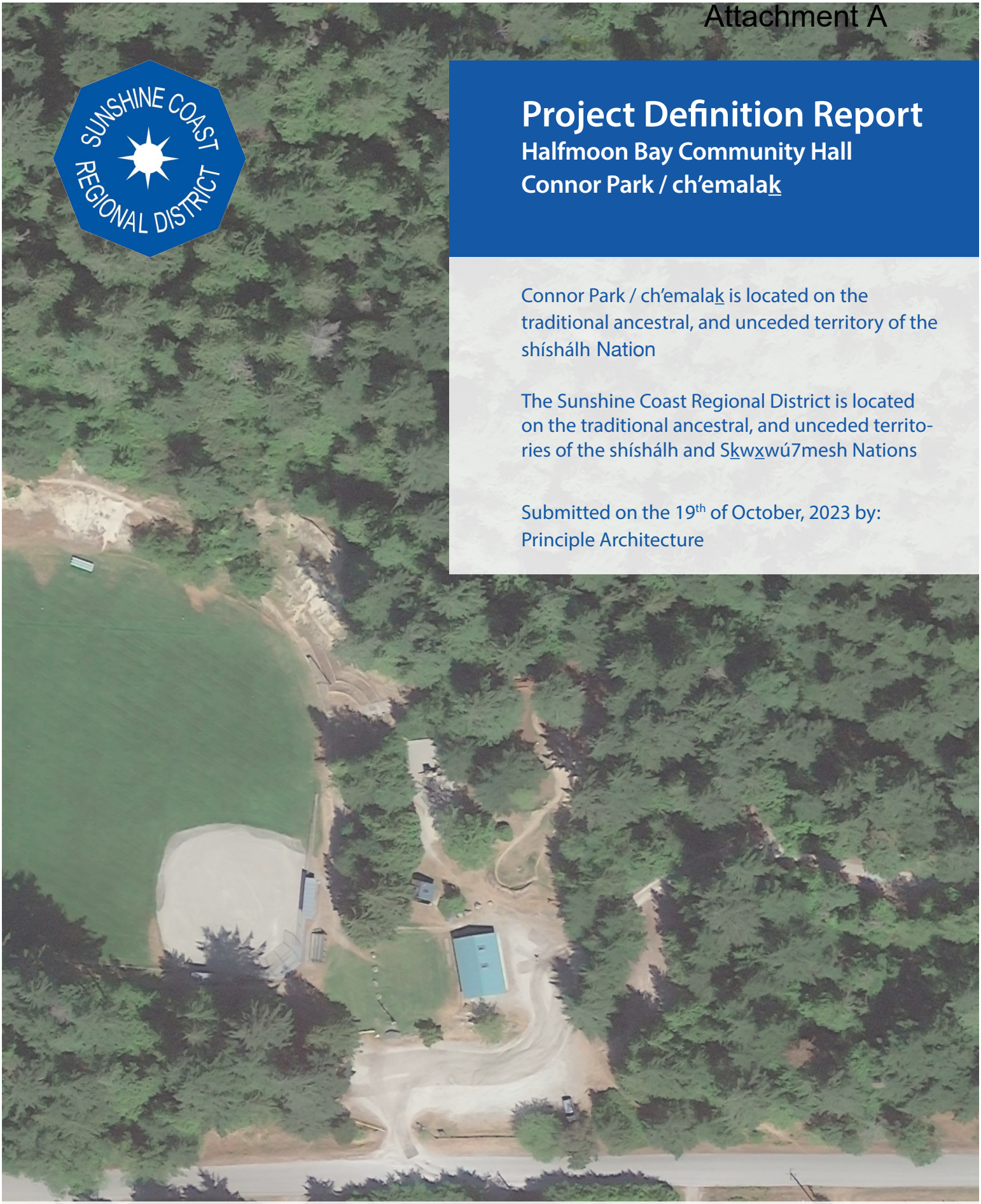
CONCLUSION

A Project Definition Report that provides guidance on the design, functionality, and siting of the future community hall in Connor Park has been received. Four potential sites for the hall were evaluated with Option D identified as the most suitable option. The PDR suggests that employing an alternative project delivery method will provide the best chance of mitigating cost overruns and scheduling delays. Preparation of schematic design and tender documents will proceed.

ATTACHMENT

Attachment A - Project Definition Report – Halfmoon Bay Community Hall

Reviewed by:			
Manager		Finance	X - B. Wing
GM	X – S. Gagnon	Legislative	
CAO	X - D. McKinley	Other	



Project Definition Report

Halfmoon Bay Community Hall
Connor Park / ch'emalak

Connor Park / ch'emalak is located on the traditional ancestral, and unceded territory of the shíshálh Nation

The Sunshine Coast Regional District is located on the traditional ancestral, and unceded territories of the shíshálh and Skwxwú7mesh Nations

Submitted on the 19th of October, 2023 by:
Principle Architecture

Principle architecture

Table of Contents

1 Executive Summary

The pressing need for a new community hall in Halfmoon Bay is stronger than ever. The SCRD recognizes the importance for this new piece of social infrastructure to become available to the community as early as possible.

The proposed site for the new hall is located near the Southeast corner of Connor Park, along Northwood Road. This area of the park has been previously developed and will minimize the environmental impact of the new building.

Connor Park is a long time recreational destination for the residents of Halfmoon Bay. Existing Park Concept Plans have explored and demonstrated the potential for further developing Connor Park as Halfmoon Bay's recreational community hub. Its proximity to residential areas and Halfmoon Bay Elementary School makes it well suited for the future community hall.

After selecting Connor Park as the site for the new hall in the Spring of 2023, the SCRD initiated an extensive pre-design phase. Various professionals were engaged to investigate the feasibility of the project and gather technical information for the design phases to come. Additionally, the SCRD spearheaded a comprehensive community input exercise through various platforms, to connect with the public and gather input on the project.

By synthesizing the technical findings and the input from the community participation, this report defines a vision for the new community hall. A new and bright gathering space, sensitively inserted within the park natural features and amenities; environmentally conscious and respectful of its surrounding neighbourhood. With a scope similar to that of other halls operated by the SCRD, the facility will aim at complementing other amenities available in Halfmoon Bay. Affordability, durability and ease of access will also be important aspects of the design.

The project vision was then translated into a functional program which defines what the building will include and how these components will relate to each other in order to serve the community at its fullest. A net area of 205 m^2 (2,200 ft^2) with a main hall space of 112 m^2 (1,200 ft^2) for up to 100 seated occupants was found to suit the needs of the community. Support spaces for the hall will include a kitchen, washrooms, storage spaces and a covered outdoor patio opening up the hall to the park's natural setting and amenities.

Defining this functional program in details was instrumental in identifying the most suitable location for the hall within the park. Four potential sites were investigated, compared and ranked using a series of technical, programmatic and environmental parameters. The most favourable option (Site Option D) was found to be a previously disturbed area, close to the gravel lot, slightly elevated on a knoll overlooking the playing field. This option identified that no significant tree specimens would be affected by the project and that the impact on the existing park amenities could be kept to a minimum.

Once the most suitable site was identified, the functional program was unfolded into a conceptual floor plan responding and seeking opportunities from the specific siting conditions. Great potential was found to intimately connect the building to the playing field and playground.

The specifics of the building program and its siting were then tested to identify risks having the potential to affect the project delivery. These were organized into a matrix and should be referred to and addressed during subsequent project phases.

Some of the risks often encountered during building projects can be mitigated through the selection of an alternative project delivery method. Particularly those involving a construction professional's advice during the design phases. This report found that a contrustion management project delivery method to be well suited to the specifics of the Halfmoon Bay community hall project.

The final sections of this report summarize the current project budget and its anticipated allocations as well as an estimated timeline to the completetion of the new community hall building.

2 Background Information

Project history

Connor Park Concept Plans 1987-2010

In 1987, the Halfmoon Bay Recreation Association met to discuss the development of Connor Park. It was agreed that the further development of recreational amenities at Connor Park would be beneficial to the Community. Various site plans were initiated over the years and the park saw some minor upgrades throughout the 90's.

In 2002, the SCRD Board approved funding for the creation of the Connor Park Advisory Committee (CPAC), composed of 15 members from the community and tasked with the preparation of a concept site plan for the future development of recreational amenities at Connor Park. The facilities were to be integrated and complimentary with that of the adjoining Halfmoon Bay Community School, while being connected to the residential areas through bicycle and pedestrian links.

The 2003 concept plan, adopted by the SCRD in February 2003, made recommendations for the following:

- Phase 1: Land clearing, levelling, irrigation and seeding of an expanded playfield area (2 full-size baseball diamonds, 1 full-size soccer field)
- Phase 2: Construction of an access road to a new pavilion large enough to accommodate festival type events, and allow for a variety of activities to take place. Construction of a bike skill park area and a multi-purpose paved flat area.

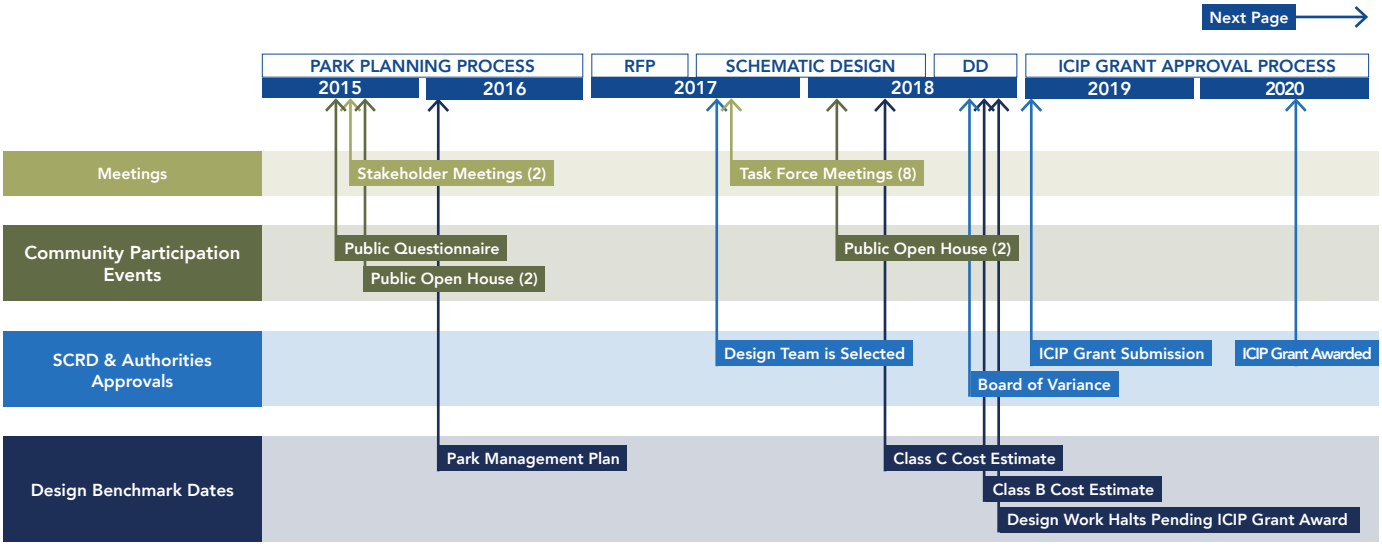
In 2005, a new playground structure was built and upgrades were made to the Park entrance and parking facilities.

In 2007, the Connor Park Concept Plan was reviewed after receiving input from the community. The consensus was that the amenities identified as priorities in 2003 remained relevant (Appendix A).

In 2009/2010, a new field washroom facility, with a covered area facing the parking lot, was constructed at the entrance of the park.

Coopers Green Park Management Plan

The 2016 Coopers Green Park Management Plan identified a Community Hall Replacement as the highest priority enhancement for the park. Planning for a new hall began in 2016. The hall, designed for the beautiful site at Coopers Green Park, was envisioned as a community space for residents and as a destination venue for a wider population.



107△ *Project history timeline - Refer to section I I for future phases*

In 2020, a grant was awarded to support the construction of a new community hall in Halfmoon Bay.

In 2022, following a mandatory review of the original geotechnical report, the elevation for the Floor Construction Level was raised and new siting guidelines were provided. These revised design parameters required design changes anticipated to increase the cost of construction and challenged the ability to meet accessibility requirements. Additional uncertainties at Coopers Green included: limited parking space and minimum setback distances requiring zoning variances, known archeological significance of the park, and congestion around the boat ramp.

These challenges prompted the Board to consider alternative locations for the new community hall. An informal survey conducted in late 2022 to consider alternative sites suggested that public opinion was split between three options. The SCRD Board chose to relocate the project to Connor Park in March 2023. A portion of the community hall project budget was reallocated for future park enhancements to be made at Coopers Green Park.

Halfmoon Bay Community Hall

The new hall, with a smaller footprint than that proposed at Coopers Green Park, will be designed to align with the size and function of other SCRD community halls. It will complement other community facilities along the coast. Its location at the entrance of the park, will be ideal to support park events and play field activities.

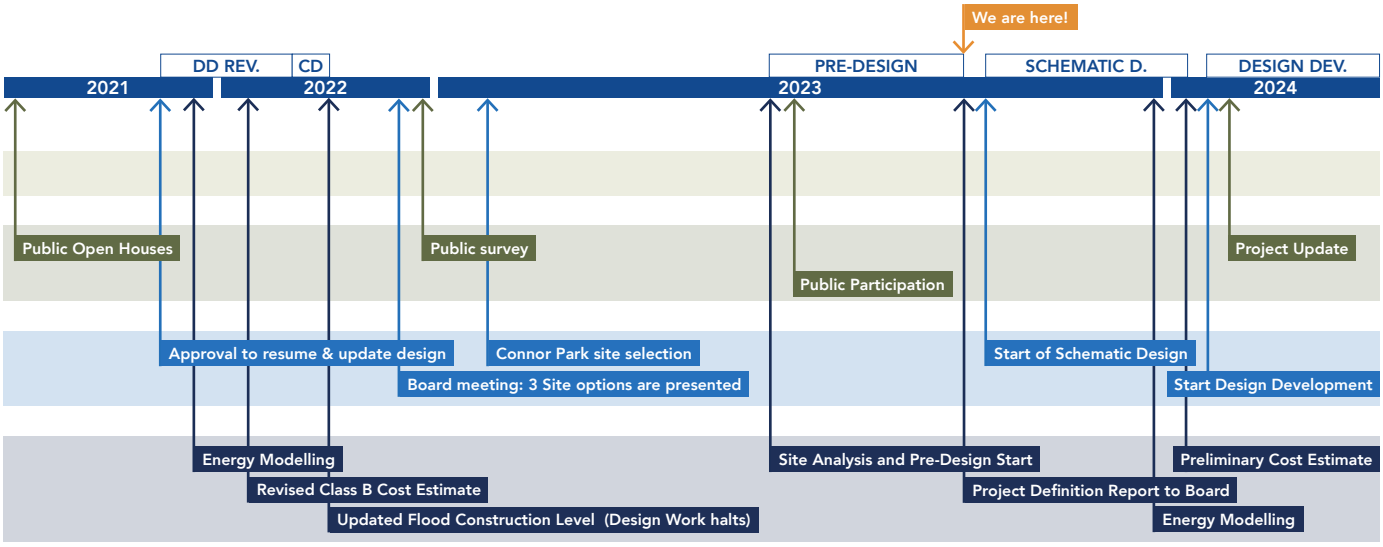
The community hall project will be designed to integrate with the existing amenities at Connor Park. Although not the festival pavilion envisioned in the 2003 Connor Park Concept Plan the community hall will be designed to intergrate with the existing amenities in the park.

For the new facility to serve the community at its fullest, the SCRD initiated a series of public participation events throughout the Summer of 2023. The intent was to gather input from the public regarding the siting and programming of the new facility. Attendees were encouraged to identify what they valued most about Connor Park and provide feedback on the new hall siting and programming. This information was recorded and used to inform the Project Vision.

Concurrently, the SCRD staff appointed various professionals to carry out pre-design due diligence studies for the Connor Park site. The extensive data collection required to start an informed design process included:

- Legal survey
- Geotechnical Report
- Environmental Impact Assessment Report
- Archaelogical Preliminary Field Reconnaissance (Pre-existing from Forest Fuel Demonstration Project)

Following this pre-design phase, the ambition is to promptly start with the design and construction of the new Hall. It should be noted that a significant portion of project funding relies on the *Investing in Canada Infrastructure Program (ICIP)* grant which is set to expire by March 2025. The SCRD has submitted a request for a two-year extension and is awaiting a formal response.



3 Public Participation

Once the decision was made to relocate the new hall to Connor Park, efforts began to inform the community and to gather input on values that should help guide the vision for the new facility. Three main avenues were taken to connect with the community.

Online

The SCRD published an interative website through the Let's Talk Platform. This provided a single location to follow project updates and find all relevant documents. Over 800 visitors engaged with the site and 23 questions were answered since May 2023.

Open House

The SCRD hosted an Open House at Connor Park on June 21st 2023. This beautiful and sunny afternoon saw hundreds of community members as staff invited the public to walk the site and share their visions for the project. While many grappled with the relocation of the new hall, enthusiasm for the project grew among others. Staff answered many questions and guided community members through potential siting challenges and opportunities that exist within the park. The values identified for the hall through this event were intimate, welcoming spaces and programming that inspired learning and growth. The community strongly values the serenity of the park and wants to facilitate connections more than events.

"This is a vitally important project for the Halfmoon Bay community"

Community check-in survey respondent

Public Events

Booths were set up at both the Roberts Creek and Sechelt farmers markets throughout the summer to help share the project and solicit more input from the broader community. Staff heard from community groups excited for the future space to provide services to Halfmoon Bay residents. From education to fitness, the new community hall should facilitate community groups that seek to connect with the residents in their locale.

Other Stakeholders

This project will continue to engage with the School District, shíshálh Nation, and the Ministry of Transportation and Infrastructure to align best with their values and provision of services.

This information was presented to an SCRD committee on September 28th 2023.

△ *Public participation event at Connor Park - June 2023*

4 Project Vision

Statement of Intent & Project Evaluation Parameters

A Hall for the Community

With limited social infrastructure, Halfmoon Bay and its surrounding areas require a community hall that supports the ever-evolving lifestyles, events, and recreational activities of its residents. The ambition of this project is to provide a gathering space for the community of Halfmoon Bay and the residents of the Sunshine Coast. The hall will create opportunities for greater social connections and provide an important space for community events.

The new community hall will be bright and open, with views out to its natural surroundings. Simple in its components, the architectural program is to be arranged in a way that is easy to construct, operate and maintain while being adaptable and flexible to cater to various user groups and activity types. The program areas of the building are specific but it is understood that these spaces need to adapt to a variety of community uses and functions. The intention for the new hall is to not be redundant in its programming but to complement existing amenities like those offered at Connor Park and at the Halfmoon Bay Elementary School adjacent to the park.

A Hall within the Park

Connor Park is surrounded by mature forest and its natural diversity is important to the community of Halfmoon Bay. The community hall building will integrate with the existing outdoor facilities through careful design decisions while minimizing its impact on the park's natural setting. The siting of the new building will consider the preservation of significant trees and existing park amenities and will be central and connected to park activities. The design of the public realm surrounding the building will be an important design challenge which will ultimately enrich the experience for both hall and park users.

A Hall that is Inclusive & Universal

A community hall hosts a wide range of users with diverse needs. As such, it is important to provide spaces that are welcoming, safe and inclusive of any gender, respecting each unique individual's identity, needs, differences and characteristics. The Hall will be designed to welcome all individuals and their uniqueness. It will provide safe and non-discriminating facilities by thoughtfully integrating accessible and universal solutions throughout each step of the design and strive to eliminate barriers to mobility for all users.

A Hall that is Sustainable & Durable

As a social anchor for the community, the hall will be designed to last. Durability is an important component to sustainable design and includes the careful selection of materials and the robust detailing of their assembly.

Environmental building performance is a crucial aspect of sustainable building practices. The design will focus on providing the hall with a high-performance and long-lasting building envelope. Passive design solutions will be explored to deliver a building that stays warm in the Winter and cool in the Summer without relying on expensive equipment.

Mechanical and electrical systems will be designed to ensure the hall is easy and affordable to operate while providing outstanding environmental comfort.

Building design performance will be quantified through energy modelling tools to ensure that environmental targets and operational cost expectations are met.

Consideration will be given in the selection of products and building components to limit the embedded carbon footprint of the new facility.

A Hall that is Affordable

The current community hall project scope has been revised to suit a smaller construction budget.

The hall is now comparable in size to other SCRD facilities along the Coast. Support spaces have been reduced accordingly, making for a smaller overall building size.

The kitchen will be designed as a reheat and serve facility (refer to Section 5 for details on the Project Scope).

△ *Dining Hall Project - Conceptual Sketch*

The new site and architectural program will allow for a lower project cost and greater financial certainty.

The hall will be designed with the intention of minimizing operational costs. This will be achieved by designing a building with durable, high-performing systems and finishes. Despite its size, the materials, detailing and equipment of the building will need to be suitable for a high-traffic public building.

The reduced project scope will enable the SCRD to keep the rental fees affordable and aligned with that of other SCRD operated halls.

A Hall that is Accessible

Connor Park is accessible to the local community it aims to service. The neighbourhood density enables more than 700 parcels to be within a 30-minute walk of the new hall. Transit users will find the nearest bus stop on Southwood Road, a 650 meter walk from the new hall. Those arriving by car may access the park through one of two entrances along Northwood Road. Current parking available at Connor Park consist of informal graveled areas with one main lot and multiple smaller pockets of parking along the gravel road wrapping around the South East corner of the park.

The existing parking capacity, over 40 cars, currently provides sufficient space to accommodate park users during busy events at the playfield. This also exceeds the 12 parking stalls required by the bylaw for the new hall.

The SCRD staff has engaged with the school district to discuss the potential for use of the school parking lot for occasional overflow parking. Revised booking processes can be established to mitigate conflicts and congestion.

"teaching by the community for the community"

Resident's vision for Halfmoon Bay Community Hall

5 Scope of Work

Description of the Architectural Program and Site Improvements

Functional Program

The functional program describes what will be included in the building and how these components will relate to each other to fulfill the design objectives and respond to the project and site constraints.

The proposed project consists of a single-story building with a net area of 205m^2 (2,200 ft^2) plus along with a component of covered outdoor space.

The main hall space, with an area of 112 m^2 (1,200 ft^2) will be designed to accommodate 100 seated guests in a dining configuration. The space will have high ceilings with exposed wood finish and ample access to daylight and views of the park with large windows and glazed doors. It will offer direct access to an outdoor covered area for year-round use. The hall will accommodate a wide range of activities from seated dining events, birthdays, lectures, meetings, classes and seminars.

The SCRD understands some members of community's interest in ball sports and pickleball in particular. However, for the hall to accommodate such activities, a substantially larger floor area and ceiling clearance would be necessary compared to what is required for the current building scope. Additionally, the Halfmoon Bay Elementary School can be utilized for these types of activities.

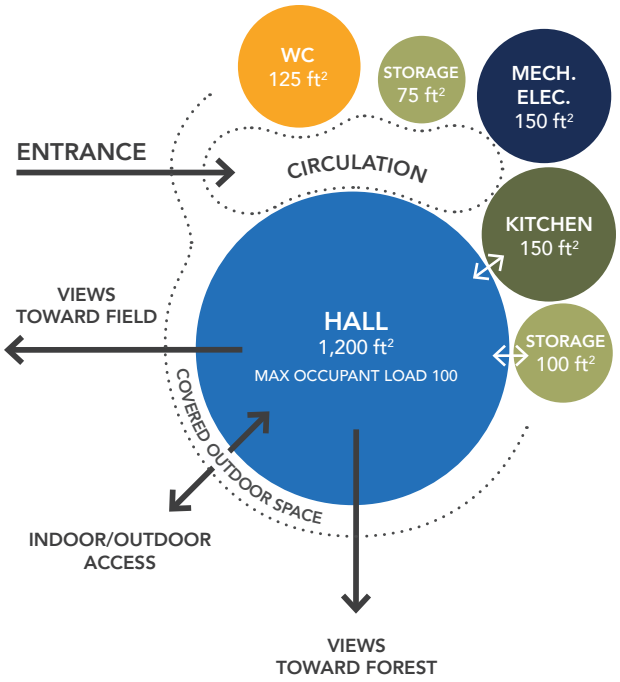
In addition to the main hall space, the new facility will integrate a series of support programs.

A kitchen will provide users with the ability to store, reheat and serve prepared meals. The kitchen is not intended for meal preparation, commercial vendors or park concession. The kitchen will be adjacent to the main hall space for ease of serving and clearing tables. It will also be fitted with conventional small kitchen appliances.

Adjacent to the main space, a small room will be dedicated to the storage of folding tables and chairs. Additional space will be provided for general storage, and custodial supplies. The hall will not be designed to accommodate user groups' storage.

The Community Hall will provide gender neutral washrooms to ensure a safe, fair, and inclusive space for all. The washroom facility will be accessible through the main circulation/lobby and located in a way that ensures privacy by obstructing direct views from the hall. Three (3) separate gender-neutral toilet rooms will be provided, two (2) of which will be designed to universal accessibility standards.

Finally, a locking service room will house the building electrical and mechanical components. The room will be adjacent to the kitchen and the hall so as minimize plumbing and duct runs. The service room must also have direct access to the outside to satisfy hydro requirements.

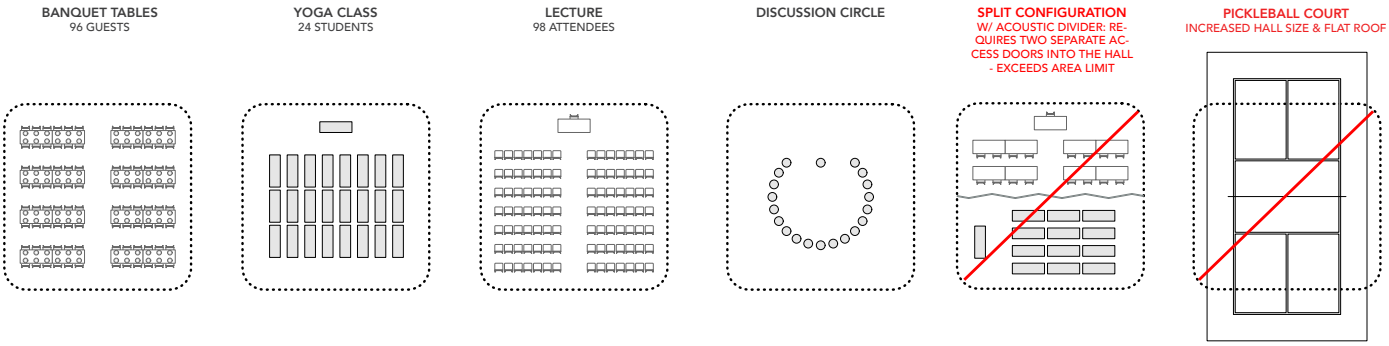


△ *Functional program adjacency diagram*

Main Hall Space

Occupant load: *100* **Net Area:** *112 m² (1200 ft²)*

- *Exposed wood finish*
- *Views to outdoor*
- *Access to outdoor covered area*
- *Audio visual rough-ins*
- *Acoustic treatment*
- *High performance windows*
- *Resilient flooring*
- *Wall protection*
- *Sloped ceiling*
- *Dedicated table and chair storage*



Kitchen

Net Area: *14 m² (150 ft²)*

- *Residential grade Dishwasher*
- *Residential grade Cooktop & oven*
- *Residential hood*
- *Double sink*
- *Locking Fridge*
- *Locking Freezer*
- *Commercial holding cabinet*
- *Custom millwork locking cabinet*
- *Tiled backsplash*
- *Stainless steel countertops*
- *Non-slip resilient flooring*
- *Acoustic tiles ceiling*
- *Small kitchen appliances*

Table and Chair Storage

Net Area: *9.5 m² (100 ft²)*

- *Sized to accommodate 100 chairs and 16 30" x 72" folding tables*
- *Locking cabinet for AV equipment*
- *Direct access to hall*
- *Resilient flooring*
- *Gypsum wall board ceiling and walls*
- *Wall protection*
- *Steel corner guards*

General Storage / Custodial room

Net Area: *7 m² (75 ft²)*

- *Locking door*
- *Open shelving for supplies*
- *Locking cabinet*
- *Mop sink / Mop holder*
- *Mop sink 3-sided splash guard*
- *Non-slip resilient flooring*
- *Gypsum wall board ceiling and walls*

Washrooms

Net Area: *12 m² (125 ft²)*

- *Two (2) gender-neutral universal toilet rooms*
- *One (1) gender-neutral toilet room*
- *Resilient flooring*
- *Gypsum wall board ceiling and walls*
- *Porcelain tiled walls up to 1.8m*
- *Flush-tank toilet fixtures*
- *Wall-hung sinks*
- *Electric hand-dryer*
- *Occupancy sensor lighting*
- *Washroom accessories*

Lobby / Circulation

- *Covered entryway / Canopy*
- *Glazed door entrance*
- *Power door operators*
- *Recessed door mat*
- *Millwork coat storage and bench*
- *Building signage*
- *Wall protection*

Design Assumptions

Sustainable design

Several sustainable design strategies will be explored by the design team over the next design stages of the project:

- High-performance building envelope
- Renewable energy sources (PV technologies)
- High efficiency mechanical and electrical equipment
- Natural storm water management practices
- Digital controls for building systems
- Net-Zero-Energy Ready

These strategies will be evaluated to determine if they provide cost effective value to the project. Through energy modeling of the building and life cycle cost analysis, the design team will be able to recommend strategies that are best suited to the community hall and demonstrate why others may not be appropriate.

As previously mentioned, we firmly believe that durability is an integral component of sustainability. Therefore, a sustainable envelope design entails the use of durable materials and assemblies. The roof will be designed with a 10-year RCABC RoofStar guarantee and consist of metal panels with outboard insulation, providing the building structure with a durable protection from moisture and repeated temperature variations.
Fibrous cement panels and metal panels will be used to clad the exterior walls as they are durable and non-combustible.

Structural Systems

In light of the geotechnical report, it can be assumed that the substructure will consist of a reinforced concrete slab on grade supported by reinforced concrete strip footings. Some localized concrete piers may be required to support columns around the hall space.

It is anticipated that the superstructure will have two distinct zones.

- Mass timber structures are an effective solution for rectangular rooms with longer spans. Thus, a timber post and beam/truss system will be well suited for the main hall, providing the space with high-ceilings and a unique Coastal identity, while allowing for unobstructed views of the outside.
- The support spaces will be constructed with conventional light-wood framing and prefabricated engineered trusses since mass timber is less cost effective for these smaller spaces.
- Shear walls and diaphragms will be constructed with plywood sheathing.

The project will prioritize the use of wood products for the building superstructure.

Mechanical Systems

The plumbing systems in the building will include copper supply piping with a centralized electric boiler located in the service room. Fixtures include ultra-low-flow faucets, urinals and water closets.

Fire suppression system is not required for the building, however, a monitored fire alarm is recommended.

The heating and ventilation system for the building will include a single central air-source heat pump as well as a centralized Air Handling Unit (AHU) providing heating and cooling for the whole facility. The heat pump will be pad or roof-mounted on a non-exposed portion of the building. The air extraction will rely on a Heat Recovery Ventilation system (HRV) to minimize energy losses.

Overhead air supply and return is anticipated to be the most cost-effective approach for air distribution. Exposed ductwork in the hall will be coordinated and integrated with other engineered systems and finishes.

Electrical Systems

The electrical systems for the community hall will include power distribution, emergency power, lighting systems, fire-alarm system, security and telecommunications systems.

Three-phased service requirement is anticipated for the mechanical systems.

Emergency lighting will be ensured by battery packs.

LED lighting fixtures will be used throughout the hall. Lighting design includes interior lighting and lighting controls (occupancy sensors), exterior building lighting and landscape and parking area lighting.

Civil Design and Site Improvements

Civil engineering work for the project will include designing finished grades (cut and fill of subgrade material), ensuring service connections to the site and building as well as the design of wastewater disposal systems.

In order to integrate the building within the existing site, a certain amount of excavation and earthwork will be required. The information provided by the geotechnical report supports the assumption that no blasting will be required for the project.

Designing the finished grades will consider integration of existing driveways and parking areas. Low impact improvements to facilitate access and parking should be considered. The parking calculations will be based on SCRD Bylaw 722 which dictates that for Assembly use, six (6) off-street parking spaces shall be constructed per 100 m2 of floor space. Assuming a gross floor area of 205 m^2 (2,200 ft^2), the bylaw requires twelve (12) parking spaces including one (1) accessible space.

Water service is available accross Northwood Road. Electrical service is similarly located. These will be brought to the South end of the new building.

A new fire hydrant will be required on the South side of Northwood road in front of the park entrance.

A wastewater disposal system will be designed to accommodate the building program and its occupant load. In addition to the area required for the building to be constructed, the site analysis will be considering the need for a level area in close proximity to the building where the septic system can be located. There may be opportunities to upgrade the existing septic system to accommodate the additional load from the new building but this assumption should be tested by a waste water system engineer early in the design.

Landscape design

The ambition of the project is to integrate the new community hall with the park's existing assets and natural features.

The community and the design team agree on the importance of minimizing tree removal. All efforts will be made to preserve significant tree specimens identified in the Environmental Impact assessment report. Western White Pines were noted as being especially dear to the community.

Integrating the building within the park will involve reinforcing connection between the inside and outside. Careful design consideration will be given to the entry sequence as the hall will sit at the transition where developed landscape meets the forest. A particular emphasis will also be placed on establishing visual and physical connections between the forest, the playing field, the playground and the hall. Acting as a link between the building and the landscape, the covered patio area will soften the indoor/outdoor transition.

With the site generally sloping toward the West and Southwest, accommodating the grade change will require some earthwork to provide a level area for the building to sit on. In an effort to preserve the identity of the existing site and minimize costs, the design team will strive to limit excavation and grading. This approach is consistent with the landscape design commitment of retaining the significant portions of the site while enhancing the disturbed areas with native planting.

As the intent of the project is to limit its impact on the site, landscape interventions and outdoor lighting will be kept to a minimum. However, the chosen approach to locate the building in a previously disturbed area of the site implies that the affected amenities will need to be . Whether it is parking, play equipment or trails, the community hall will aim to preserve the park and its amenities.

Integrating the design within its context also requires protecting the building and the landscape from the risks they pose to each other. Thus, fire safety will be assessed and fire-smart design strategies will be considered to protect the park, the building and the commmunity.

6 Site Analysis

Comparative site study in relation to building program and budget

General

The selection of the most suitable building site is a critical part of the design process. A comparative site study consists in the concurrent analysis of several sites. Using consistent parameters such as constraints, development impact and physical characteristics, a comparative site study was used to rank the suitability of the sites and advise the SCRD accordingly.

Identifying Potential Sites

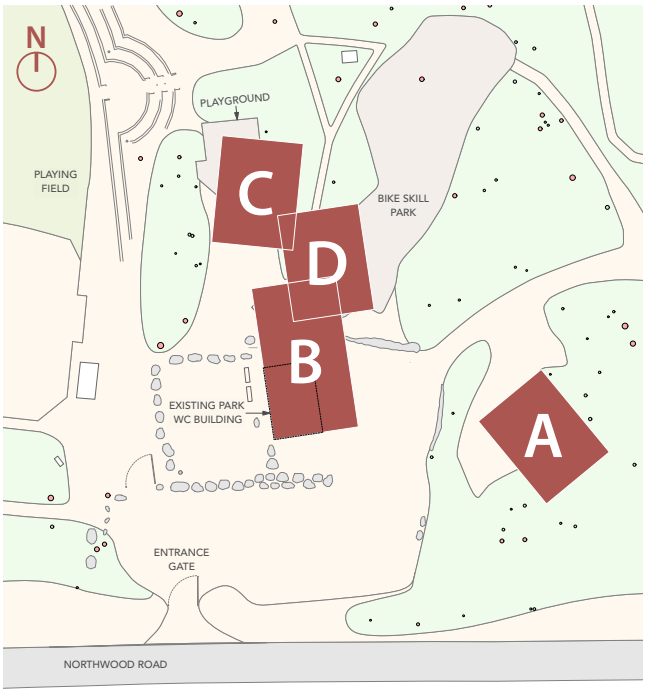
When Connor Park was selected as the location of the new community hall, the Southeast corner of the park was naturally identified as the project site due to its existing amenities and connection to the road infrastructure. Within this context, it is the ambition of the design team to minimize the impact on the park, its activities, amenities and its natural features. Therefore, the selection process for potential sites within the Southeast corner of the park was driven by the following parameters:

- Level area
- Previously disturbed ground
- Minimized proximity to significant tree specimens
- Proximity to existing circulation
- Minimized impact on park functions & circulation

Four potential building sites were identified:

- Site Option A: Parking Lot Knoll
- Site Option B: Existing Park WC
- Site Option C: Playground Area
- Site Option D: Bike Skill Park Area

These options were tested against a three-dimensional digital model of the site by inserting a building massing representative of the hall's anticipated size. The test fits provided critical information regarding the physical constraints of each option including its topography, projected grading and potential tree removal.



△ *Potential building sites thumbnail map*

Site Evaluation Notes

Using the data collected from professionals (Geotechnical report, Environmental Impact Assessment Report, Survey) and physical test fits, the site options were compared against a set of consistent parameters ranging from physical conditions, land use & legal constraints, environmental impact, budget impact and access to available services. Detailed evaluation criteria and ranking can be found on the following pages along with detailed site plans.

Despite its satisfactory environmental impact ranking and its minimal disruption of existing park amenities, Site Option A is too congested as a result of being wedged by the access gravel road to the North, the existing parking to the West and steep terrain slope requiring significant excavation to the East. Additionally, the steep gravel road makes the access to the building challenging for users with reduced mobility. Finally, by being turned toward the gravel

parking lot, Option A has little potential for covered outdoor space and establishing meaningful relationships with other park amenities. Its proximity to the road and orientation, make it more prone to creating acoustic disturbance for its immediate surroundings.

Site Option B makes an attempt at solely constructing the hall on previously disturbed ground and have lower environmental impact on the site. However, to achieve this, the recently built (2010) and functional park washroom must be removed. The deleted washroom facilities would have to be replaced and integrated into the new hall building. The environmental impact of demolishing, disposing of, and rebuilding equivalent amenities would greatly offset the benefits of building on a previously disturbed site. Additionally, integrating the washroom facility into the new building, would increase its footprint by nearly 50% and substantially drive up the construction cost, thus working against the project's attempt to remain economical. Option B would benefit from its proximity to the existing septic field which could potentially be upgraded to accommodate the new facility. However, the existing septic field constraints the building's location by pushing it toward the East and thus creating a pinch point in the overall park circulation.

It was originally anticipated that siting the hall at the location of the existing playground (Option C) would allow for views to the playing field while pleasantly screening the building with the tree grove located along its west facade. However, the study showed that to allow for an appropriate construction zone, this option would require cutting down most of the grove West of the building. This would include cutting down significant tree specimens which is not acceptable within the framework of the project. Additionally, this option would be further away from the park entrance, making access more challenging for users with reduced mobility. Finally, Site Option C would require the relocation of the playground elsewhere in the park.

Recommendations

The findings from the comparative site analysis show Option D to be the most suitable site for the future Community Hall. While providing satisfactory levels of accessibility and proximity to the existing site access points, Option D offers the best compromise between excavation cost and tree removal. Option D is not expected to require the removal of significant tree specimens despite potentially impacting up to two specimens' root system. A more in-depth arborist report would be required to confirm this assumption once the site selection has been finalized.

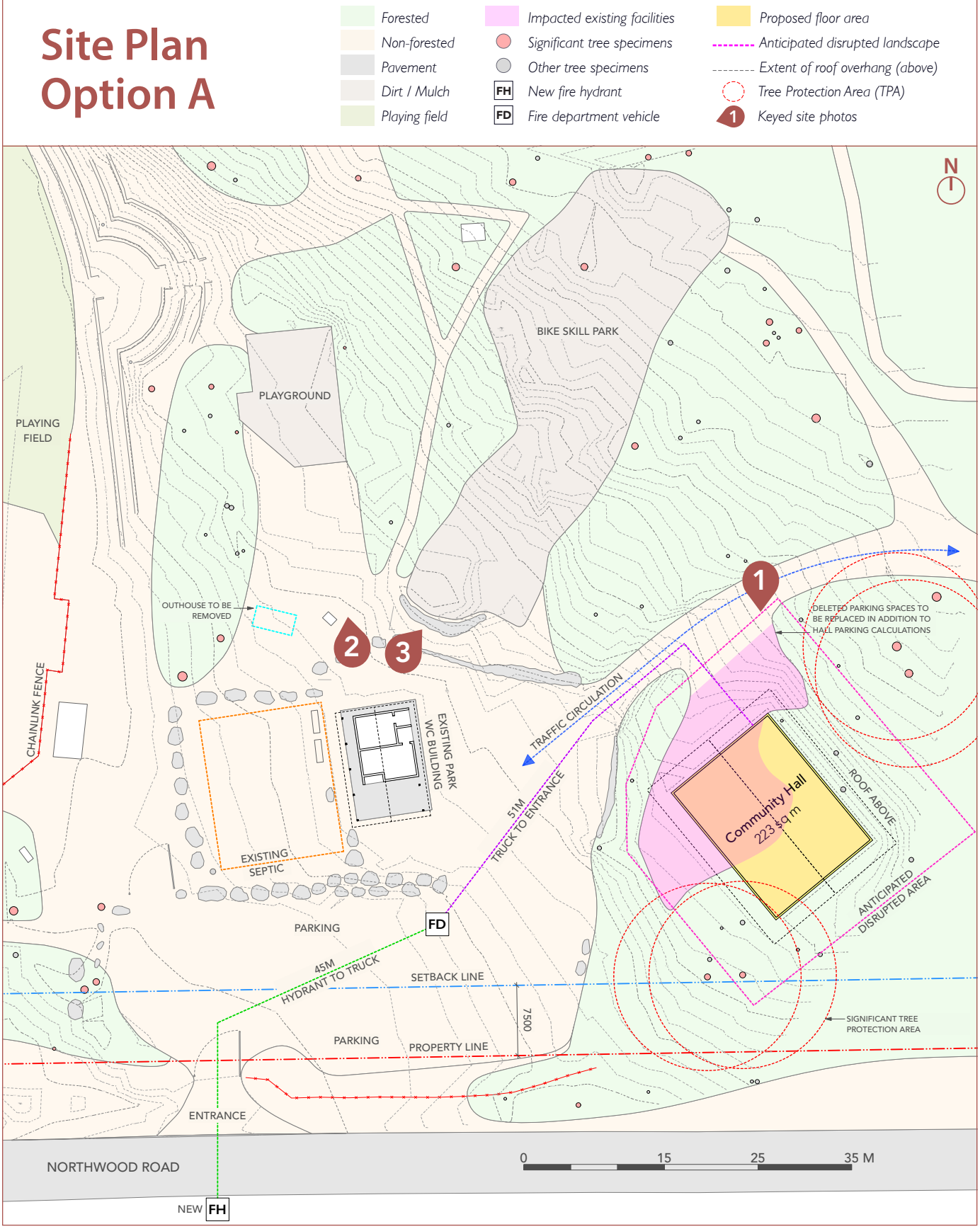
The comparative study showed that Option D allows for a strong visual relationship between the hall and the playing field while preserving the tree grove bordering it. Unfortunately, Option D will have an impact on the bicycle skills area and construction activities may temporarily interrupt the use of the playground. This option places the hall at the centre of the site, yet it allows for fluid circulation and makes the building a gateway point to the park's trail network.

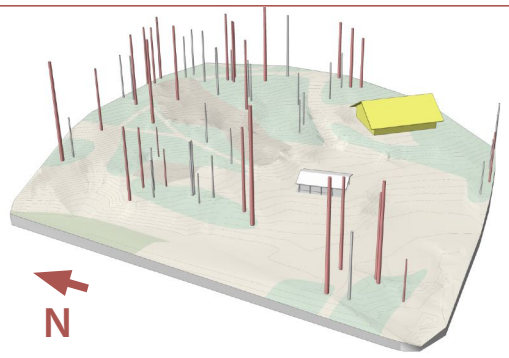
With its South facade facing the parking lot, the building would have an easily recognizable entrance. However, the building would truly open to the West, facing the playing field, adjacent to the playground and acoustically screened by the park washroom building.

Finally, Option D is adjacent and uphill from a flat level area to the West, which may be a suitable location for a septic field in the event that the existing septic system would not be able to accommodate the new hall.

Site photos as keyed on site plan drawings ▽

Site Plan Option A





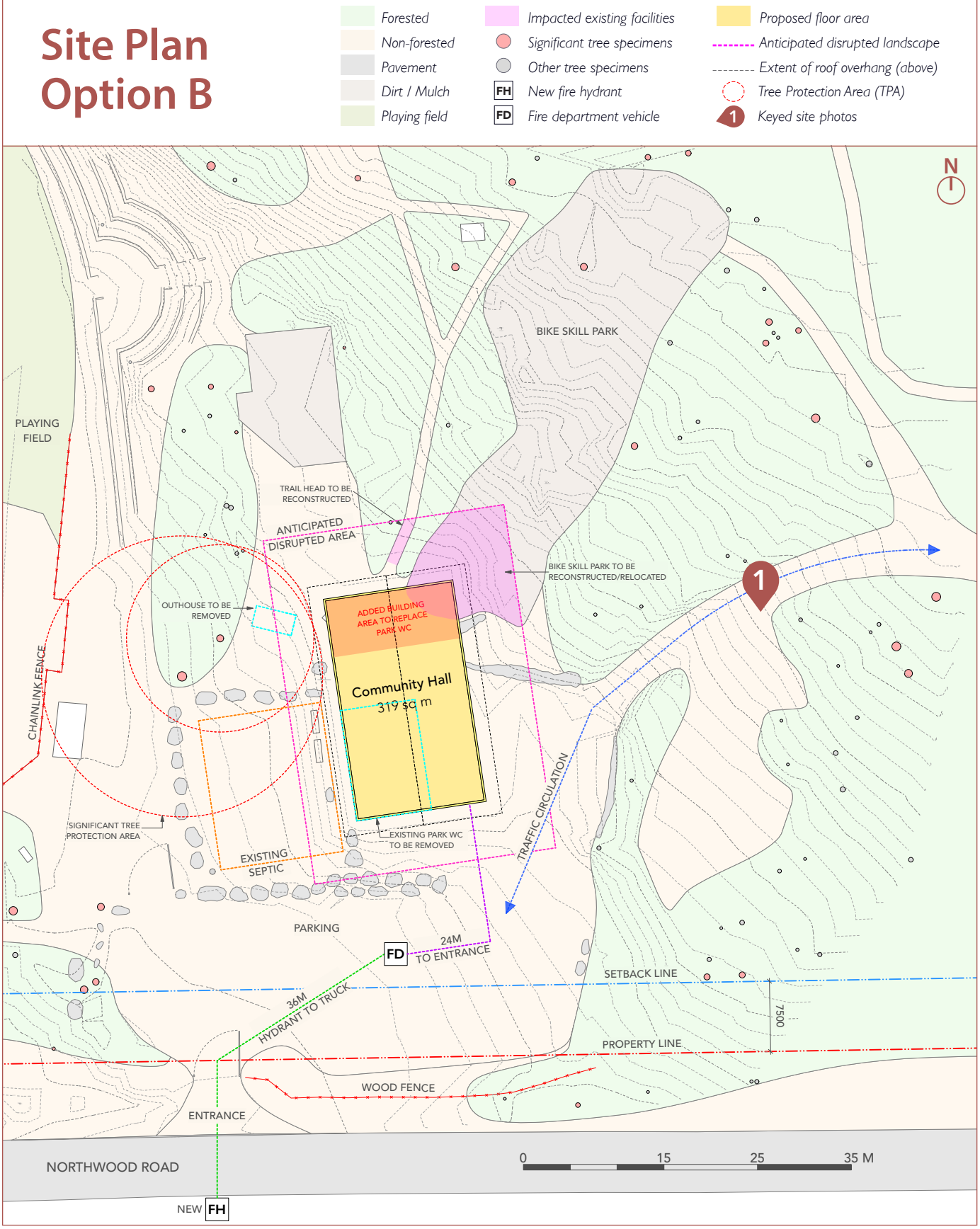
Evaluation Matrix Option A

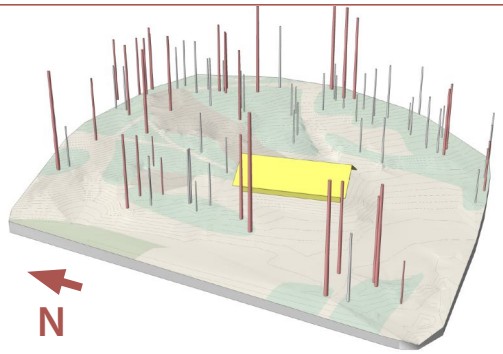
* Subject to confirmation from the fire department
** Refer to Environmental Impact Report 23/07 by Coastal Raintree Consulting Ltd.
*** Subject to advice from qualified professional Arborist regarding tree health and risk
**** Refer to Archaeological report 22/10/19 by In Situ Archaeology
***** Refer to Professional Geotechnical report 23/07/13 by Frontera Geotechnical
****** Subject to advice from qualified professional septic design consultant

Evaluation Criteria

Land Use Planning		**33%** good
Meet setback requirements	✓	
Construction zone can be hoarded off without impacting park activities	×	Reduced parking and blocks through-road access
No pedestrian or vehicle traffic control measures required	×	Pedestrian traffic across gravel access road
Site design qualities		**43%** good
Insertion within existing site assets and activities	×	Building is removed from the rest of the site by the road
Significant natural light opportunities	✓	
No significant requirement for solar shading	×	Exterior shading on West façade - Summer months heat gain
Opportunities for outdoor spaces	×	West facing façade overlooks parking. Limited space otherwise
Hall main entrance is removed from traffic and park circulation	×	Congested entrance next to gravel road
Building location does not impede vehicle circulation through site	✓	
Building is easily recognizable from the street	✓	
Impact on Existing Amenities		**80%** good
Hall Building does not reduce existing parking capacity	×	
Hall Building does not impact playground area	✓	
Hall Building does not impact bike skill area	✓	
Hall Building does not impact existing park WC facility	✓	
Hall Building does not impact existing covered picnic area	✓	
Site selection budget impact		**100%** good
Added demolition cost from removal of existing, functional amenities	✓	No demolition required
Significant added project cost to replace existing, functional amenities	✓	Parking replacement cost would be minimal
Site development cost to accommodate larger building footprint	✓	
Safety + Security		**0%** good
No specific safety hazard to note	×	Building proximity to the gravel access road
Accessibility		**50%** good
Continuous wheelchair accessible route from street and from parking area	×	Gravel access road slopes at 1:6 (too steep to be accessible)
Pick-up/Drop-off area may be accommodated close to the main entrance	✓	
Fire Safety		**50%** good
Fire truck access to within 15m of main entry*	✓	
Fire hydrant & Fire department vehicle access (New hydrant needed)*	×	Hall entrance further than 90m from hydrant
Environmental Impact		**67%** good
Low environmental impact of demolition/disposal of existing, functional amenities	✓	
Low environmental impact of rebuilding existing, functional amenities	✓	
Environmental leadership through preservation of existing, functional amenities	✓	
No removal of significant trees **	✓	
No encroachment on Tree Protection Area (TPA) **/***	×	4 (3 Firs, Cedar)
No removal of non-significant tree specimens**	×	11 non-significant tree specimens to be removed
No archaeological material, feature or potential ****	✓	
No impact on endangered habitats or wetlands**	✓	
Acoustic line of sights and proximity to neighbour properties	×	Close proximity and direct line of sight to Northwood Rd.
Soils / Topography		**33%** good
Suitable bearing soils for permanent foundation *****	✓	
Minimal clearing and grading required	×	
No special building perimeter drainage required	×	
Utilities + Services		**75%** good
Electrical (Hydro) service availability	✓	Across Northwood Road
Potable water service connected directly to municipal system	✓	Across Northwood Road
Suitable septic field area available downslope from site ******	×	
Communication service available (cable, telephone, fibre)	✓	Across Northwood Road
	Total Rating:	**53%**

Site Plan Option B





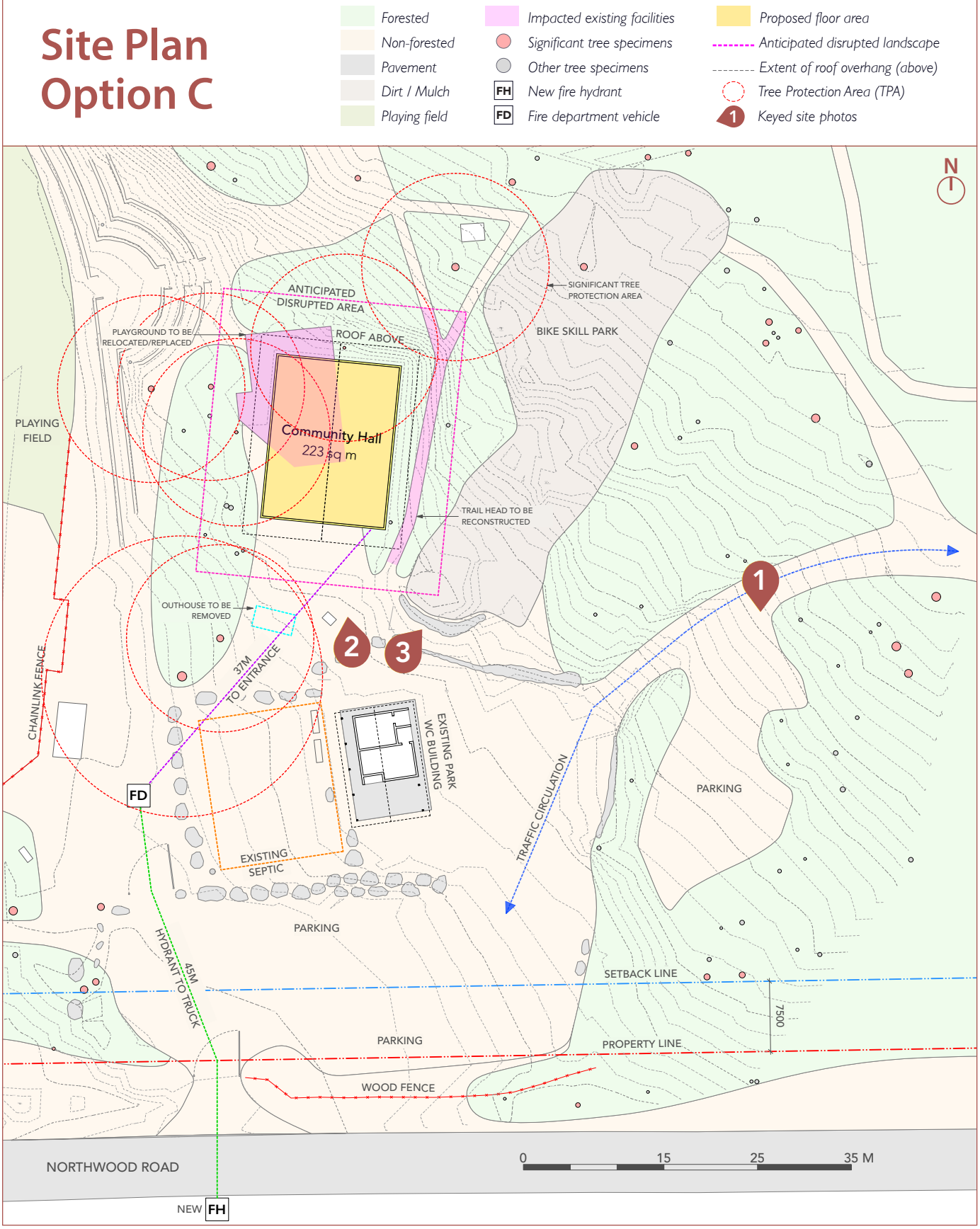
Evaluation Matrix Option B

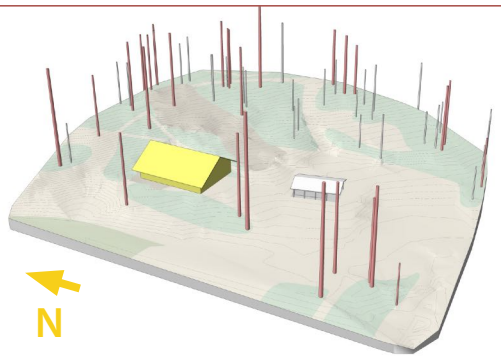
* Subject to confirmation from the fire department
** Refer to Environmental Impact Report 23/07 by Coastal Raintree Consulting Ltd.
*** Subject to advice from qualified professional Arborist regarding tree health and risk
**** Refer to Archaeological report 22/10/19 by In Situ Archaeology
***** Refer to Professional Geotechnical report 23/07/13 by Frontera Geotechnical
****** Subject to advice from qualified professional septic design consultant

Evaluation Criteria

Land Use Planning			**67%** good
Meet setback requirements	✓		
Construction zone can be hoarded off without impacting park activities	×	Construction removes access to WC and blocks through-road access	
No pedestrian or vehicle traffic control measures required	✓		
Site design qualities			**43%** good
Insertion within existing site assets and activities	×	Building is centrally located but obstructs site circulation	
Significant natural light opportunities	✓		
No significant requirement for solar shading	×	Exterior shading on West façade - Summer months heat gain North	
Opportunities for outdoor spaces	✓	west corner has good potential for outdoor space Entrance	
Hall main entrance is removed from traffic and park circulation	×	adjacent to main site circulation with little breathing room	
Building location does not impede vehicle circulation through site	×	Constrained by septic system, building creates pinch point at SE	
Building is easily recognizable from the street	✓		
Impact on Existing Amenities			**20%** good
Hall Building does not reduce existing parking capacity	×	Informal parking along the existing WC and rock-wall deleted	
Hall Building does not impact playground area	✓		
Hall Building does not impact bike skill area	×		
Hall Building does not impact existing park WC facility	×		
Hall Building does not impact existing covered picnic area	×		
Site selection budget impact			**0%** good
Added demolition cost from removal of existing, functional amenities	×	Demolition and disposal of existing park WC	
Significant added project cost to replace existing, functional amenities	×	Park WC facility adds 20-30% floor area to the building	
Site development cost to accommodate larger building footprint	×		
Safety + Security			**0%** good
No specific safety hazard to note	×	Building proximity to the gravel access road	
Accessibility			**100%** good
Continuous wheelchair accessible route from street and from parking area	✓		
Pick-up/Drop-off area may be accommodated close to the main entrance	✓		
Fire Safety			**100%** good
Fire truck access to within 15m of main entry*	✓		
Fire hydrant & Fire department vehicle access (New hydrant needed)*	✓		
Environmental Impact			**33%** good
Low environmental impact of demolition/disposal of existing, functional amenities	×	Waste disposal of park WC building demolition	
Low environmental impact of rebuilding existing, functional amenities	×	Emissions from additional construction for new park WC	
Environmental leadership through preservation of existing, functional amenities	×	Park WC built in 2010, do not need upgrading or replacement	
No removal of significant trees **	✓		
No encroachment on Tree Protection Area (TPA) **/***	×	2 (Cedars)	
No removal of non-significant tree specimens**	×	3 non-significant tree specimens to be removed	
No archaeological material, feature or potential ****	✓		
No impact on endangered habitats or wetlands**	✓		
Acoustic line of sights and proximity to neighbour properties	×	Close proximity and direct line of sight to Northwood Rd.	
Soils / Topography			**100%** good
Suitable bearing soils for permanent foundation *****	✓		
Minimal clearing and grading required	✓		
No special building perimeter drainage required	✓		
Utilities + Services			**100%** good
Electrical (Hydro) service availability	✓	Across Northwood Road	
Potable water service connected directly to municipal system	✓	Across Northwood Road	
Suitable septic field area available downslope from site ******	✓	Potential for upgrade to existing septic system	
Communication service available (cable, telephone, fibre)	✓	Across Northwood Road	
		Total Rating:	**56%**

Site Plan Option C





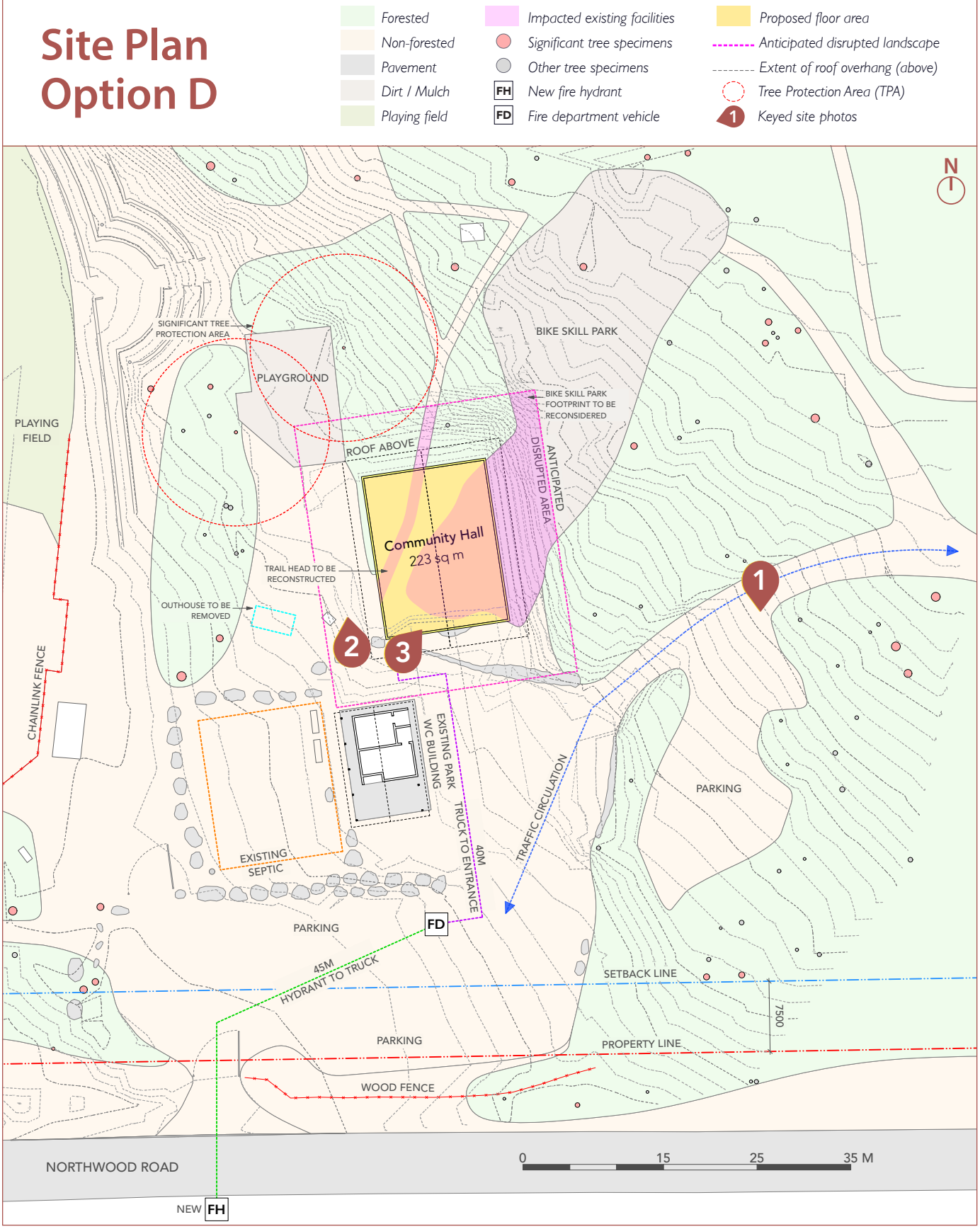
Evaluation Matrix Option C

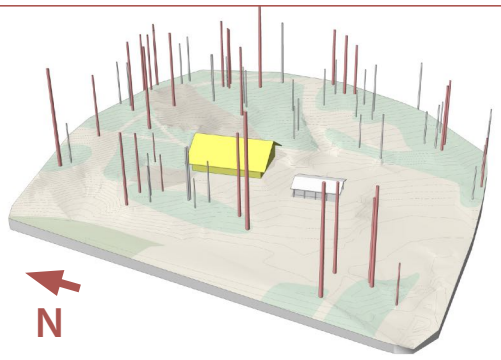
* Subject to confirmation from the fire department
** Refer to Environmental Impact Report 23/07 by Coastal Raintree Consulting Ltd.
*** Subject to advice from qualified professional Arborist regarding tree health and risk
**** Refer to Archaeological report 22/10/19 by In Situ Archaeology
***** Refer to Professional Geotechnical report 23/07/13 by Frontera Geotechnical
****** Subject to advice from qualified professional septic design consultant

Evaluation Criteria

Land Use Planning			100% good
Meet setback requirements	✓		
Construction zone can be hoarded off without impacting park activities	✓		
No pedestrian or vehicle traffic control measures required	✓		
Site design qualities			71% good
Insertion within existing site assets and activities	✓	Well connected to play field and trail access	
Significant natural light opportunities	×	Building significantly shaded on 3 sides year round	
No significant requirement for solar shading	✓		
Opportunities for outdoor spaces	✓	South and West façade as trees have been removed for construction	
Hall main entrance is removed from traffic and park circulation	✓		
Building location does not impede vehicle circulation through site	✓		
Building is easily recognizable from the street	×	Building is tucked away behind park WC	
Impact on Existing Amenities			80% good
Hall Building does not reduce existing parking capacity	✓		
Hall Building does not impact playground area	×	Pre-existing discussion to replace playground equipment	
Hall Building does not impact bike skill area	✓	Or very marginally during construction	
Hall Building does not impact existing park WC facility	✓		
Hall Building does not impact existing covered picnic area	✓		
Site selection budget impact			100% good
Added demolition cost from removal of existing, functional amenities	✓	Cost of dismantling the playground is marginal	
Significant added project cost to replace existing, functional amenities	✓	The existing playground needs replacement	
Site development cost to accommodate larger building footprint	✓		
Safety + Security			0% good
No specific safety hazard to note	×	Heightened tree fall hazard (isolated trees close to the building)	
Accessibility			50% good
Continuous wheelchair accessible route from street and from parking area	✓		
Pick-up/Drop-off area may be accommodated close to the main entrance	×	Main entrance at a distance from parking area	
Fire Safety			50% good
Fire truck access to within 15m of main entry*	×		
Fire hydrant & Fire department vehicle access (New hydrant needed)*	✓		
Environmental Impact			67% good
Low environmental impact of demolition/disposal of existing, functional amenities	✓		
Low environmental impact of rebuilding existing, functional amenities	✓		
Environmental leadership through preservation of existing, functional amenities	✓	Pre-existing discussion to replace playground equipment	
No removal of significant trees **	×	2 (White Pine, Arbutus)	
No encroachement on Tree Protection Area (TPA) **/***	×	4 (3 Cedars, White Pine)	
No removal of non-significant tree specimens**	×	8 non-significant tree specimens to be removed	
No archaeological material, feature or potential ****	✓		
No impact on endangered habitats or wetlands**	✓		
Acoustic line of sights and proximity to neighbour properties	✓	Building is tucked away and partially screened by the park WC	
Soils / Topography			33% good
Suitable bearing soils for permanent foundation *****	✓		
Minimal clearing and grading required	×		
No special building perimeter drainage required	×		
Utilities + Services			100% good
Electrical (Hydro) service availability	✓	Across Northwood Road	
Potable water service connected directly to municipal system	✓	Across Northwood Road	
Suitable septic field area available downslope from site ******	✓	Potential for upgrade to existing septic system	
Communication service available (cable, telephone, fibre)	✓	Across Northwood Road	
		Total Rating:	**65%**

Site Plan Option D





Evaluation Matrix Option D

* Subject to confirmation from the fire department
** Refer to Environmental Impact Report 23/07 by Coastal Raintree Consulting Ltd.
*** Subject to advice from qualified professional Arborist regarding tree health and risk
**** Refer to Archaeological report 22/10/19 by In Situ Archaeology
***** Refer to Professional Geotechnical report 23/07/13 by Frontera Geotechnical
****** Subject to advice from qualified professional septic design consultant

Evaluation Criteria

Land Use Planning			100% good
Meet setback requirements	✓		
Construction zone can be hoarded off without impacting park activities	✓		
No pedestrian or vehicle traffic control measures required	✓		
Site design qualities			100% good
Insertion within existing site assets and activities	✓	Well connected to play field and trail access	
Significant natural light opportunities	✓	Far enough removed from West tree grove	
No significant requirement for solar shading	✓	West tree grove minimizes excessive solar heat gain during summer	
Opportunities for outdoor spaces	✓	West façade (views toward the field & trailhead gateway point)	
Hall main entrance is removed from traffic and park circulation	✓		
Building location does not impede vehicle circulation through site	✓		
Building is easily recognizable from the street	✓	Only the West façade and the outdoor patio screened by WC	
Impact on Existing Amenities			60% good
Hall Building does not reduce existing parking capacity	×	Informal parking along the existing WC and rock-wall deleted	
Hall Building does not impact playground area	✓	Or very marginally during construction	
Hall Building does not impact bike skill area	×		
Hall Building does not impact existing park WC facility	✓		
Hall Building does not impact existing covered picnic area	✓		
Site selection budget impact			100% good
Added demolition cost from removal of existing, functional amenities	✓	No demolition required	
Significant added project cost to replace existing, functional amenities	✓	Bike skill park needs upgrades	
Site development cost to accommodate larger building footprint	✓		
Safety + Security			100% good
No specific safety hazard to note	✓		
Accessibility			100% good
Continuous wheelchair accessible route from street and from parking area	✓	Ramp as hardscape separation between WC building and Hall	
Pick-up/Drop-off area may be accommodated close to the main entrance	✓		
Fire Safety			100% good
Fire truck access to within 15m of main entry*	✓		
Fire hydrant & Fire department vehicle access (New hydrant needed)*	✓		
Environmental Impact			78% good
Low environmental impact of demolition/disposal of existing, functional amenities	✓		
Low environmental impact of rebuilding existing, functional amenities	✓		
Environmental leadership through preservation of existing, functional amenities	✓		
No removal of significant trees **	✓		
No encroachment on Tree Protection Area (TPA) **/***	×	2 (Arbutus, White Pine)	
No removal of non-significant tree specimens**	×	2 non-significant tree specimens to be removed	
No archaeological material, feature or potential ****	✓		
No impact on endangered habitats or wetlands**	✓		
Acoustic line of sights and proximity to neighbour properties	✓	Building is partially screened by the park WC	
Soils / Topography			33% good
Suitable bearing soils for permanent foundation *****	✓		
Minimal clearing and grading required	×		
No special building perimeter drainage required	×		
Utilities + Services			100% good
Electrical (Hydro) service availability	✓	Across Northwood Road	
Potable water service connected directly to municipal system	✓	Across Northwood Road	
Suitable septic field area available downslope from site ******	✓	Existing playground location or upgrade to existing septic system	
Communication service available (cable, telephone, fibre)	✓	Across Northwood Road	
		Total Rating:	**87%**

7 Conceptual Design Option

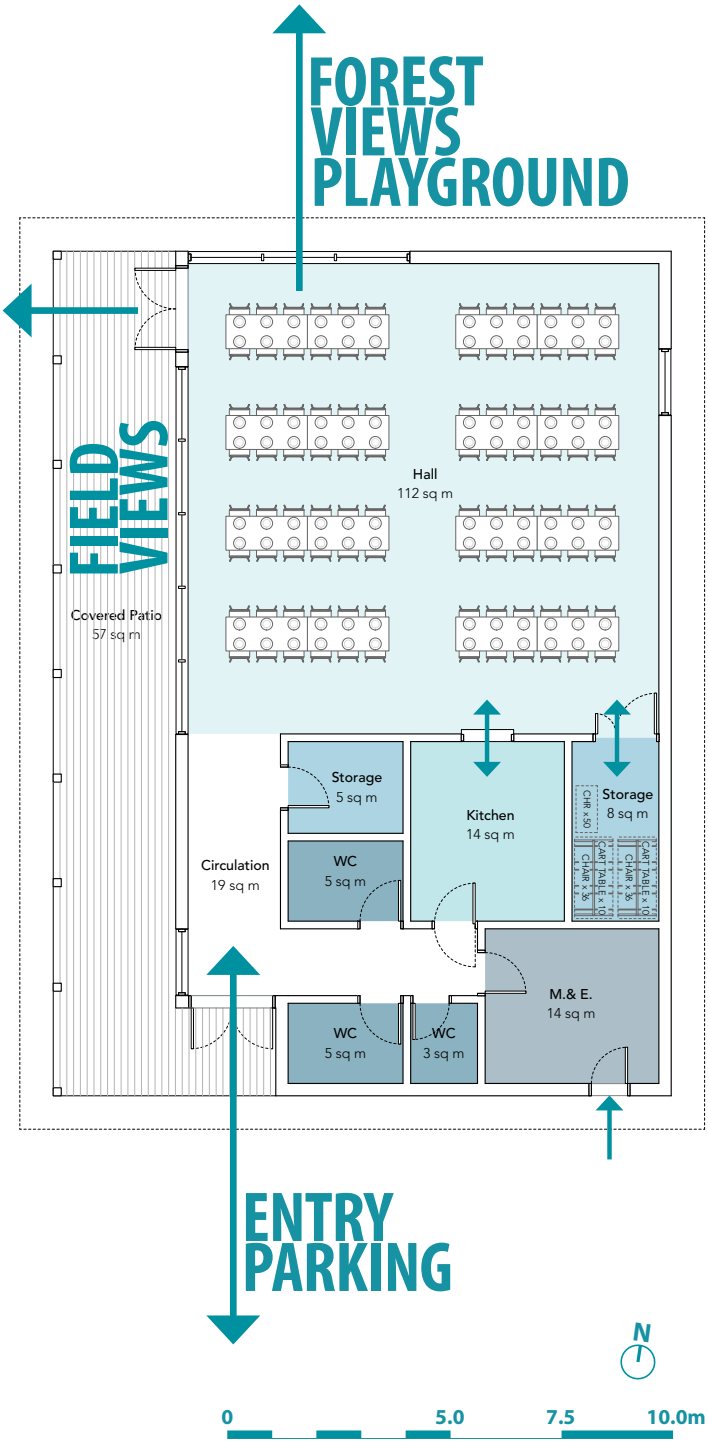
From Site Analysis and Project Scope to Design

Conceptual Floor Plan

Constraints and opportunities identified with Site Option D, together with the functional program outlined in the Scope of Work section allowed for a conceptual floor plan to be developed. Building access, views and topography contributed in locating each piece of the program.

This design has a gross floor area of 200 m² (2,150 ft²) and a net floor area of 184 m² (1,980 ft²) excluding the patio. The net areas shown on the drawing, result from minimum clearances and circulation widths required to satisfy the scope of work. It is anticipated that when integrating engineered systems and further resolving the design, the overall building will have a 205 m² (2,200 ft²) net area.

△ *Camp Kanata Dining Hall - Andre Johnson Architect*



△ *Camp Kanata Dining Hall - Andre Johnson Architect*

△ *Sakuragaoka Childcare Center - Kengo Kuma & Associates*

Opportunities & Constraints

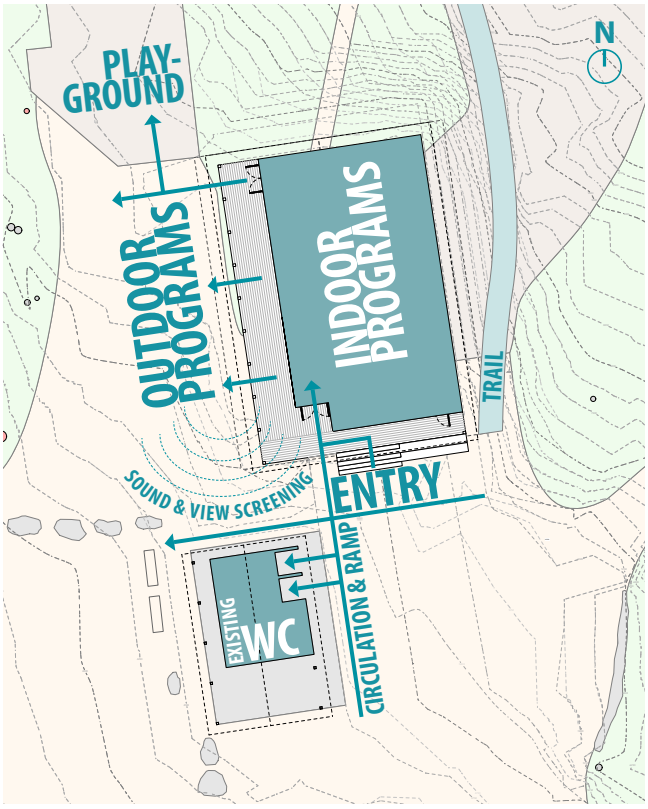
As previously discussed, Site Option D will provide the best compromise between site constraints and design opportunities.

Access, Circulation & Privacy

The benefit of siting the building close to the parking lot is two-fold. First, the hall will be easily identifiable from Northwood Road. Located on a slight knoll, the facade will be visible beyond the park washroom. Then, the access is more direct, particularly for users with reduced mobility. A ramp, required to reach the entrance from the parking lot, will act as a natural landscaped separation between the field washroom and the building entrance.
Additionally, the ramp and park washroom will help establish a hierarchy between the two main building facades:

- The South facade is the welcoming face of the hall. Looking onto the parking lot and focusing on circulation, it guides the users up to the building with stairs as well as the ramp. Adjacent to the ramp, benched seating would be the perfect meeting spot for hikers getting on the reconstructed trailhead at Southeast corner of the building.

▽ *Conceptual Site Circulation Diagram*



- On the other side, the West facade is more intimate with its covered patio. Opening up the hall activities onto the West side, it establishes a strong visual and physical connection with the field and the playground. This configuration also prevents having a direct line of sight between the street and the patio which is obstructed by the park washroom. This helps with privacy and minimizes sounds travelling from the hall toward the Northwood Road.

In siting the new community hall building, Option D carefully considers its location with respect to the existing field washroom. The slight and intentional misalignment aims at enriching the in-between space where circulation and impromptu programming can take place.

Topography

Grade changes are both generative of opportunities and imposing of technical constraints on the design. With the general slope of the site falling toward the Southwest, the Northeast corner of the community hall is lower than the existing grade. It is anticipated that grading in this area will extend at least six meters beyond the building walls to allow for an acceptable angle of repose while allowing the construction to proceed around the building. Consequently, the Northeast corner of the building will collect substantial water and require appropriate drainage strategies. The areas disturbed by the excavations will be replanted with native species and minimize excessive runoff.

Site Amenities

Option Site D offered a good compromise of using a previously disturbed area of the site while having a marginal effect on existing park amenities. However, both the existing trailhead and part of the Bike Skill Park (Snake Pit) will be compromised by the construction of the new hall. Temporary disruption to the playground access may occur during the construction period.

The trailhead will be rebuilt and integrated into the site improvements. Potential options to rebuilt or relocate the Bike Skill Park will be investigated by the SCRD within the context of other community facility improvements at Connor Park.

△ *Connor Park - view from main gravel parking lot and looking North*

8 Project Risk Assessment

Based on the assumption of Site Option D

RISK #	RISK DESCRIPTION	PROBABILITY	TIMELINE	IMPACT	MITIGATION STRATEGY	RISK RESERVE COST
1	Unforeseen soil conditions or bearing capacity	Very low	Early construction stages	Medium	Geotechnical investigations carried out in June 2023 investigated 5 pits including one at the building's anticipated location. With consistent results across all 5 pits, the occurrence of soil with lesser structural capacity within the building footprint could be resolved with localized foundation re-design. Another approach would be to obtain additional test pits specifically targeting the building footprint during subsequent design phases.	The unlikely probability of occurrence does not warrant a reserve cost
2	Unforeseen excavation volumes	Low	Early construction stages	Medium	The soil type reasonable predictability does not warrant significant concerns about additional excavation to reach load bearing soil. However, grading is costly and estimating cut & fill volumes can prove difficult to predict with precision. Civil consultant to provide estimate volumes. Particular care should be taken in the procurement documents phrasing around excavation costs.	Reserve amount should be allocated to excavation contingencies
3	Weather delays	Low	Construction	Medium (ICIP Grant)	Winter months may affect construction and impose delays. Delays are more likely with construction starting in the winter, delaying concrete pours. Time sensitive grant funding can be affected by delays.	No cost can be identified
4	Trade shortages / Market conditions	Medium	Tender	Medium/ High	Budget control is a critical aspect of this project. Construction costs have been volatile and quantity surveyor estimates reflect this climate with conservative estimates. Investigating alternative project delivery methods, like design stage construction management mitigates such risks. Refer to procurement method sections.	Upfront cost of alternative project delivery methods
5	Soil contamination remedial	Medium	Early construction stages	Low	Soil contamination may be identified during the removal of the decommissioned outhouse. A preliminary assessment of the outhouse integrity and the soil beneath would help identify risk and mitigate uncertainty.	Identify assessment cost
6	Budget creep	Medium	Design stages	Medium	Defining a precise and complete project scope prior to starting design is critical to avoid budget creep. Design changes impact on schedule and budget increase dramatically as the design progresses. Alternative project delivery methods where a construction professional is involved early in the process can help mitigate budget creep (see Section 10)	No cost can be identified

8 Project Risk Assessment

Based on the assumption of Site Option D

RISK #	RISK DESCRIPTION	PROBABILITY	TIMELINE	IMPACT	MITIGATION STRATEGY	RISK RESERVE COST
7	Archaeological findings	Low	Early Construction	High	An archaeological preliminary reconnaissance of the site was prepared by In Situ in October 2022 in the context of Forest Fuel Demonstration project. No archaeological material or heightened potential were identified. However, the assessment does not pertain to this project nor assesses subsurface conditions. It is recommended that the applicability of this report and its findings in the context of this project be confirmed with the shíshálh Nation.	No cost can be identified
8	Wildlife disturbance	Low	Early Construction	Low	The Environmental Impact Assessment report outlines the possible discovery of snake hibernaculum on site or bat presence in the decommissioned outhouse. Relocation/salvage of snakes should be appropriately undertaken, and bats should be reported to the Ministry of Environment for appropriate mitigation measures.	No cost can be identified
9	Insufficient available area for wastewater disposal	Medium	Design	High	Mechanical plumbing load calculations will define the area required for the installation of a septic field servicing the building. Site analysis identified that Site Option D may have a suitable septic field location, directly South of the existing playground. Alternately, the existing septic system may have the possibility of being upgraded. However, these assumptions will need to be tested and verified by the wastewater system engineer.	No cost can be identified
10	Tree falls	Medium	Building lifespan	High	The hall is located at the edge of a forested area near a large clearing (playing field). It is therefore possible that during a particularly windy event, trees may fall on the hall. The building was sited to not be in the direct vicinity of trees so as not to disrupt their root system. However, some of the specimens in the area are large enough to still pose a threat to the building if they were to fall. A detailed arborist report would help in providing a better assessment of this risk item.	No cost can be identified
11	Unforeseen upgrades to existing services	Low	Design/ Construction	Medium	The new Community Hall is a small facility with reasonably low utility demands. Unforeseen upgrades to existing services (Hydro, domestic water, data) is unlikely. The existing services will be investigated at design stage. A new fire hydrant will be required on the South side of Northwood Road.	No cost can be identified

8 Project Risk Assessment

Based on the assumption of Site Option D

RISK #	RISK DESCRIPTION	PROBABILITY	TIMELINE	IMPACT	MITIGATION STRATEGY	RISK RESERVE COST
12	Parking capacity	Low	Design	Low	The SCRD has reached out to the school district to inquire about the possibility of having outflow parking at the Halfmoon Bay Elementary School during high demand.	No cost can be identified
13	Affected Tree Protection Areas	Low	Design	Low	The Environmental Impact Assessment report submitted by Coastal Raintree Consulting in July 2023 outlines the location off all identified significant tree specimens on site and provide a Tree Protection Area (TPA) around each one of them. Option D was carefully located to minimize conflicts with TPAs. However, as pointed out by the EIA report, the trees are located with an accuracy of +/- 3.65m. Some conflicting information was also identified with the legal survey. In order to avoid removal or damage to significant trees, the preparation of an arborist report is recommended once the building location is confirmed.	Arborist consultant cost
14	Appropriate sun exposure for photovoltaic panels	Medium	Design	Medium	Net Zero Energy readiness, if pursued, will require that the project be able to accommodate sufficient photovoltaic panels to offset its hydro consumption. The energy modelling exercise will inform the PV area required based on solar exposure. As the building is located in a forested zone, exploring alternative PV locations may help increase exposure.	No cost can be identified
15	Park activity conflicts during construction	Medium	Construction	High	Site Option D was located so as to minimize its impact on the park activities while being central. It is anticipated that the necessary hoarding around trees and preventing the construction zone from creeping into forested areas will put pressure on the parking lot. This may, at times, have an impact on park activities. Alternative project delivery method such as Construction Management, may help mitigate this risk.	No cost can be identified

9 Alternative Project Delivery Methods

Project delivery is a general term describing the processes used to successfully complete the design and construction of a building project. The typical project delivery method for public buildings consists of three phases: Design-bid-build. The owner engages the architect to design the project and produce the tender documents. The tender package is issued for competitive bids and the general contractor with the lowest bid is selected to build the project. In the recent past, project delivery methods have evolved from this original model to better respond to a changing industry:

- Increased owner requirements
- More urgent time frames
- Demand for higher building performance
- Reduce adversarial relationships to achieve higher quality outcomes through collaboration
- Economic pressures and market volatility

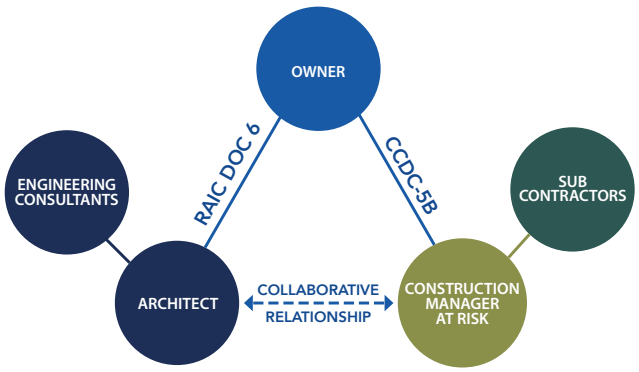
Novel forms of project delivery focusing on collaboration between builders and designers are becoming mainstream, opening up the potential to deliver superior projects at similar cost. With time and budgetary constraints, the Halfmoon Bay community hall project would benefit from a project delivery method that combines the expertise of both design and construction professionals. This will ensure that the construction documents will be informed by a constructor's input who will provide advice on cost, schedule and ease of construction during the design.

Common project delivery methods using this collaborative approach include 'design-build' and 'construction management'. Both these methods would see the design consultant and construction consultant work together to efficiently guide the process through completion. However, in the case of design-build contracts, the price is set before the design is complete which can result in higher contingency factors and a decision process focused on initial cost rather than long-term value. The architect is no longer an independent agent advocating for the owner's best interest. Additionally, design changes become onerous a they constitute changes to the stipulated price contract. Therefore, this method often relinquishes the most control over the project after the contract is signed.

Construction Management

With this project delivery method, the owner engages the architect and a construction manager separately. The architect is responsible for the design and preparation of construction documents which follow the same phasing as that of a traditional Design-Bid-Build project. The construction manager (CM) comes on board under a CCDC-5B contract once the schematic design is complete. The CM acts as a consultant during the remaining design phases to provide input on constructibility, cost estimating, scheduling and cost control. As the design phases of the project progress and the final cost can be more accurately projected the CM will develop a final construction budget. At this stage, the CM has an in-depth knowledge of the project and is in a unique position to provide a smooth transition into the construction phase as well as accurate pricing. If the owner agrees to the budget, the two parties execute a change order amending the CCDC contract to finalize their agreement on the price and terms of the construction scope. This is called construction management at risk as the construction manager assumes the risks for construction.

This form of construction management provides an excellent collaborative structure but also remains competitive in its construction procurement as it is in the CM's best interest to proceed as the general contractor. Therefore, this method would be the best suited to delivering a quality building on time and on budget for the Halfmoon Bay community hall project.



△ *Construction management - Contractual relationships diagram*

10 Project Budget Summary

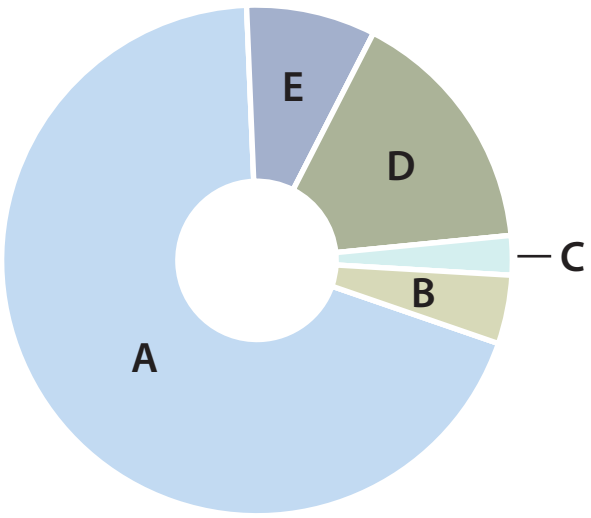
The SCRD staff will provide assistance in developing and reviewing a master cost plan, including a reasonable contingency amount based on project specific risks. It is important that this plan includes all aspects of the budget so that the Regional District has one place to look for all information on project funding availability, design costs, construction costs, and other owner related expenses. This plan helps to ensure sound fiscal responsibility at all stages of the project by tracking anticipated costs against the most updated budget. During each phase, the design will be progressed, analyzed for needs assessment and value prior to being professionally quantity surveyed. At each stage of the design, the corresponding level of detail and cost plan accuracy will be improved. This iterative approach to integrated design and cost management is an effective methodology for project cost control success. Finally, alternative project delivery methods, through the early involvement of a construction manager, offer greater level of predictability with respect to construction costs.

Project Funding Summary Chart

FUNDING SOURCE	AMOUNT	REMAINING	DEADLINE
Investing in Canada Infrastructure Program (ICIP)	$2,013,642	$1,933,631	25/03/31
SCRD Approved Debt Funding	$1,478,233	$1,478,233	N/A
Amenity Funding	$29,887	$0	N/A
TOTAL	**$3,521,762**	**$3,411,864**	

Anticipated Funding Allocations

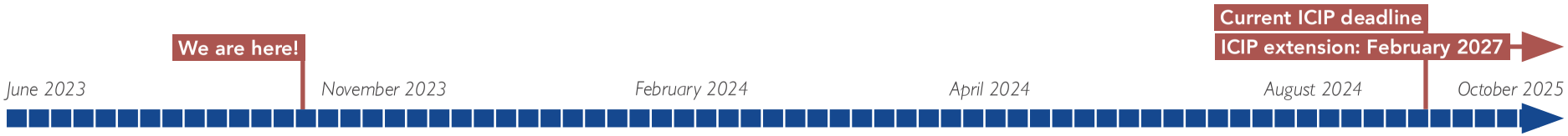
- A - Building Cost
- B - Design Cost
- C - Connection Fees & Permits
- D - Site Development
- E - Construction Contingencies



11 Project Timeline and Schedule

The timeline presented below outlines the various project stages from design until occupancy. It is advised that the project be costed by an independent quantity surveyor as set out in the timeline, prior to being reviewed by the SCRD for approval to proceeding to each stage.

In order to qualify for the federal Invest in Canada Infrastructure Program (ICIP) grant, the project must be substantially complete prior to the grant deadline. The current deadline is set for March 2025 and a two-year extension application has been submitted for approval by the grantor.



PRE DESIGN
15 Weeks

- Community participation event 1
- Site legal survey
- Geotechnical testing and Recommendation
- Community participation event 2
- Environmental Impact Assessment Report
- Community participation event 3
- **MTG 01** - Project Definition Report kick-off
- **MTG 02** - Project Definition Report draft review
- **MTG 03** - Project definition Report final draft review
- **MTG 04** - Project definition Report presentation

SCHEMATIC DESIGN
12 Weeks

- **MTG 01** - Project scope validation
- Consolidation of site and building information for use by consultants
- **MTG 02** - Review schematic design options with SCRD staff
- Energy modelling workshop
- Preparation of coordinated design package for cost estimate (Class D)
- **MTG 03** - schematic design and costing presentation
- Design presentation to local community at public event

IN PARALLEL...

- Request for proposal document preparation
- Proposal application period
- Suitable candidate selection

Construction Manager RFP process (CCDC-5B)
8 Weeks

DESIGN DEVELOPEMENT
9 Weeks

- **MTG 01 -** Construction management kick-off
- Drawing package preparation for consultant design coordination
- Internal quality control review
- **MTG 02** - Coordinated design package presentation for review session and feedback
- Further design documentation
- Internal quality control review
- Preparation of coordinated design package for cost estimate (Class C)
- **MTG 03** - Coordinated set of development permit drawings, outline specifications and costing presentation

- Construction manager provides input on constructibility, cost estimating, scheduling and cost control.

CONSTRUCTION DOC.
15 Weeks

- Preparation of coordinated Working Drawings (WD) and specifications
- Preparation of coordinated design package for cost estimate (Class B)
- Internal quality control review
- **MTG 01** - Design and costing presentation to decision making group for approval
- Preparation of building permit application package
- Submission of 95% WD package for cost estimate (Class A pre-tender estimate)
- Internal quality control review
- **MTG 02** - Final design and costing presentation
- Submit building permit application

- Construction manager provides input on constructibility, cost estimating, scheduling and cost control.

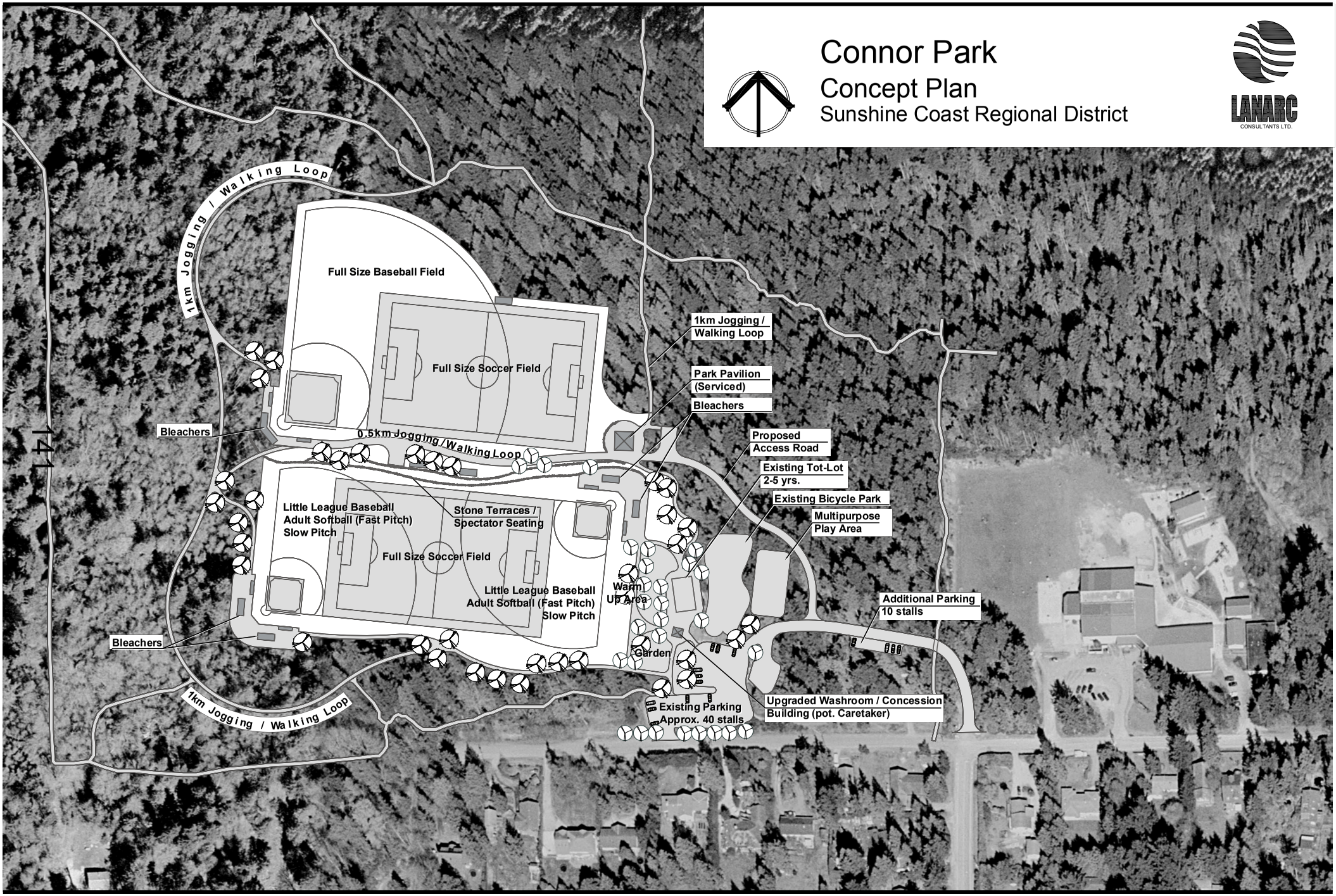
CONTRACT ADMIN
13 Months

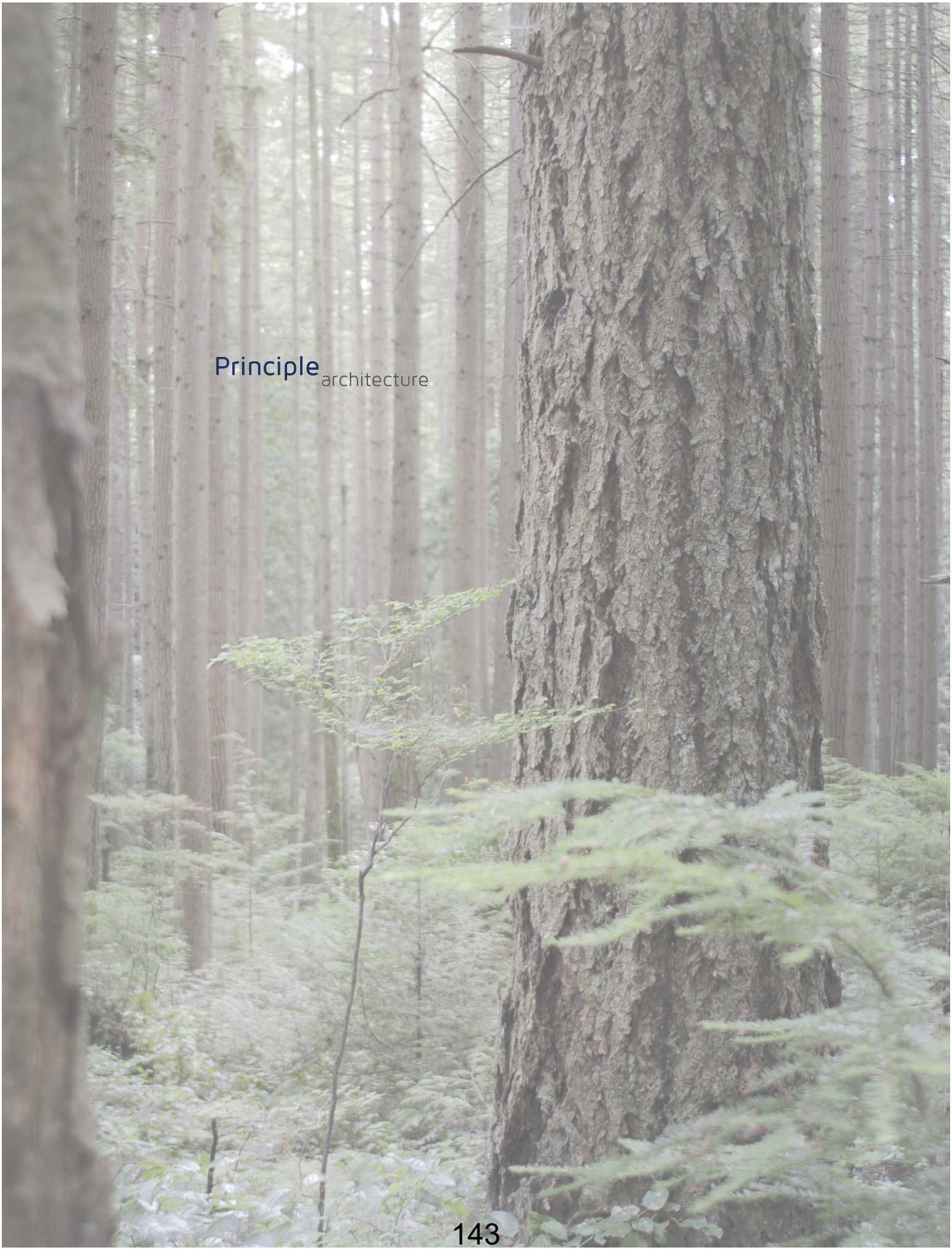
- Architect assists owner in reviewing the final constrution budget
- Architect prepares the change order defining the price and terms of the construction scope
- Architect reviews the work and ensure it is in general conformity with the contract documents
- Architect reviews shop drawings

- Construction manager prepares final construction budget
- Owner and CM execute a change order to finalize their agreement on the price and terms of the construction scope
- Construction starts
- Closeout and takeover procedures

Appendix A

2007 Connor Park Concept Map


Connor Park
Concept Plan
Sunshine Coast Regional District
LANARC
CONSULTANTS LTD.
1km Jogging / Walking Loop
Full Size Baseball Field
Full Size Soccer Field
1km Jogging / Walking Loop
Park Pavilion (Serviced)
Bleachers
Bleachers
0.5km Jogging / Walking Loop
Proposed Access Road
Existing Tot-Lot 2-5 yrs.
Existing Bicycle Park
Multipurpose Play Area
Little League Baseball Adult Softball (Fast Pitch) Slow Pitch
Stone Terraces / Spectator Seating
Full Size Soccer Field
Little League Baseball Adult Softball (Fast Pitch) Slow Pitch
Warm Up Area
Additional Parking 10 stalls
Bleachers
Garden
1km Jogging / Walking Loop
Existing Parking Approx. 40 stalls
Upgraded Washroom / Concession Building (pot. Caretaker)
141


Principle architecture

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Area Services Committee – October 19, 2023

AUTHOR: Ian Hall – General Manager, Planning & Development

SUBJECT: **ZONING BYLAW NO. 722 REVISION**

RECOMMENDATION(S)

(1) THAT the report titled Zoning Bylaw No. 722 Revision be received for information;

(2) AND THAT *SCRD Bylaw Revision Authorization Bylaw No. 760, 2023*, a bylaw to authorize revision of *SCRD Zoning Bylaw No. 722, 2019,* be forwarded to the Board for three readings and adoption;

(3) AND FURTHER THAT, pending adoption of Bylaw No. 760, *SCRD Zoning Bylaw No. 722, 2019, Revision Bylaw No. 761, 2023* be forwarded to the Board for three readings and adoption.

BACKGROUND

The SCRD Board adopted Zoning Bylaw No. 722 on October 13, 2022.

Discrepancies on 5 of the 73 map sheets in Schedule A and 1 of the 73 map sheets in Schedule B, relative to the stated intention of the bylaw and the process used for bylaw adoption, were identified in late August 2023.

The discrepancies have the effect of changing the zoning of 13 properties and the subdivision district of 1 of these 13 properties compared to the zoning and subdivision district in place under the prior zoning bylaw (Figure 1 below). Some of the properties are split zoned and boundary of the split was changed. Through the development and presentation of Zoning Bylaw No. 722 staff were clear that the new bylaw would not redraw zoning boundaries; the Board's mandate was a focused refresh of the prior bylaw.

PID	Civic address	Whole/Part of parcel	310 Zoning	722 Zoning
017-780-918	1920 LOWER RD	Whole	AG	CR1
005-411-572	691 SULLIVAN RD	Whole	AG	CR1
023-143-380	310 BRIDGEMAN PL	Whole	AG	R1
023-143-371	306 BRIDGEMAN PL	Whole	AG	R1
023-143-363	BRIDGEMAN PL	Whole	AG	R1
009-802-207	1691 JENSEN RD*	Part	AG	AG/R1
026-410-532	1524 HANBURY RD	Part	RU1,AG	RU1,AG
018-003-354	1578 HANBURY RD	Part	RU1,AG	RU1,AG
011-650-010	1475 LOCKYER RD	Part	RU1,AG	RU1,AG

031-205-721	DUSTY RD	Part	RU2,AG	RU2,AG
PID	Civic address	Whole/Part of parcel	310 Zoning	722 Zoning
010-536-540	518 PARKER RD	Part	AG	AG,RU2
010-536-523	440 PARKER RD	Whole	AG	RU2
010-536-507	418 PARKER RD	Whole	AG	RU2

*Subdivision district changed for part of parcel from I to C.

Figure 1: List of properties for which zoning/subdivision district discrepancy identified.

The discrepancies occurred without the knowledge of management or the Board. Corrective action has been taken to address the cause.

As an intended refresh that explicitly did not involve changes to zoning boundaries, the process required for a rezoning and/or subdivision district change for the affected properties (namely: neighbour notifications and an opportunity for those whose interests are affected to be heard) was not followed. The validity of these rezonings/subdivision district changes can therefore be challenged.

DISCUSSION

Options and Analysis

Having reviewed the matter with legal counsel, staff recommend that a revision be made to Zoning Bylaw No. 722 using the authority provided to local governments through the *Bylaw Revision Regulation* BC Reg 367/2003 under Section 227 of the *Local Government Act* and Section 140 of the *Community Charter*.

The authority available under this regulation is narrowly prescribed. Among a short list of permitted uses, it can be used to correct clerical, grammatical and typographical errors and to add, change or omit a map (section 1(2)(f) and (i)).

Utilizing this authority requires that a local government have a bylaw in place to conduct revisions. A proposed bylaw for this purpose is attached, and staff recommend that it be advanced for readings.

Once the Bylaw Revision Authorization Bylaw is adopted, the Board can consider a bylaw to revise Zoning Bylaw No. 722. The revision bylaw is attached, and staff recommend that it be advanced for three readings and adoption.

Organizational and Intergovernmental Implications

These discrepancies affect property owners' development rights. Staff were very concerned upon discovering the issue and acted immediately with corrective action.

The affected property owners may apply in the future to change zoning or subdivision districts. SCRD may undertake a review of zoning or subdivision districts that leads to future amendments. Nothing in the revision process hinders either of these possibilities.

A properly applied rezoning process, as required in legislation, provides an opportunity for community input and consideration of implications associated with the change such as traffic, fire protection and solid waste management.

Financial Implications

There are no direct financial implications associated with the recommendations of this report.

Timeline for next steps or estimated completion date

Staff recommend that the two bylaws be given readings at the next Regular Board meeting.

Communications Strategy

Affected property owners were made aware of this report on publication.

A letter will be sent to affected property owners following Board decision.

STRATEGIC PLAN AND RELATED POLICIES

N/A operational.

CONCLUSION

Discrepancies with several zoning and subdivision district map sheets that form part of Zoning Bylaw No. 722 have been discovered. Revision of the bylaw to address this is recommended. Two bylaws to effect the revision are recommended for three readings and adoption.

ATTACHMENTS

A. *Sunshine Coast Regional District Bylaw Revision Authorization Bylaw No. 760, 2023* a bylaw to authorize revision of Zoning Bylaw No. 722, 2019

B. *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019, Revision Bylaw No. 761, 2023* a bylaw to revise Zoning Bylaw No. 722, 2019

Reviewed by:			
Manager	X – J. Jackson	Finance	
GM		Legislative	X – S. Reid
CAO	X – D. McKinley	Risk	
Sr Mgr HR	X – G. Parker		

SUNSHINE COAST REGIONAL DISTRICT

Bylaw No. 760

A bylaw to authorize the revision of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*

WHEREAS the Board of the Sunshine Coast Regional District deems it expedient to authorize the revision of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*;

AND WHEREAS section 227 of the *Local Government Act* and section 140 of the *Community Charter* enable the Regional Board to, by bylaw, authorize the revision of all or any of the bylaws of the Regional District in accordance with the applicable regulations;

AND WHEREAS pursuant to the *Bylaw Revision Regulation* B.C. Reg. 367/2003 the Regional Board may, by bylaw, authorize the revision of all or any of the bylaws of the Regional District to correct clerical, grammatical and typographical errors and to add, change or omit a note, heading, title, marginal note, diagram, map, plan or example to a bylaw;

NOW THEREFORE, the Board of the Sunshine Coast Regional District, in open meeting assembled, enacts as follows:

1. **CITATION**

   This Bylaw may be cited for all purposes as *Sunshine Coast Regional District Bylaw Revision Authorization Bylaw No. 760, 2023.*

2. **BYLAW REVISION AUTHORITY**

   2.1 The revision of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019* is authorized to correct clerical, grammatical and typographical errors and to add, change or omit a note, heading, title, marginal note, diagram, map, plan or example to a bylaw.

   2.2 In order to be effective, a revised bylaw authorized under section 2.1 must be adopted by a bylaw that specifies the date on which the revised bylaw is to come into force.

   2.3 Before a proposed bylaw revision authorized under section 2.1 is given third reading, the Corporate Officer must certify that the proposed revised bylaw has been revised in accordance with this bylaw.

READ A FIRST TIME this	26th	day of	October,	2023
READ A SECOND TIME this	26th	day of	October,	2023

READ A THIRD TIME this 26th day of October, 2023

ADOPTED this 26th day of October, 2023

_____
CORPORATE OFFICER

_____
CHAIR

SUNSHINE COAST REGIONAL DISTRICT

Bylaw No. 761

A bylaw to revise *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*

WHEREAS the Board of the Sunshine Coast Regional District deems it expedient to revise *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*;

AND WHEREAS pursuant to section 227 of the *Local Government Act* and section 140 of the *Community Charter* and the *Bylaw Revision Regulation* B.C. Reg. 367/2003 the Regional Board may, by bylaw, authorize the revision of all or any of the bylaws of the Regional District;

AND WHEREAS the Regional Board has adopted *Sunshine Coast Regional District Bylaw Revision Authorization Bylaw No. 760, 2023* to authorize the revision of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*;

AND WHEREAS *Sunshine Coast Regional District Bylaw Revision Authorization Bylaw No. 760, 2023* authorizes the revision of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019* to correct clerical, grammatical and typographical errors and to add, change or omit a note, heading, title, marginal note, diagram, map, plan or example to a bylaw;

NOW THEREFORE, the Board of the Sunshine Coast Regional District, in open meeting assembled, enacts as follows:

1. **CITATION**

   This Bylaw may be cited for all purposes as *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019, Revision Bylaw No. 761, 2023*.

2. **BYLAW REVISION**

   2.1 Schedule A of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019* is revised as follows:

   Map sheets 1107; 1205; 1305; 1404; and 1605 are changed.

   2.2 Schedule B of *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019* is revised as follows:

   Map sheet 1605 is changed.

3. **EFFECTIVE DATE**

   3.3 Revised *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019* comes into force on the date of adoption of this Bylaw.

Schedule A

Schedule A – Revised Schedule A *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*

Schedule B

Schedule B– Revised Schedule B *Sunshine Coast Regional District Zoning Bylaw No. 722, 2019*

READ A FIRST TIME this	26th	day of	October,	2023
READ A SECOND TIME this	26th	day of	October,	2023
Proposed Revised Bylaw Certified by Corporate officer on		day of		2023
READ A THIRD TIME this		day of		2023
ADOPTED this		day of		2023

_____
CORPORATE OFFICER

_____
CHAIR

Sunshine Coast Regional District Zoning Bylaw No. 722, 2019 has been revised in accordance with *Sunshine Coast Regional District Bylaw Revision Authorization Bylaw No. 760, 2023*, authorizing the revision.

_____
CORPORATE OFFICER

Schedule A
Revised Schedule A Sunshine Coast Regional District Zoning Bylaw No. 722, 2019

**NOTE TO STAFF – Insert revised/ correct Schedule A in its entirety*

Schedule B
Revised Schedule B Sunshine Coast Regional District Zoning Bylaw No. 722, 2019

**NOTE TO STAFF – Insert revised/ correct Schedule B in its entirety*

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Area Services Committee – October 19, 2023

AUTHOR: Ian Hall – General Manager, Planning & Development

SUBJECT: **TEMPORARY MOVEABLE SMALL HOME PILOT PROJECT UPDATE**

RECOMMENDATION(S)

(1) THAT the report titled Temporary Moveable Small Home Pilot Project Update be received for information.

BACKGROUND

The SCRD Board adopted the following resolution on July 27, 2023:

224/23 **Recommendation No. 2** *Tiny Home Alliance of Canada and Sunshine Coast Tiny Homes Ltd. Delegation*

THAT the delegation materials provided by Pam Robertson, Tiny Home Alliance of Canada and Sunshine Coast Tiny Homes Ltd. be received for information;

AND THAT staff report to the October 12, 2023 Electoral Areas Services Committee with an update of the changes on Tiny Homes over the past five years and an outline of the steps required to advance a pilot project;

AND FURTHER THAT the 2018 staff report be included for reference.

DISCUSSION

Status update (SCRD):

- The concept of a tiny home pilot project focused on RV-style (with wheels) shelters built to the CSA Z240 RV standard was referred to APCs in late 2018/early 2019. Minutes were reported on Committee agendas.
- No final report nor further Board directives specific to the pilot project were developed after September 2018.
- In the last five years through strategic and work planning cycles, a focus on zoning enhancements to support housing diversity was given priority. This focus led to the drafting and adoption of Zoning Bylaw No. 722, which includes enabling provisions for secondary suites and enhanced provisions for auxiliary dwellings. Land research conducted circa 2018 indicated that there were a large number of parcels zoned to accommodate auxiliary dwelling units that did not have one.
- Other/complementary housing work completed in the last five years includes coordinating support for a regional housing action plan, support for regional housing coordinator role, completion of a housing needs assessment, introduction of regulations for short term rentals and Board advocacy to the province on clarity around recreational vehicles (RVs) used as shelter.

- The situation regarding SCRD permitting use of RVs as shelter through the Building Bylaw No. 687 remains unchanged. The Bylaw (section 12.2) does allow issuance of a temporary permit for trailers, which can only be issued in conformance with zoning and therefore all conditions of Bylaw 722, Section 5.22.1 or Bylaw No. 337, Section 510 would need to be met. Practically, this means that construction of a dwelling (as defined in BC Building Code and zoning) needs to be in progress. This is a clarification of the meaning of the information presented in the September 2018 staff report.
- In the last 5 years there have been a number of campground and RV park expansions on the Sunshine Coast.
- There is no minimum dwelling size set in BC Building Code or SCRD bylaws.

Status update (Provincial):
- The province has not made material changes with respect to BC Building Code as regards motor vehicles (which include tiny homes constructed to the CSA Z240 RV standard). Local governments continue not to have regulatory responsibility, authority, or jurisdiction to permit or inspect RVs.
- The CSA Z240 RV standard does not address certain aspects of the building codes such as structural safety, fire protection, ventilation, energy or water efficiency, and accessibility. It only applies to vehicle-type units designed to provide temporary living quarters for recreational, camping, or seasonal use.
- The province, as the regulator of motor vehicles, has not provided clarity on their use as long-term shelter. There are legal and liability implications for a local government that chooses to enable, through policy, the use of RVs as long-term shelter.
- The province has recently introduced incentives including forgivable loans for the development of secondary suites and auxiliary dwellings.

Status update (Housing Sector):
- There continues to be a shortage of attainable, secure, appropriate housing on the Sunshine Coast.
- Views on the role of tiny homes built to RV standards vary. While not suitable for all needs, some see them as a bridge to other types of more secure housing. Relative to 5 years ago, concerns about safety and security of tenure persist; these concerns are not unique to tiny homes.

Options and Analysis

The steps to advance a pilot project that was focused on Temporary Use Permits (TUPs) for tiny homes built to the RV standard would include, at least:

Pre-work/feasibility:

1. A review of legal and liability considerations (see comment under “Organizational Implications” below) and of tenancy considerations as established in the *Manufactured Home Park Tenancy Act* and the *Residential Tenancy Act*

2. Preparation of detailed estimates for resource requirements and cost-recovered application fees

These steps would be followed by a Board decision.

Project gating/resourcing step:

3. Preparation of a budget proposal for program design, which includes service level description and implications for other service lines.

These steps would be followed by a Board decision.

Project initiation:

4. Notionally, program design and testing. Should include legal review

5. Amendments to official community plans (to establish TUP areas) and other bylaw amendments as needed, including public hearings

6. Board decisions on adoption of bylaw amendments

7. Communications and program launch

8. Monitoring and enforcement

Organizational and Intergovernmental Implications

With respect to options for "allowing" full time residential use of RVs for a period of years, it is not certain that the SCRD has authority to permit the use of RVs as dwelling units in contravention of the BC Building Code. This could be characterized as regulating buildings by relaxing the applicable building standards, which is exclusively an area of provincial jurisdiction. Further, as RVs are not designed to be used as a fulltime residences and do not meet the Building Code standards, expressly allowing such a use creates potential life safety concerns for occupants (and inspectors, if they are involved) and increases potential liability. Staff would strongly recommend further review in support of informed Board decision making if further development of the pilot project is directed.

The development of a tiny home pilot project is not included in the Housing Action Plan. Planning staff (with support/coordination from Building Inspection and Bylaw Enforcement) are currently focused on items in the Plan, including renewal of OCPs.

Financial Implications

Resources would be required for program design, testing, necessary bylaw amendments, implementation and enforcement. The Board may elect to direct these resources be redeployed from another service line (which would have the effect of slowing processing of other types of applications or of pausing work on long range planning) or to supply new resources through the annual budget. Resources would be required from Planning, Legislative Services, Risk Management, Finance and Bylaw Enforcement. It is assumed, at this point, that Building Inspection would not have a material role.

Timeline for next steps or estimated completion date

As this is an information report no next steps specified.

The 2024 budget process is scheduled to commence with R1 on December 5, 2023.

Communications Strategy

This report was shared with the Regional Housing Coordinator and Pam Robertson (prior delegation) on publication.

STRATEGIC PLAN AND RELATED POLICIES

The subject matter described in this report is related, in part, to Board advocacy.
Creation of a new type of SCRD pilot project is not directly connected to the strategic plan.
Official Community Plan are supportive of affordable housing but make no comment on the use of RVs as long-term shelter.

CONCLUSION

This report provides an update on tiny homes (last 5 years) and outlines the steps to advance a pilot project.

ATTACHMENT

Attachment 1 – September 6, 2018 Staff Report - Temporary Movable Small Home Pilot Project

Reviewed by:			
Manager	X – B. Kennett X – J. Jackson	Finance	X – B. Wing
GM		Legislative	X – S. Reid
CAO	X – D. McKinley	Risk	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Planning and Community Development Committee – September 6, 2018

AUTHOR: Yuli Siao, Senior Planner

SUBJECT: **POTENTIAL FOR A TEMPORARY MOVABLE SMALL HOME PILOT PROJECT IN RURAL AREAS**

RECOMMENDATION(S)

THAT the report titled Potential for a Temporary Movable Small Home Pilot Project in Rural Areas be received;

AND THAT a report be provided to the Committee in Q1 2019 with regard to:

a) a pilot project plan to implement temporary use permits for temporary small movable homes, proposed to have a duration of three years, focus on auxiliary dwellings, and include a cap of 20 permits per electoral area per year reviewed annually;

b) amendments to Zoning Bylaw Nos. 310 and 337 and Procedure and Fees Bylaw No. 522;

AND FURTHER THAT this report be referred to SCRD Advisory Planning Commissions and Vancouver Coastal Health for comment.

BACKGROUND

The SCRD Board adopted the following recommendation on February 22, 2018:

075/18 **Recommendation No. 2** *Temporary Housing Pilot Project Delegation*

THAT staff report to a Planning and Community Development Committee meeting in Q3 2018 with regards to the potential for a Temporary Movable Small Home Pilot Project in Rural Areas.

This report analyzes different aspects of this proposal and potential impacts on the SCRD's land use planning, service and operation, and recommends an approach to implement the proposed pilot project to be further developed for implementation.

DISCUSSION

A proposal for a temporary housing pilot project was presented to the Board through a delegation on February 8, 2018 (Attachment A). The proponent requested the SCRD to consider a pilot project for issuing temporary use permits for small movable homes as secondary dwellings on residential parcels. This type of home could include recreational vehicles (RV), mobile homes, small, movable and habitable structures known as tiny homes, or other similar structures.

The intent of the pilot project as proposed is to:

- provide an option to help address the affordable housing challenge on the Sunshine Coast;
- test the feasibility and impact of this type of housing on rural areas;
- obtain feedback from the community; and
- help to shape possible permanent policies and regulations.

In response to this proposal, the following sections provide an overview of potential implications of such a project on SCRD's policies, regulations, services and operations and a potential strategy to implement the project.

Potential to Provide Affordable Housing

This proposal arose from the urgent need for affordable housing on the Sunshine Coast. It is one of many possible solutions to the housing challenges discussed in recent community consultations on housing, particularly within a series of public information meetings conducted by the SCRD regarding Official Community Plan (OCP) policies to support the development of affordable housing. A past staff report indicates that there are a substantial number of residential parcels eligible for building an additional dwelling. Secondary dwellings offer the potential to improve housing affordability for both home owners and renters. However, the cost to build a conventional dwelling can be high. A prefabricated tiny home, mobile home or recreational vehicle may be a more affordable solution. The cost of these small structures is substantially lower than a permanent dwelling, and they are movable and relatively easy to set up. They can provide a quick, inexpensive and temporary housing solution. The small, movable and low-cost nature of these structures also make them suitable for a pilot project to test whether or not this type of housing can be a viable solution for providing affordable housing, as well as its feasibility, acceptance in the community and impact on infrastructure and the rural environment.

Testing Potential Zoning Regulations

During the community consultation on policies to support affordable housing, the minimum dwelling building width (6m) required in some zones, such as the R1 zone was identified as one of the technical barriers for constructing smaller, more affordable houses, especially as auxiliary dwellings. Most tiny homes have a width less than 6m and therefore not permitted as a dwelling unless a development variance permit is granted. A pilot project for temporary infill tiny homes could allow this type of housing without a development variance permit, and can gather information on how it can integrate with the neighbourhood.

The focus of the pilot project is for the infill of an individual tiny home as an auxiliary dwelling on individual parcels, rather than cluster development of multiple tiny homes on a single parcel. Cluster housing development will require different zoning regulations and different criteria on layout, design, utility and infrastructure, and therefore is beyond the recommended scope of the project. Lessons from the pilot project may be applied to future cluster-style applications or research projects.

Building Bylaw Implications

SCRD Building Bylaw 687 allows the issuance of a building permit for a prefabricated small structure like a tiny home, as long as it is set on a permanent foundation, meets Building Code requirements, and complies with the zoning bylaw.

Bylaw 687 also allows issuing temporary building permits for temporary buildings or travel trailers (such as RVs) without a permanent foundation for a period of up to 12 months. Such permits may be renewed up to four times for a maximum of five years in total. The buildings and structures proposed by the pilot project are considered temporary buildings and therefore these provisions of Bylaw 687 can accommodate these structures if they also comply with any other applicable regulations of the Bylaw, the BC Building Code and the zoning bylaw.

Potential Implications for Infrastructure and Servicing

Where an auxiliary or secondary dwelling is permitted within the zoning bylaw, the type of building (either conventional built or prefabricated) for such a dwelling makes no significant difference in the dwelling's demand for water supply, drainage, sewage treatment, waste disposal, fire protection, electricity, transportation, and other utilities and services. Instead, the size and number of infill dwellings and the number of occupants will drive the demand for these services. If a tiny home pilot project generates a great number of temporary infill dwellings within a short period of time, then it may have an impact on servicing and infrastructure.

Potential Implications for Sewage Disposal and Drinking Water

Vancouver Coastal Health (VCH) provided a letter of support for the pilot project subject to a number of considerations. VCH recommends that a tie-in to an existing sewerage system with appropriate modifications for increase in capacity is the best solution in dealing with sewage disposal of the infill home. Where an on-site sewerage disposal system is inappropriate due to site conditions, VCH accepts installation of a holding tank on a case by case basis and subject to filing of a maintenance contract. Drinking water must be provided from either a permitted water system (e.g. SCRD water system) or a private well or surface water source with granted license for the use for the removable home or the entire property.

Potential Implications for SCRD Staff Resources

The small home pilot project will result in an increase in the issuance of temporary use permits and potentially bylaw compliance requests related to this type of housing in the community, and thus increase demand for SCRD staffing resource in processing permits, investigating complaints, enforcing conditions of the permits and monitoring the progress of the project.

Potential Implementation Strategy

<u>Temporary Use Permit</u>

A temporary use permit is a regulatory tool authorized by the *Local Government Act* to allow a use that is not permitted by a zoning bylaw on a temporary basis. A temporary use permit may specify the conditions under which the temporary use may be carried on. An official community plan or a zoning bylaw may designate areas where temporary uses may be allowed.

Based on the above analysis, there is a potential to apply temporary use permits as a tool to facilitate a pilot project.

In order for the project to proceed, Bylaws 310 and 337 must be amended to designate temporary use permit areas specifically for temporary small infill homes, and include specific terms and conditions for the use.

To ensure that the temporary dwellings meet the goals of the project and technical requirements, the following specific provisions for the temporary use permit may be considered:

- Create and define a brief and easily understood term specifically for temporary movable small homes that are proposed in the pilot project. The term “tiny home” is recommended, as it captures the essence of this type of structure and has been widely used and understood.
- Only one tiny home is permitted on a parcel where more than one dwelling is permitted and the tiny home counts towards the maximum total number of permitted dwellings.
- A width less than 6m for a tiny home is permitted.
- A building permit or a temporary building permit must have been granted for the tiny home.
- If the tiny home is to be placed within a development permit area, a development permit must have been granted for the tiny home.
- Approval from VCH must have been granted on sewerage system or holding tank and drinking water system.
- The tiny home must not be used for short-term vacation rental or tourist accommodation purposes.
- The tiny home should be intended to provide an affordable housing choice for property owners and renters.
- The tiny home must comply with all other applicable provisions of the zoning bylaw.
- A fee must be paid for processing the permit application regardless whether or not it will be approved.
- A deposit must be paid to incentivize the removal of the tiny home at the end of the permit term.

Procedures and Fees Bylaw

To implement temporary use permits, the Planning and Development Procedures and Fees Bylaw 522 is also recommended for amendment to include provisions for fees, deposits, application procedures and approval conditions. Staff would prepare recommended application fees as part of proposing bylaw amendments.

Monitoring

As discussed in above sections, monitoring is critical to this pilot project. Monitoring will be carried out, especially by the building, planning, bylaw enforcement and infrastructure divisions. Information will be gathered with respect to the allocation pattern of permits, demographics of participants, complaints, change in water usage, community feedback, and so forth. SCRD can also invite housing experts and stakeholders to participate in community consultation and monitoring efforts.

Managing the Scale

Staff recommend an incremental approach in implementing the project while carefully monitoring the impacts and public reception. The SCRD should establish a cap for the number of permits that can be issued. The project should begin with a small cap, such as 20 permits per electoral area per year. Based on the initial result of project monitoring and assessment of impact on SCRD infrastructure and servicing, the cap can be gradually adjusted. It is recommended that any pilot project be limited to a 3-year term. An annual report on the project should be provided to the Board for review and direction. At the end of the project term, based on monitoring result and feedback, the Board can terminate the project, or make further decisions on specific provisions and potential regulations for small movable homes.

Public Participation

The pilot project plan should be refined through a public participation process. This is recommended to include referrals Advisory Planning Commissions, the Sunshine Coast Housing Committee and Vancouver Coastal Health to refine project parameters. As part of the bylaw amendment process, referral of specific amendments to agencies and Advisory Planning Commissions would occur, and public information meeting(s) and public hearing(s) would take place related to amending the zoning bylaws.

Organizational and Intergovernmental Implications

If the pilot project is implemented, it may have implications for SCRD infrastructure and servicing, and on external agencies as discussed in this report. Staff will monitor the implications and include the results in project reporting.

Financial Implications

If the pilot project is implemented, it may have financial implications on SCRD infrastructure and servicing. These will be reviewed and reported annually.

Timeline for next steps or estimated completion date

If the Board decides to proceed with the recommendation of this report, the processes for bylaw amendments related to the project will proceed for first reading in Q1 2019.

Communications Strategy

If the Board decides to proceed with the recommendation of this report, a communication strategy will be prepared.

STRATEGIC PLAN AND RELATED POLICIES

The following SCRD Strategic Plan objectives and success indicators relate to the subject of this report:

- Collaborate with community groups and organizations to support their objectives and capacity.
- Land use policies and regulations are supporting affordable housing.

The subject of this report is also aligned with the following land use principles of the Regional Sustainability Plan: 'We Envision' for the Sunshine Coast:

We envision complete, compact, low environmental-impact communities based on energy-efficient transportation and settlement patterns.

CONCLUSION

In response to the proposal for a temporary small movable home pilot project, this report analyzes various aspects of the proposal and their implications for the SCRD. It is feasible to implement this project and the basic parameters for project design and an implementation strategy are provided for consideration.

On Board direction, staff will report to a Committee in Q1 2019 with a pilot project plan to implement temporary use permits for temporary small movable homes and amendments to Zoning Bylaw Nos. 310 and 337 and Procedure and Fees Bylaw No. 522.

The pilot project is recommended to be 3 years, focus on temporary small movable homes as auxiliary dwellings and include a cap of 20 permits per electoral area per year. These recommendations will be refined through the public participation process.

Attachments

Attachment A – Temporary Housing Solution – Pilot Project Proposal

Reviewed by:			
Manager	X – A. Allen	Finance	
GM	X – I. Hall	Legislative	
CAO	X – J. Loveys	Other	

Temporary Housing Solution - Pilot Project Proposal

Submitted by Pam Robertson

This proposal was created through the process of the LEAP program sponsored by Community Futures. I entered the program with the intention to source out a viable way to build a tiny house community specifically to aid in the housing crisis. There were many twist and turns but in the process this idea was born. The end of the program required us to deliver our ideas to the community. I believe that there is an appetite for this kind of a pilot project, as evidenced by the selection of my work as the “People’s Choice” award that I received at the LEAP Launch 2018 event.

This proposal is presented as a possible temporary solution for the housing crisis on the Sunshine Coast. This is a **pilot project requesting that the SCRD consider issuing a specific Temporary Use Permit allowing property owners the ability to have a temporary secondary home, subject to existing Land Use policies**. The temporary secondary home will include recreational vehicles or small temporary mobile/relocatable and Micro housing structures built to applicable regulatory standards and building codes. For example, RV tiny houses (built to CSA Z240 RV specifications), Park Models (built to CSA Z241 specifications), shipping containers or buildings on skids.

This is a request for a **pilot project** created with consideration to the SCRD’s staff’s recent review showing the 90% underutilized properties that are zoned for a secondary dwelling. This represents approximately 2200 properties in the regional district rural areas, and there are many more eligible properties outside of these areas, which have the capacity to accommodate a temporary secondary dwelling. In community discussions the question of how to incentivize Smart Growth-oriented infill building has come up repeatedly, given current building costs. I believe this pilot would encourage that. We are asking that the Temporary Use Permit be in effect for a period of three to four years. This will give a substantial time frame for assessments to be created, monitored and reviewed, to determine the successes or any setbacks of the project.

This project will provide property owners, the ability to have a properly licensed and certified Recreational Vehicle or an equivalent mobile building set up on their property. This will give opportunity to have a trial period of a secondary dwelling, to determine the decision to move forward in the future to a permanent structure, or with the opportunity for neighbor input, renew the Temporary Use Permit. This is an immediate temporary solution for displaced members of the community, which can accommodate them during the wait period for the municipalities to decide on and to construct more permanent housing solutions. It also is a safety net for displaced people, preventing homelessness.

Potential considerations could include insulating the unit from the Short-Term Rental market through the TUP stipulations or other means, as well as ensuring the units meet existing density, setback and other Official Community Plan or Bylaw regulations.

This pilot project will hopefully remove the “underground” building and RV residences that are rampant across the Sunshine Coast and will protect the property owners and the occupants and neighbors of these illegal dwellings. This will also ease some of the stress associated with having an illegal RV or other type of unauthorized dwelling that exists right now, potentially alleviating some of the metal health risks of unstable housing situations, putting the community at peace.

This would also require a permit issued by VCH allowing a septic solution for the temporary housing. Attached to this information page is the letter from the Vancouver Coastal Health Authority giving its support for this pilot project

The primary implementation of a temporary housing septic installation, will be to create a RV hook up to the existing septic field. These will be assessed and signed off by a qualified engineer, thus eliminating the need for a separate septic field. This will all be assessed prior to the permit application, to determine the needs of the property and placement of the temporary housing. Should the temporary housing need to be placed in a location that is not conducive to connecting to the existing septic, it will need a temporary holding tank.

The manufactured fiberglass holding tank will be installed by a knowledgeable septic installation company. There will be a contract drafted and signed between the holding tank installation company and the property owner and the holding tank will be included in a scheduled waste removal system.

On completion of the pilot project, if the outcome is favorable and there is a permanent allowance of these temporary secondary dwellings, the holding tanks will be converted into approved (engineered) septic field systems. If the outcome is unfavorable, and will not proceed into a permanent situation, the holding tanks will be removed by the responsible installation company. This will be included in the original contract.

It will be only a matter of time before the government embraces the tiny house movement. There have been other municipalities who are close to recognizing tiny or micro homes, and are infilling their urban areas with them. It would be great to have this in place, thus having a proactive approach to what has become a North American wide issue. I have included below, some information about provinces and states who are close to accepting RV tiny homes and Micro homes as full-time residences.

http://www.cbc.ca/news/canada/newfoundland-labrador/tiny-home-subdivision-stephenville-1.4480928

http://www.cbc.ca/news/canada/newfoundland-labrador/tiny-home-subdivision-stephenville-1.4480928

http://www.oregon.gov/bcd/committees/Pages/hb2737.aspx

It is requested that the staff report back at the next planning and development committee meeting, and that this be viewed as an urgent matter, moving towards the next piece of the affordable housing spectrum. Thank you for your consideration and I look forward to the opportunity to discuss this with you at your committee meeting.

Sechelt Public Health
PO Box 1040 5571 Inlet
Sechelt, BC V0N3A0
PH: (604) 885-5164
Fax: (604) 885-9725

Pamela Robertson
PR Housing Solutions & Robertson Safety Solutions
748 Creekside Crescent
Gibsons, BC V0N1V9

RE: Letter of Support for Housing Infill Proposal and Sewage Considerations

Ms. Robertson:

Our office has received your request for a letter of support for your pilot project to allow housing infill in areas of the SCRD zoned for a second dwelling. I can offer the following comments:

Housing as a Social Determinant of Health

VCH has already provided comment on the importance of diverse housing options for communities. Using existing zoning bylaw structures and lowering barriers for homeowners to access this opportunity is an effective way to promote an increase in density. This has been identified by the recent SCRD OCP bylaw amendment.

Providing diverse housing options and tenure types is known to have a positive impact on general physical and mental health in a variety of ways. Specifically, by increasing the availability of small, affordable housing units, the Regional District can help serve vulnerable populations in the region.

During the development of criteria for these housing units, VCH recommends that the proposed housing units:

- Are used for long term tenants only.
- Are constructed from quality, high-efficiency materials and fixtures.
- Are available at the low-mid range of market value.
- Are subject to SCRD Building Inspection.

Sewage Disposal

VCH recommends that on-site sewerage disposal systems be installed with these units wherever possible. A tie-in to an existing sewerage system with appropriate modifications for increase in capacity is the best solution for this proposal. This work must be completed in accordance with the Sewerage System Regulation (SSR) by an Authorized Person as defined by Section 7 of the Regulation.

In the event that an on-site sewerage disposal system is deemed inappropriate, VCH will accept applications for the installation of a holding tank on a case by case basis. The criteria in the VCH Holding Tank guideline apply. The application must also include:

- A maintenance plan, including frequency of pumping and maintenance provider.
- A signed and sealed letter from a qualified sewerage professional or engineer stating that the circumstances do not support installation of a Type 1, 2, or 3 sewerage system or connection to an existing system.
- A proposed date when the holding tank will be removed from service. If the housing arrangement is to continue, the dwelling will be converted to an on-site sewerage system in accordance with the process outlined in the SSR.

Sechelt Public Health
PO Box 1040 5571 Inlet
Sechelt, BC V0N3A0
PH: (604) 885-5164
Fax: (604) 885-9725

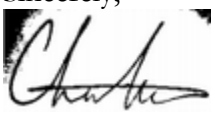
Drinking Water

Drinking water must be provided from an approved source. This includes a permitted water system (ie. SCRD water system) or a dedicated source serving only the housing unit (ie. a private well or surface water supply). Disinfection is recommended for all surface sources. Suggestions and recommendations for private water supplies can be given upon request.

VCH supports this pilot project given the above noted considerations. We look forward to working with you in the future.

If you have any questions regarding this letter, please contact the undersigned.

Sincerely,



Chris Morse, C.P.H.I.(C)
Environmental Health Officer
Vancouver Coastal Health
604-885-8701

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Services Committee – October 19, 2023

AUTHOR: Sierra Rempel, Strategic Planning Coordinator
Julie Clark, Senior Planner

SUBJECT: **FORESTRY REFERRALS: BC TIMBER SALES (BCTS) OPERATING PLAN (CRN00155) 2023-2027**

RECOMMENDATIONS

(1) THAT the report titled Forestry Referrals: BC Timber Sales (BCTS) Operating Plan (CRN00155) 2023-2027 be received;

(2) AND THAT the following comments be provided to BC Timber Sales by October 27, 2023:

(i) SCRD does not support the logging and construction of McNR005 due to it being located within a Community Watershed, as well as the potential impact to downstream SCRD assets of the Dakota Creek berm and Hillside Industrial Park;

(ii) SCRD recommends that in advance of proposing/ engineering cutblocks on Mount Elphinstone near Roberts Creek, that a review of the cumulative impact to ground water resources of Aquifer 555 by qualified experts selected by Local Government water service providers be completed. Historical and any proposed forestry activities for the next 5 years, and climate change considerations should be considered as part of such assessment.

(iii) SCRD is concerned about the cumulative impacts of resource activity, including deforesting, that is proposed on or near Aquifer 555, which supports private wells who are not within the SCRD Regional Water Service Area and thus do not have access to other sources of water.

(iv) SCRD requests BCTS complete a Watershed Assessment for the Roberts Creek watershed and implement assessment findings prior to further design or auctioning of the proposed cutblocks within this area.

(v) SCRD emphasises the need for BCTS follow the recommendations of the Mt Elphinstone South Watershed Assessment Phase 1 and 2 for all currently proposed or auctioned blocks in order to avoid increasing current Peak Flow Hazards.

BACKGROUND

BC Timber Sales (BCTS) is a Provincial Corporation that is responsible for harvesting approximately 20% of British Columbia's Annual Allowable Cut and operates under the legislative and regulatory frameworks of the *Forest Act, the Forest Range and Practices Act, the Wildfire Act, BCTS Regulation* and the *Wildfire Regulation*.

SCRD receives an annual referral for BC Timber Sales' (BCTS) 5-year Operating Plan. BCTS shares proposed harvesting and road building activities in order to receive comment on and understand stakeholder interests in advance of anticipated harvesting.

The 2023-2027 Operating Plan was received by the SCRD on June 21, 2023. SCRD and BCTS have a Communications Protocol which prescribes SCRD response within 90 days; an extension has been provided until October 27, 2023.

This report provides background on BCTS, analysis of the Operating Plan, and recommendations for response. BCTS is only seeking feedback on and only has a mandate to consider or act on feedback related to the 2023-2027 Operating Plan.

Please see SCRD webpage link https://www.scrd.ca/bcts-logging for background information about BCTS and SCRD role in responding to annual Operating Plan referrals. Past SCRD referral-responses to BCTS Operating Plans, including the Communications Protocol is also available.

DISCUSSION

In the 2023-2027 Operating Plan BCTS proposes 5 new blocks, totalling a gross area of 100.63 hectares, to be harvested between 2024 and 2027. This report provides review of new blocks only, with the exception of comments on one previously referred block.

Maps of the 2023 Operating Plan blocks are available here. SCRD has provided comment on the previously referred blocks.

New cutblocks are concentrated in three main areas:

- high elevations on Mount Elphinstone
- low elevations near McNab Creek, Dakota Creek, and Hillside Industrial Park
- Hotham Sound, north of Earls Cove

The summary tables below provide a list of proposed cutblocks:

Block ID	Proposed Auction Year	Net area in Hectares (ha)	Summary Details
McNR005	2024	15.9	• 14.21 ha in high elevation near McNair / Mt Elphinstone • New method of capturing timber felled during road construction • Road to provide “direct route” to Port Mellon • Within Dakota Community Watershed • Crosses Dakota Creek, and approximately 6 other tributaries to Dakota Creek • Outside the Mt Elphinstone South Watershed Assessment Phase 1, 2 and 3 area

ELPH010	2024	1.59	• 1.59 ha in Elphinstone • Slopes along Roberts Creek • Within Roberts Creek Official Community Plan Area • Outside the recently completed Mt Elphinstone South Watershed Assessment Phase 1, 2 and 3 area
GRAN011	2025	6.7	• 6.7 ha in Granville (Hotham Sound)
ELPH008	2026	33.5	• 33.5 ha in Elphinstone • Above Roberts Creek and associated tributaries • Outside the Mt Elphinstone South Watershed Assessment Phase 1, 2 and 3 area
MCNA002	2027	44.63	• 44.63 in McNab • Lower elevations along McNab Creek

Previously referred block:

Block ID	Proposed Auction Year	Net area in Hectares (ha)	Summary Details
McNR002	2026	19.2	• Located on slope above Hillside Industrial Park

SCRD Service Area Impacts: Drinking Water Protection

The (Provincial) definition of Community Watersheds includes watersheds where surface water licences are present for the purpose of human consumption by a licensed waterworks and does not include groundwater drinking water supply or aquifer recharge zones.

Deforesting leads to long-term ground cover changes such as loss of mature tree canopy, increased bare land, compaction of soil and road cuts across streams and along slopes. This can result in on and off-site effects of erosion, downslope sedimentation (the increase of sediment supply to a stream network), land movement, changes to drainage, increased magnitude of peak flows, which impact water infiltration processes that can result in a change to surface and groundwater quality and quantity. Industrial activities in recharge zones pose the risk of spills or other vectors of both surface and groundwater contamination. Logging near source water areas and tributaries can result in changes to the hydrological regimes of the area

and in some cases result in the loss of source water flows, which are critical in providing base flows to larger surface water streams or for groundwater infiltration. Changes to water infiltration as a result of logging are complex and differ depending on specific locations, time of year, and sometimes require years before impacts are actualized.

Protecting groundwater recharge areas is of critical importance to protecting community drinking water supply. The SCRD is increasing its reliance on groundwater resources for the provision of drinking water in the Region, as it looks to diversify water sources for the Chapman Water System.

SCRD Service Area Impacts: Stormwater Management

The Mount Elphinstone area contains many headwaters and creeks. While SCRD does not have a stormwater management service, changes to stormwater and hydrological regimes can impact services and assets downstream, both public and private. The SCRD is the lead agency for emergency management on the Sunshine Coast, and coordinates responses to hazard events that may occur. SCRD Official Community Plans (OCPs) identify many of the creeks in this area as at risk for debris flows, ravine instability and slope hazards.

Logging on steep slopes, in headwaters areas, and above developed communities adds to the existing identified risk of slope instability, flooding, debris flows and ravine instability. This risk increases again when it is coupled with the new normal of summer drought conditions drying out soils and vegetation, increased frequency of winter storms and increased intensity of rain events. SCRD provided comments about these risks on Elphinstone in the 2020-2025 referral response.

Recent years have seen increased heavy rainfalls where increased creek discharge has led to washouts. Washouts in the region in 2021 resulted in an Emergency Operations Centre, and State of Local Emergency as they impacted SCRD services and assets such as drinking water supply mains, transit services, and park infrastructure. In the Elphinstone area, damages to park trails in Cliff Gilker, watermain washouts resulting in Boil Water Advisories, and disruptions to transit services occurred during high flows on creek in the area.

SCRD Service Area Impacts: Roberts Creek Official Community Plan (OCP) Impacts

The Roberts Creek OCP includes the following policy related to 13) Water Service Areas and Watersheds:

> 13.8 Deforestation is a significant concern and any forestry activity should take into account possible impacts on water quality and supply.

The Roberts Creek OCP includes the following objective related to 13) Stormwater Management and Drainage Plans:

> 14a To maintain the existing natural watersheds' flow characteristics to the greatest extent possible by taking into account the cumulative impacts of each development on watersheds.

SCRD Service Area Impacts: Hillside-Port Mellon Officially Community Plan (OCP)

The Hillside-Port Mellon OCP includes the following objective related to land use:

> 2.1. To protect development from hazardous conditions in the form of land slip, erosion, flooding and debris torrents.
>
> 2.2 To protect valuable fish and wildlife habitat areas associated with McNair and Dakota Creeks, Mohawk Creek, the Rainy River and the ocean foreshore.
>
> 2.3 To satisfy the requirements of the provincial Fish Protection Act, in particular the Riparian Areas [Protection] Regulation, with respect to protecting fish habitat.

ANALYSIS

McNR005

Drinking Water

This road cutblock is proposed through a designated Community Watershed where the SCRD holds a water licence. This licence is not related to current SCRD water service. The potential future quality and quantity of this water source could be impacted by the logging of the crossing over multiple tributaries and Dakota Creek itself.

Stormwater

The tributaries and creeks this proposed road crosses has a history of high creek flows resulting in damages to Port Mellon Highway and scouring of the bridge crossing at Dakota Creek. The SCRD is the Diking Authority as defined pursuant to the *Dike Maintenance Act* for Dakota Creek Berm. The berm was designed and installed for the purpose of flood and erosion protection for highway and lands to the east, including SCRD-owned Hillside Industrial Park.

Recommendations

The SCRD does not support the logging of McNR0005 due to it being located within a Community Watershed, as well as the potential impact to downstream SCRD assets of the Dakota Creek berm and Hillside Industrial Park.

ELPH010

Drinking Water

The watershed of Roberts Creek is not designated Community Watershed, however, BC Well Database lists 164 private licenced groundwater wells pulling from Aquifer 555.

Changes in land cover on these slopes have the potential to impact private/commercial downstream drinking water licences on Roberts Creek.

Stormwater

ELPH010 located within DPA #3, Slope Hazards. This known hazardous area inherently adds risk and stormwater management responsibilities for downstream property owners, land managers and service providers. Impacts of logging exacerbate these risks through changing hydrological regimes such as decreasing of soil infiltration, the increase of snow cover and thus snow melt, and increase rainfall impacts on clear cut areas. The SCRD owns multiple assets along Roberts Creek, including Cliff Gilker Park and Roberts Creek Pier Park. Cliff Gilker was negatively impacted by high water flows in 2021, resulting in damages to park infrastructure.

Recommendations

SCRD recommends that in advance of proposing/engineering cutblocks on Mount Elphinstone near Roberts Creek, that a review of the cumulative impact to ground water resources of Aquifer 555 by qualified experts selected by Local Government water service providers be completed. Historical and any proposed forestry activities for the next 5 years, and climate change considerations should be considered as part of such assessment.

SCRD is concerned about the cumulative impacts of resource activity, including deforesting, that is proposed on or near Aquifer 555, which supports private wells who are not within the SCRD Regional Water Service Area and thus do not have access to other sources of water.

SCRD understands that BCTS is undertaking a Watershed Assessment for the Roberts Creek area and recommends the implementation of findings prior to the proposing, auctioning, and harvesting of lots within this area.

SCRD emphasises the need for BCTS follow the recommendations of the Mt Elphinstone South Watershed Assessment Phase 1 and 2 for all currently proposed or auctioned blocks in order to avoid increasing current Peak Flow Hazards.

ELPH008

Comments and draft recommendations related to ELPH008 are the same as ELPH010.

GRAN011

The SCRD does not have any services or assets that would be impacted by this proposed cutblock.

MCNA002

The SCRD does not have any services or assets that would be impacted by this proposed cutblock.

MCNR002

This cutblock was proposed in an earlier Operating Plan and was shown to be located within SCRD-owned property at Hillside Industrial Park. Staff received clarification from BCTS about the block location and have confirmed this is an error. The block will be removed from the

Operating Plan and further investigation into the current boundaries of the BCTS operating area is occurring.

Advisory Planning Commissions Feedback

Five Advisory Planning Commissions (APCs) reviewed the staff report in advance of this Electoral Services Committee meeting. Meeting minutes and recommendations are available in the October 19, 2023, Electoral Area Services Committee agenda package.

Organization and Intergovernmental Implications

The SCRD and BCTS signed a communication protocol on June 2, 2014. The protocol ensures that BCTS provides timely information about its operational plans and that the SCRD can provide comments back. Each successive year builds on previous years' plans as new field survey information is collected and stakeholder information is considered. Staff will continue to work cooperatively with BCTS to identify future opportunities for community consultation.

Communications Strategy

BCTS is responsible for consultation related to the Operations Plan. SCRD reviews and in turn refers to Advisory Commissions for comment in advance of responding to the BCTS referral.

Five Advisory Planning Commissions reviewed the staff report in advance of the Electoral Services Committee meeting.

STRATEGIC PLAN AND RELATED POLICIES

Responding to BCTS's 2023-2027 Operating Plan calls on all of the focus areas of SCRD's 2019-2023 Strategic plan: climate resilience, advocacy, asset stewardship, engagement and communications and regional collaboration. A multidisciplinary approach is required to address the concerns described in this report.

CONCLUSION

SCRD received forestry referrals from BC Timber Sales regarding the 2023-2027 Operating Plan. SCRD analysis shows potential impact to drinking water services, and increased risk of flooding and sediment transfer which could impact downstream SCRD assets.

SCRD has and will continue to emphasize strong concern to BCTS regarding cumulative impacts to:

- Downstream private property owners' stormwater impact
- Downstream public assets, such as roads, parks, watermains, and creeks
- Regional and provincial emergency response requirements for stormwater impact such as recent events in Fall of 2021.

SCRD has and will continue to advocate for:

- A proactive, landscape-level, multidisciplinary, cumulative impact assessment framework;

- Climate change informed, climate-resilient forest planning that recognizes and values local forests as local assets that protect against increasing climate impacts.

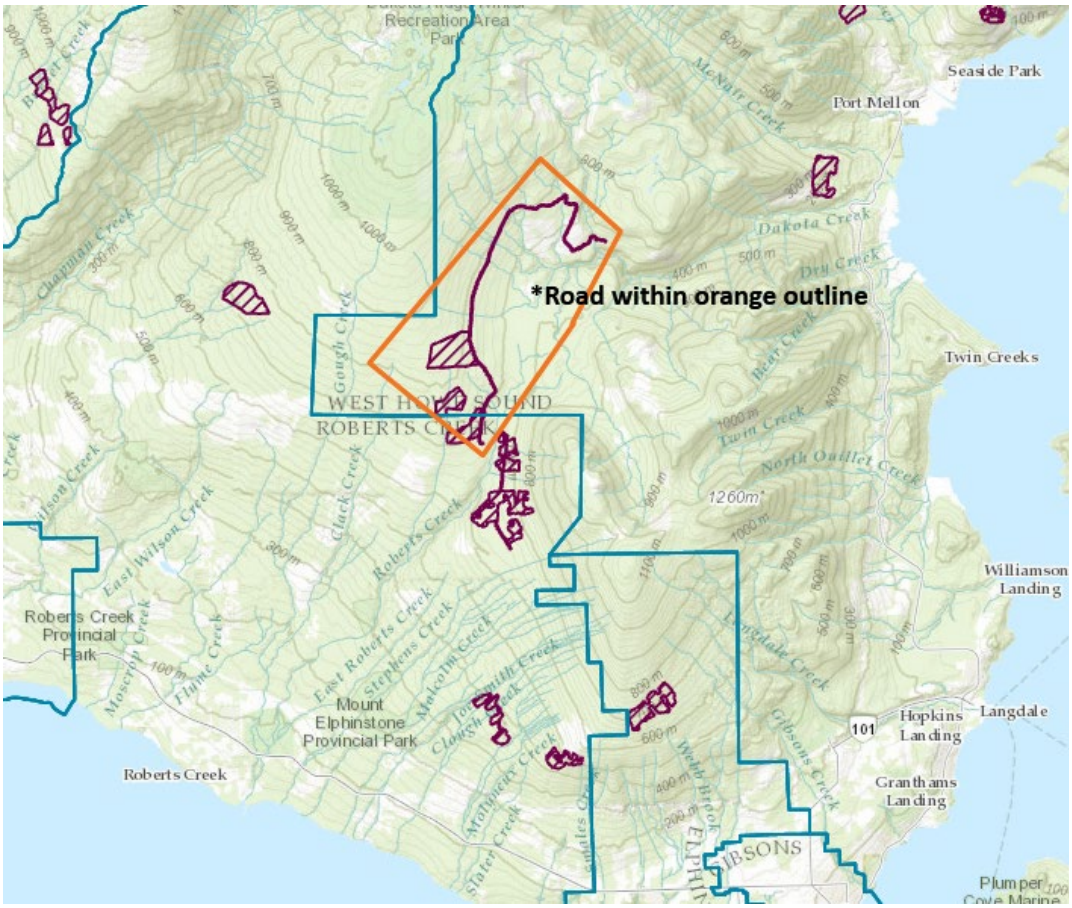
ATTACHMENTS

Attachment A – BCTS Proposed Block Maps 2023-2027

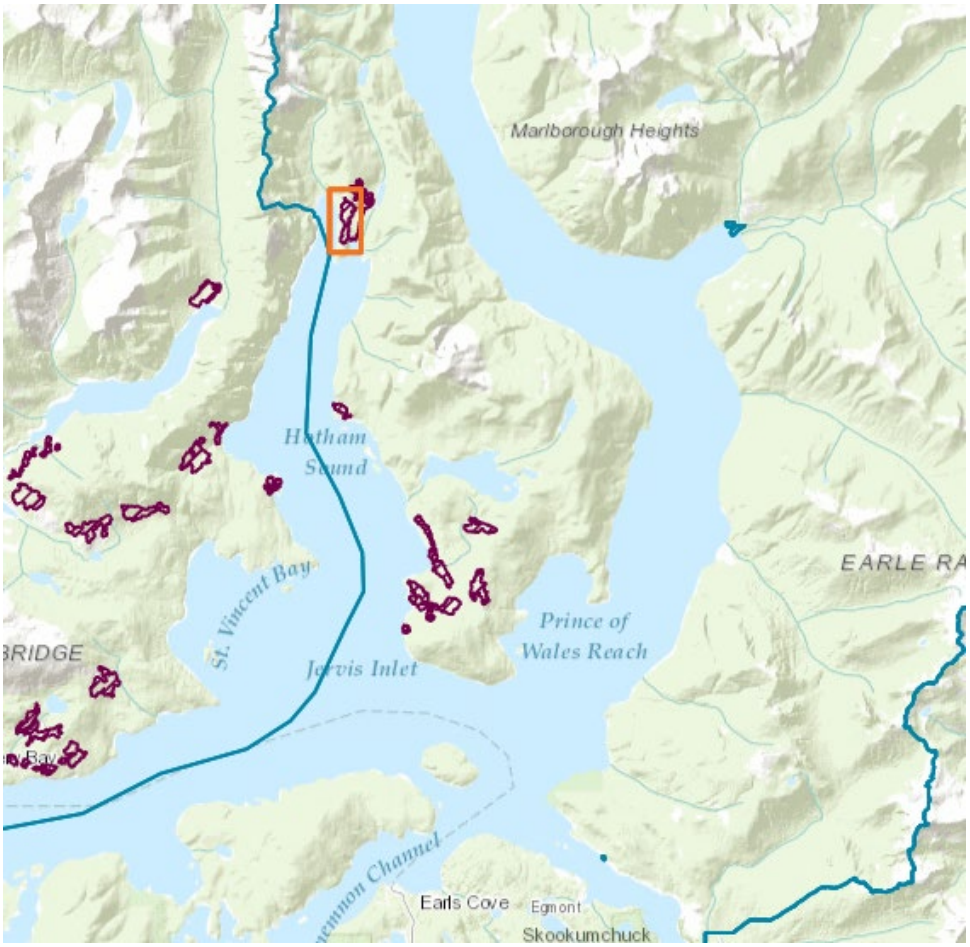
Reviewed by:			
Manager		Finance	
GM	X – I. Hall	Legislative	X - S. Reid
CAO	X – D. McKinley	Other	X - J. Clark

BC Timber Sales Operating Plan 2023-2027: 2023 Proposed Blocks Maps (for context only)

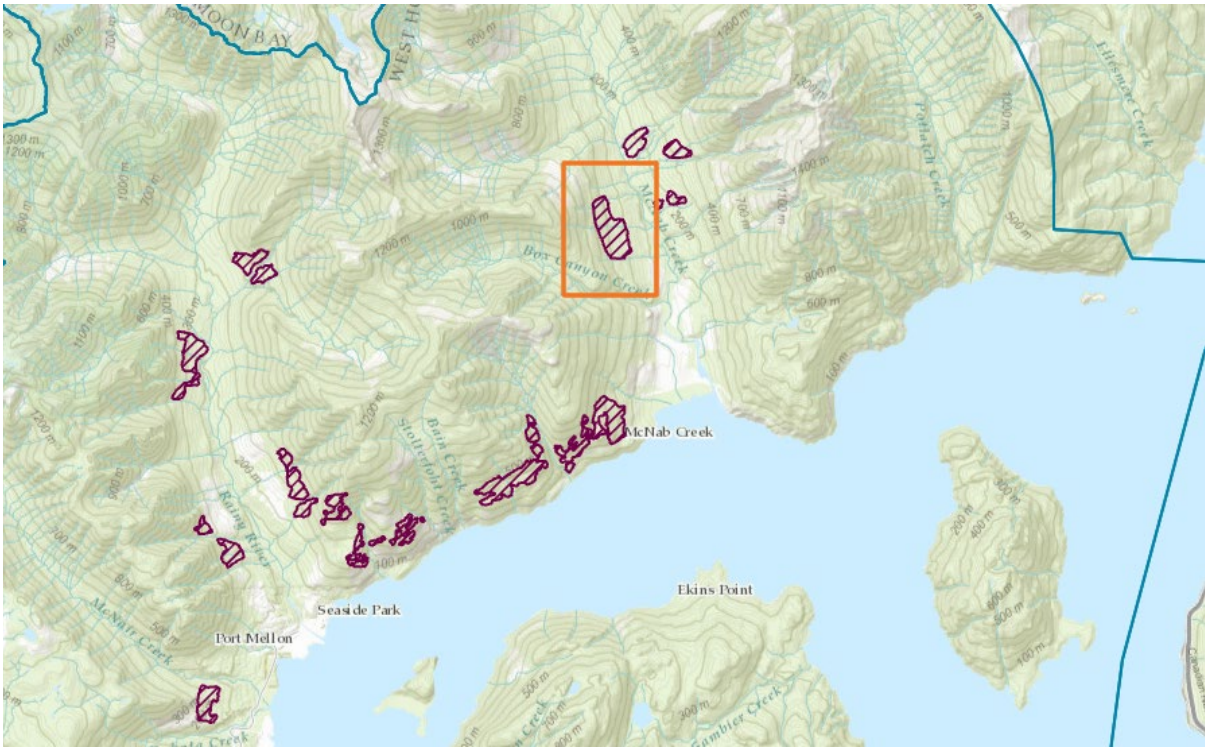
Block ID	Operating Plan Map	Planned Auction Date	Operating Plan Initial Year[1]	Block State[2]	Gross Area (ha)
McNR005	McNair_Rainy	2024	2023	Development Ongoing	14.21



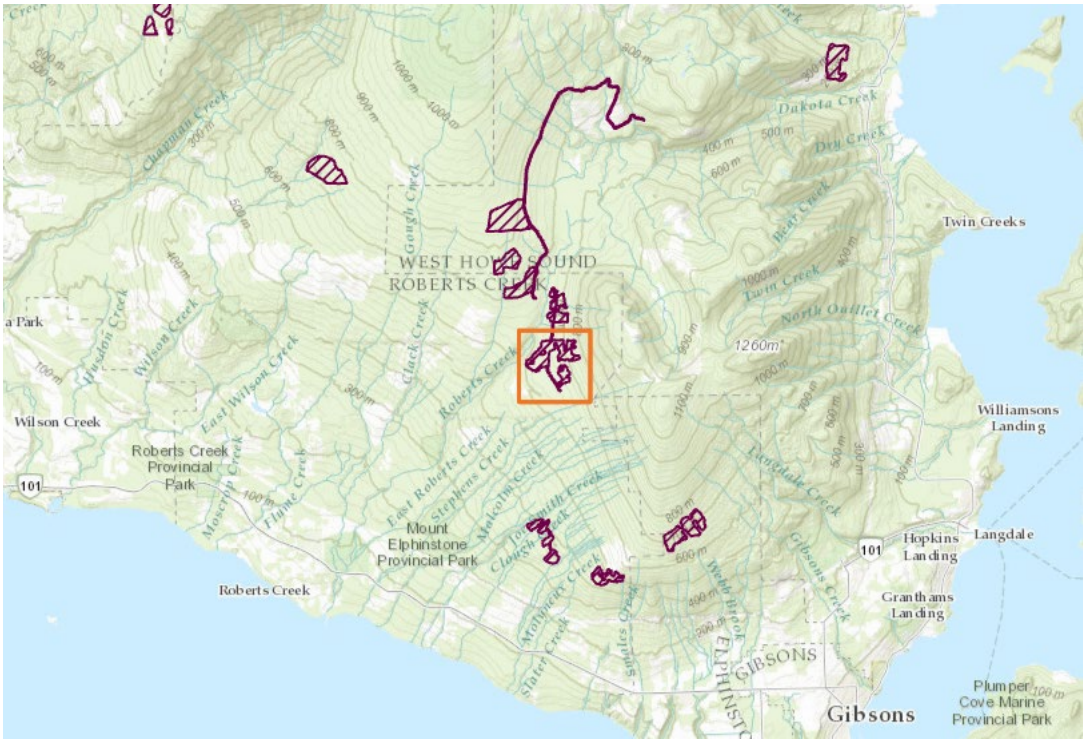
Block ID	Operating Plan Map	Planned Auction Date	Operating Plan Initial Year[1]	Block State[2]	Gross Area (ha)
GRAN011	Granville	2025	2023	Planned	6.7



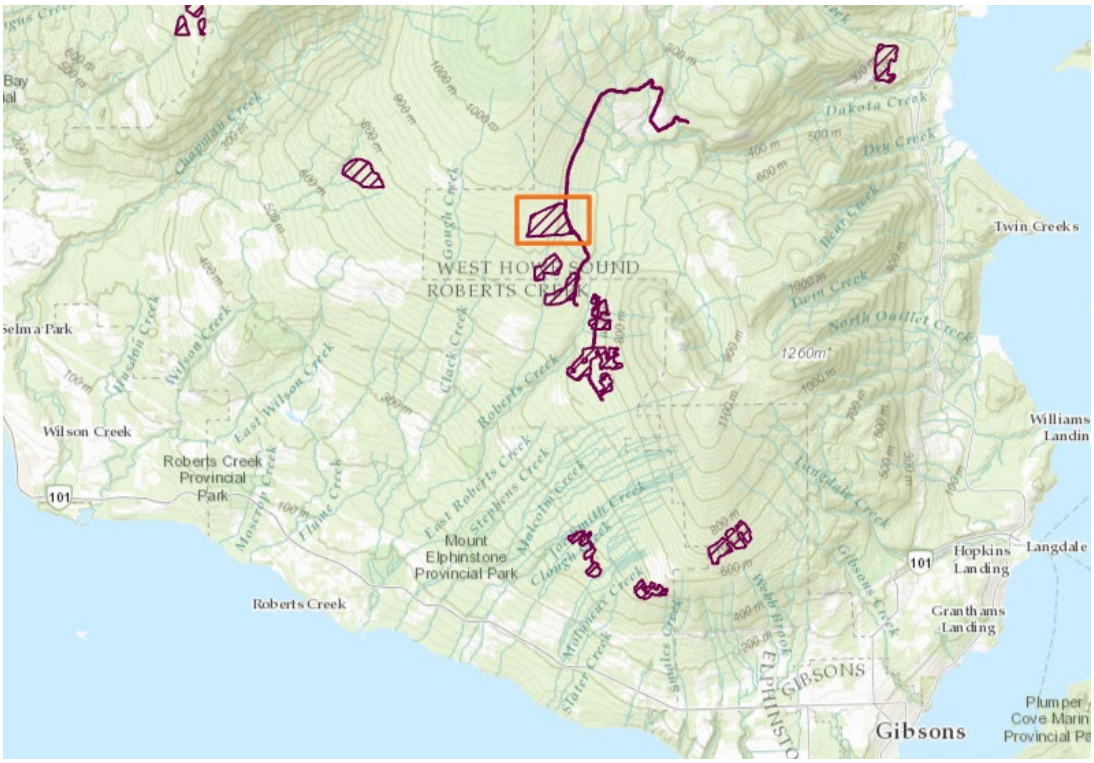
Block ID	Operating Plan Map	Planned Auction Date	Operating Plan Initial Year[1]	Block State[2]	Gross Area (ha)
MCNA002	McNab_Potlatch	2027	2023	Planned	44.63



Block ID	Operating Plan Map	Planned Auction Date	Operating Plan Initial Year[1]	Block State[2]	Gross Area (ha)
ELPH010	Elphinstone	2024	2023	Development Ongoing	1.59



Block ID	Operating Plan Map	Planned Auction Date	Operating Plan Initial Year1	Block State2	Gross Area (ha)
ELPH008	Elphinstone	2026	2023	Planned	33.5



SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Area Services Committee – October 19, 2023

AUTHOR: Chris Humphries, Planner II

SUBJECT: **Development Variance Permit DVP00087 (13305 Kammerle Road)**

RECOMMENDATION

(1) THAT the report titled Development Variance Permit DVP00087 (13305 Kammerle Road) be received for information;

(2) AND THAT Development Variance Permit DVP00087 (13305 Kammerle Road), to vary Zoning Bylaw 337, Section 1011.6, to increase the parcel coverage allowance from 15% of parcel area to 18.7%, be issued.

BACKGROUND

The SCRD has received a Development Variance Permit application (DVP00087) for the property located at 13305 Kammerle Road in Electoral Area A, to vary Zoning Bylaw 337, Section 1011.6, to increase the parcel coverage allowance of 15% of parcel area to 18.7%, representing 76m², to facilitate the following:

1. Construction of an addition to an existing residential structure where the addition adds 69 m^2 to the parcel coverage, and
2. Legalization of a previously-constructed nonconforming shed structure that adds 13 m^2 to the parcel coverage and results in the parcel exceeding total coverage allowance by 7 m^2.

The purpose of this report is to present this application to the Electoral Area Services Committee for consideration and decision. Table 1 below provides a summary of the application.

Applicant:	Jef Keighley
Legal Description:	LOT 34 DISTRICT LOT 1543 GROUP 1 NEW WESTMINSTER DISTRICT PLAN BCP33394
PID:	027-305-511
Electoral Area:	Area A
Civic Address:	13305 Kammerle Road
Zoning:	RU1 (Rural Residential One)
OCP Land Use:	Residential A
Proposed Use:	To permit addition to existing residential structure and retention of an existing shed in its current form.

Table 1 – Application Summary

Figure 1 - Location Map (subject parcel in red)

DISCUSSION

Analysis

The subject parcel is located at 13305 Kammerle Road, is zoned RU1, and is surrounded by other RU1-zoned parcels (Figure 2). Zoning Bylaw No. 337 states the following:

Section 1011.6 With the exception of public utility buildings and structures on parcels less than 100 square metres, the parcel coverage of all buildings and structures shall not exceed 15 percent size except where the parcel is 2000 square metres or less the parcel coverage shall not exceed 35 percent.

The parcel is approximately 2059.85 m^2 in area and therefore has a parcel coverage allowance of 15%. The applicant wishes to construct an addition to the existing residential structure, comprised of an expansion to the living space and introduction of a covered deck structure, both to be contained under a single roof structure that will project off the west end of the residential structure (Figure 3). This addition results in a 69m² increase to lot coverage. The applicant also wishes to retain a previously constructed shed structure (auxiliary building), situated at the west end of the parcel, adjacent to the south parcel line, which currently results in parcel coverage allowance being exceeded by 7m² (Figure 4). The residential addition and existing shed require a variance to allow for an additional 76m² of parcel coverage, increasing the parcel coverage from 308.98m² to 384.98m², and from 15% to 18.7% of the total parcel area.

Figure 2: Aerial Photo (subject parcel in blue; north arrow in red)

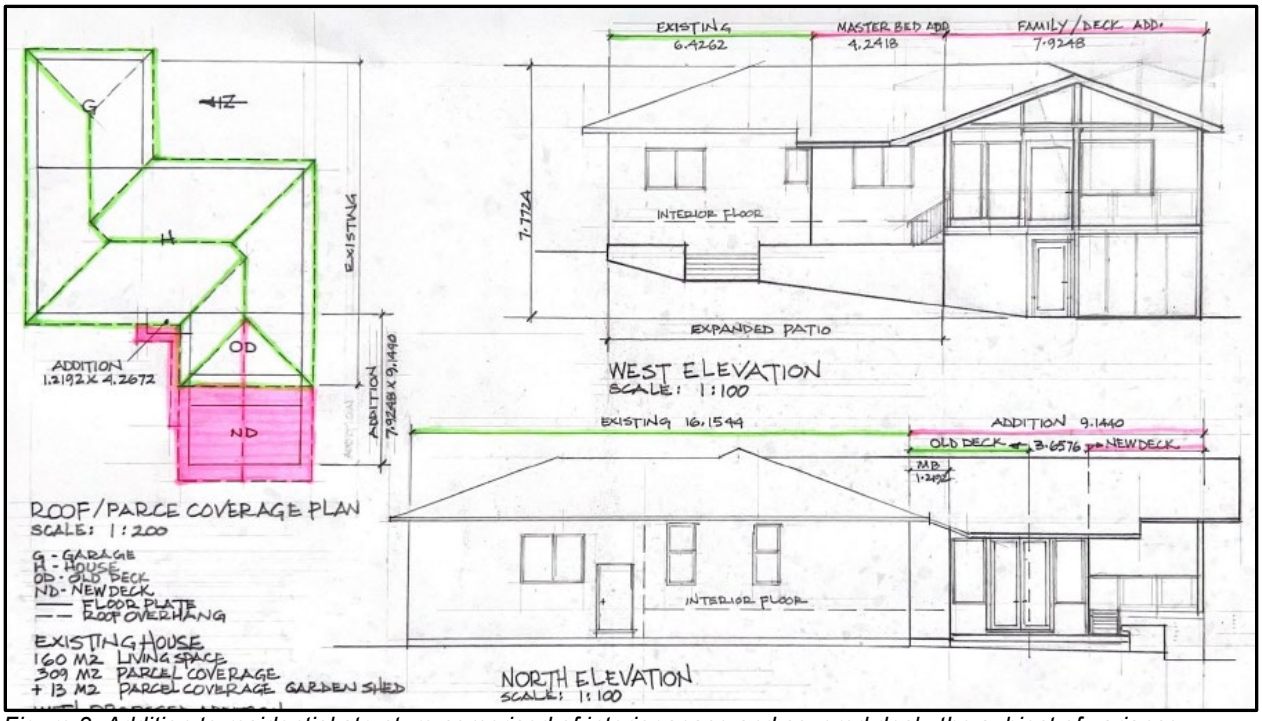


Figure 3: Addition to residential structure comprised of interior space and covered deck, the subject of variance proposal (roof of addition and covered deck structure in pink).

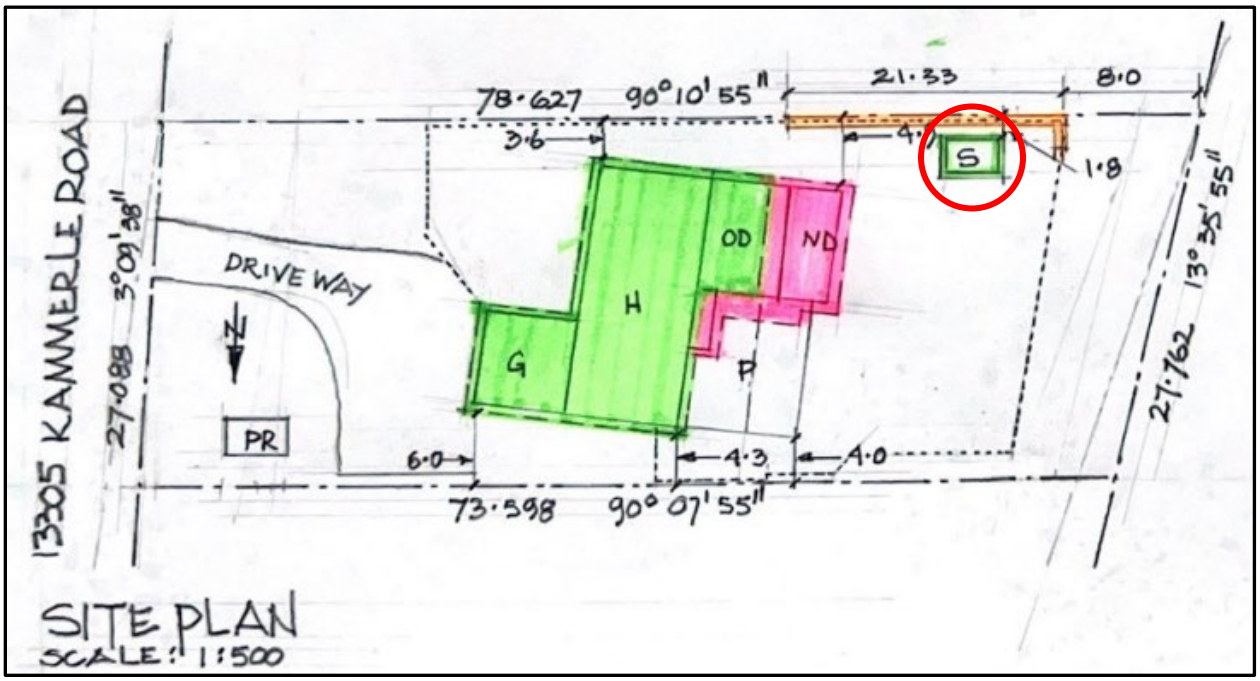


Figure 4: Site plan showing locations of structures inducing variance to parcel coverage including addition to residential structure (pink), and existing shed structure (circled).

Consultation

The development variance permit application has been referred to the following agencies for comment:

Referral Agency	Comments
SCRD Building Division	No concerns
shíshálh Nation	shíshálh Nation has directed the applicant to conduct an archaeological Preliminary Field Reconnaissance inspection of the subject site. Staff have put the applicant in contact with the Nation to fulfill this request.
Pender Harbour Fire Department	No concerns.
Neighbouring Property Owners/Occupiers	Notifications were mailed on October 3, 2023 to owners and occupiers of properties within a 50 m radius of the subject property. No comments were received prior to the report review deadline.

Notifications to surrounding properties were completed in accordance with Section 499 of the *Local Government Act* and Sunshine Coast Regional District Bylaw No. 522. Those who consider their interests affected may attend the Electoral Area Services Committee meeting and speak at the call of the Chair.

The applicant is responsible for ensuring all work undertaken complies with the *Heritage Conservation Act.*

Applicant's Rationale & Planning Analysis

Staff have evaluated this application using SCRD Board policy 13-6410-6 (Development Variance Permits) as criteria. These criteria and the analysis related to the proposal are below.

1. *The variance should not defeat the intent of the bylaw standard or significantly depart from the planning principle or objective intended by the bylaw;*

In rationalizing the requested variance, the applicant highlights that an increase in floor area of the residential structure is permitted by adding a second floor and that, even with such an increase, the residential structure's overall volume will be in line with other dwellings in the area. Staff feel that the requested increase in parcel coverage will be low impact as the overall size of the structure will not increase significantly. Adding to the main floor of the existing structure, even though it adds to parcel coverage, does not lead to the parcel density being exceeded.

In terms of the non-conforming shed structure, the rationale given in support of the addition to the residential structure shall be extended to this structure. Staff feel that the 7 m^2 overage in parcel coverage incurred by allowing the shed to remain only results in minor additional variance that does not defeat the overall intent of the bylaw requirement, given the size of the lot is close to the 2000 m² threshold in the bylaw that would permit 35% parcel coverage.

2. *The variance should not negatively affect adjacent or nearby properties or public lands;*

The applicant highlights that the single floor residential structure is of a relatively low height, and is situated generally centrally on the parcel, both of which minimize the structure's intrusion on neighbours' view corridors. Staff observe the orientation of the house and planned addition which run along the property's length, meaning that the addition will not result in the building being any closer to the property's nearest parcel lines. Staff feel that if living space is added to the existing residential structure, doing so on the existing ground floor, by expanding the floorplate, will be less intrusive to neighbouring property owners.

The single floor shed structure has a small footprint and a total parcel coverage of 13 m^2, and it conforms to the setback requirements within the zoning bylaw. It is noted that the zoning bylaw permits a total floor area of 250 m^2 for auxiliary buildings, including sheds, and that the subject shed is small and contains a floor area well below the maximum permitted. Staff do not believe that the shed structure has any negative impact for neighbouring property owners.

3. *The variance should not be considered a precedent, but should be considered as a unique solution to a unique situation or set of circumstances;*

The subject parcel's size is 59.9 m^2 in area over the 2000 m^2 threshold in the bylaw that would permit 35% parcel coverage. Staff feel that the unobtrusive single floor design of the residential structure, the planned addition that perpetuates that design, and the challenge of being constrained by a 15% parcel coverage allowance on this size parcel means the requested variance is an acceptable response.

The applicant states that the shed structure was constructed before they were aware of the 15% parcel coverage allowance, and that the shed already leads to the property exceeding parcel coverage allowance by 7 m^2. The primary focus of the application is a variance for the proposed addition to the residential structure, with a variance for the shed structure being added to bring the parcel back into compliance. Staff do not foresee the application being a precedent for other homeowners to submit variance applications for similar minor structures.

4. The proposed variance represents the best solution for the proposed development after all other options have been considered.

The applicant states that expanding the ground floor of the residential structure rather than adding a second floor will allow them to age in place, while also avoiding the impacts of a second-floor addition on adjacent neighbours. Due to the generous amount of land remaining on the west half of the property, where the planned addition would be constructed, staff agree that this is a good solution. The shed structure is small and conforms to the bylaw in terms of setbacks, building height, and floor area. As such, staff feel that allowing the shed structure to remain is a reasonable course of action.

5. The variance should not negatively affect the natural site characteristics or environmental qualities of the property.

The applicant confirms that the application comprises a relatively small alteration to the existing residential structure and that the addition generally works with the land and does not lead to significant land alteration or removal of vegetation. Staff agree that the proposed structure is relatively small and would not result in any significant negative impacts on a parcel, which has previously been heavily altered. The shed structure already exists, is small, and has been placed on a landscape that had previously been significantly altered over time.

Options / Staff Recommendation

Possible options to consider:

Option 1: Issue the permit

This would permit the proposed residential development on the property to proceed, including retention of the existing shed structure.

Staff recommend this option.

Option 2: Refer the application to the Area A APC

The APC would discuss the proposed variance in consideration of the Board's DVP policy and provide a recommendation to the EAS. Further notification is not required with this option.

Option 3: Deny the permit

The zoning bylaw regulation would continue to apply. The applicant would be required to pursue alternative solutions for the addition to the residential structure, and the existing shed structure would need to be removed or altered to comply with the required parcel coverage. The applicant could, as an alternative option, seek relief through the SCRD Board of Variance if a case of hardship was considered valid.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

The proposed development variance permit would facilitate an addition to an existing residential structure, and retention of an existing shed structure that currently results in the parcel coverage being exceeded. The proposal is reasonable given the limited variance to parcel coverage allowance proposed, the existing structural designs, and the accessibility concerns of the applicant. Accordingly, staff recommend issuing the development variance permit. If approved, the applicant would be required to comply with all relevant permitting processes.

Reviewed by:			
A/Manager	X – K. Jones	Finance	
GM	X – I. Hall	Legislative	X – S. Reid
CAO	X – D. McKinley		

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Electoral Area Services Committee – October 19, 2023

AUTHOR: Tara Crosby, Administrative Assistant, Corporate and Administrative Services

SUBJECT: **HALFMOON BAY CHILDCARE CENTRE – ELECTORAL AREAS' GRANT-IN-AID**

RECOMMENDATION(S)

(1) THAT the report titled Halfmoon Bay Childcare Centre – Electoral Areas' Grant-in-Aid be received for information;

(2) AND THAT the Committee provide direction with respect to the proposed change in funding purpose requested by the Halfmoon Bay Childcare Centre to reallocate $3,260 in Electoral Areas' Grant-in-Aid funds from school bus rental for summer programs to emergency food supplies and garden expansion.

BACKGROUND

The Halfmoon Bay Childcare Centre (the "Centre") sent a correspondence requesting to change the scope for their use of approved 2023 EAGIA (Attachment A).

Due to this EAGIA being provided by the following functions, the participants for each service would need to confirm that the change of scope by the Centre is supported and for these values:

Area A [121]	Area B [122]	Area D [127]	Area E [128]	Area F [129]
$100	$2,300	$1,400	$500	$680

The Board's Electoral Areas' Grant in Aid Policy states in Section 9.1 "*In the event that the Electoral Areas' Grant-in-Aid funding results in a surplus to the applicant's needs or is no longer required for the project, program, service or special event for which it was intended or described in the application, the SCRD will be notified immediately and any remaining funding must be returned to the SCRD as soon as possible*".

The purpose of this report is to seek direction from the funders to allow a change in the project scope for the Centre for the 2023 EAGIA.

DISCUSSION

In the past years the Centre has been approved for EAGIA for the following amounts for various reasons, and in 2020, 2022 and 2023 the funds were requested for Rental and Fuel for a Bus for the Summer Programs:

2023	2022	2021	2020	2019	2018
$4,980	$4,980	$3,260	$3,260	$2,600	$1,275

In 2020, COVID-19 prevented the Centre from providing the programs and therefore the school bus rental was not required. The Centre requested and was approved by the Board for a change of purpose for use of the funds, to enhance the outdoor learning opportunities and environment which included the purchase of a small storage container unit for outside and individualized equipment items.

This year the Centre advised that it could not rent the bus for the Summer Programs.

In email correspondence in July 2023, the Centre requested shade structures and air conditioning for the use of funds, in the attached correspondence the Centre requests emergency food supplies which are expired and an expansion to the garden space and installation of shade frees. Attachment B is the original application supplied by the Centre for reference.

The EAGIA Policy also states in Section 4.9 that "Grant funding is not guaranteed from year to year, Organizations are encouraged to work toward financial independence." and in Section 8 Evaluation Criteria the applications should provide "Evidence of financial need" and the "Ability to demonstrate or anticipate future outcomes". The *Local Government Act* also states that an appropriate service be established to allow for ongoing funding.

Option 1

For the Committee to approve the 2023 EAGIA funding purpose change made by the Halfmoon Bay Childcare Centre from school bus rental for summer programs to emergency food supplies and garden expansion for the 2023 year only and affirm that funds will be provided by each functional area as approved through the EAGIA process. This option is recommended.

Option 2

To deny the request to use 2023 EAGIA of $3,260, for the change of project scope from bus rental for Summer Programs and request that the Centre return the funds provided for 2023.

STRATEGIC PLAN AND RELATED POLICIES

The provision of grants-in-aid is administered through Board Policy #50-034 Electoral Areas' Grant-in-Aid.

CONCLUSION

The Halfmoon Bay Childcare Centre has requested a change of scope for their use of approved 2023 EAGIA. Staff request direction regarding this change and the funds provided by each functional area.

ATTACHMENTS

A: Correspondence from the Halfmoon Bay Childcare Centre

B: 2023 EAGIA Application from the Halfmoon Bay Childcare Centre

Reviewed by:			
Manager		CFO / Finance	X – T. Perreault
GM		Legislative	X – S. Reid
CAO	X – D. McKinley	Other	

The Halfmoon Bay Childcare Centre
8090 Northwood Rd
Halfmoon Bay, B.C. V7Z 1A8
hmbchildcarecentre@gmail.com
6048853739

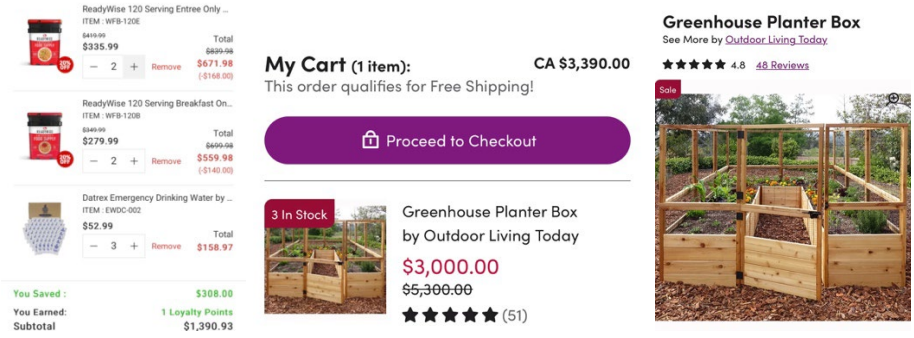
For the attention of Leonard Lee, Chair of the Sunshine Coast Regional District,

The Halfmoon Bay Child Care Centre Society received a generous Rural Grant in Aid funding amount of $4,980.00 to support our Summer Program. As outlined in our grant application, the funding was to be used for bus rental and subsequent expenses, a program that has been consistently supported by the Rural Grant in Aid. This program relies on an established relationship between School District 46 and its contracted bus service, and an outcome of recent changes was our inability to procure a vehicle this summer.

I would appreciate your consideration of our request to change the scope of our project as initiatives align with the interests and values of the original funding parameters. There are currently two areas identified as high priority needs in the Centre and include the renewal of emergency food supplies and the expansion of the Centre's gardening, food sustainability, and nutrition program. Regulations require that we maintain a three-day supply of food and water for all staff and students in case of an emergency, and our stock has expired. Conditions throughout our province for the past few years speak to the necessity of this security and it is a total cost of $1,390.93 for a shelf life of five years, if not used.

In Spring 2023, Centre staff began to grow food with children in care who were able to take food home throughout the summer. We have grown potatoes, peas, beans, corn, herbs, tomatoes, sunflowers, and lavender as well as pollinator plants to encourage ecosystem support as well as education. We do not currently have spaces for each child in care to maintain a personalised garden box and hope to build a fenced area with additional plots. The program has opened a world of exploration into food, nutrition, environmental stewardship, and responsibility for shared spaces. Additionally, a key outcome observed is the enthusiasm of children who have found group activities challenging and participate with fewer perceived barriers when engaged with gardening. It is crucial that we plant more trees to provide necessary shade on our grounds and continue to use our multiple rain barrels to effectively respond to water conservation measures during the summer months.

The Centre's proposed use of RGIA funding will include emergency supplies as noted above as well as an enhanced gardening space. Fencing and boxes are an expense total of $3,390.00, as outlined in the following images.



We would like to thank you again for consistent funding of our programming. The Sunshine Coast Regional District has been a valued supporter for years and we hope that our values and programs continue to reflect the purpose of the community grants. We would be grateful for your consideration of our request.

Thank you for your time,

Jennifer Hoile
Halfmoon Bay Child Care Centre Society, Manager

OFFICE USE ONLY

Applicant: THE HALFMOON BAY CHILD CARE CENTRE SOCIETY

Date application received: MARCH 30, 2023

Date application confirmed to be complete: APRIL 4, 2023

Checklist:
- ☑ Society No. (if application over $500)
- ☑ Completed Application Form
- ☑ Latest Financial Statement
  - Audited: ☐ Yes ☑ No ☐ N/A
- ☑ Budget Summary for current year
- ☑ Project Budget
- ☑ Annual Report
- ☑ Notification of last year's GIA expenditure ☐ N/A 4980 rcvd. march 26/23

Category:
- ☐ Arts & Culture ___
- ☐ Sports & Recreation ___
- ☑ Social/Educational/Environmental/Other ___

Amount of Grant-in-Aid Applied For: $4980

Amount Approved: $_____

Application Denied: ☐

Comments:

Summer Program
- Bus Rental + Insurance + fuel
- Supplies

- operational costs (Bus, insurance, fuel)?
- Same as funded last year - Bus,
- FUNDED ANNUALLY SINCE 2018; overtime since 2010 - $25,875

Letter sent to applicant informing of decision — Date:

Cheque sent to applicant — Date:

RECEIVED
MAR 3 0 2023

SUNSHINE COAST REGIONAL DISTRICT
ELECTORAL AREAS' GRANT-IN-AID APPLICATION - 2023

Are you a Society submitting this application on behalf of another organization? ☐ Yes ■ No
If yes, name the benefitting organization: _____
(For applications exceeding $500, applicant must be a registered Society. Proof of registration is required.)

Society/Organization's Legal Name: The Halfmoon Bay Child Care Centre Society

Bank Account in Society / Organization Name: ■ Yes (payments will not be made to individuals)

Societies Act No. *(required for applications exceeding $500)* S0024768

Business No. 135837821BC0001

Mailing Address: 8090 Northwood Rd.
Halfmoon Bay, B.C.
V7Z 1A8

Phone No.: (604) 885-3739
Cell No.: _____
E-mail: hmbchildcarecentre@gm

Contact Person: Jenn Hoile

Title: Manager

Did you receive Grant-in-Aid funding from the SCRD last year? ■ Yes ☐ No
If yes, what was the amount of last year's grant? $ 4,980
If yes, have you complied with the SCRD reporting requirements? ■ Yes ☐ No
(see "Reporting Out" form attached)

Which Electoral Area(s) does your project, program, service or special event benefit?
Egmont / Pender Harbour ■ Halfmoon Bay ■ Roberts Creek ☐
Elphinstone ☐ West Howe Sound & Islands ☐

Does your project have a measurable benefit outside of the electoral areas? ☐ Yes ■ No
If yes, have you applied to the appropriate municipal grant programs? ☐ Yes ☐ No
If yes, provide name _____ Amount $_____
(Municipal Areas being: Town of Gibsons, District of Sechelt, Sechelt Indian Government District)

Amount of Electoral Areas' Grant-in-Aid being requested: $ 4,980.00

Category: Arts and Culture ☐ Sports and Recreation ☐ Social / Educational / Environmental / Other ■

Type of Request: Specific Project ■ One-Time Special Event ☐ New Program or Service ☐ Specific Project in Special Event ☐

Describe your organization's purpose and goals (add pages where required).

Please see attached file.

Explain how your project, program, service or special event will benefit either the "Local" or "Regional" Community and promote volunteering, participation and citizen involvement (add pages where required).

Please see attached file.

Describe how the requested grant money will be used and how the SCRD contribution will be recognized (add pages where required).

The requested funding from the SCRD will support the Centre's Summer Program and its reliance on rented transportation in the form of a twenty-person bus and its fuel. Additionally, funding will supplement Program emergency supplies such as sunscreen and snacks.

Does your organization own it's own facility or rent / lease space?	■ Own ☐ Rent / Lease
How many members does your organization currently have?	45
Do you charge a membership fee?	☑ Yes ☐ No
If yes, what is your annual fee?	$5.00
Did you have a surplus last year?	☐ Yes ■ No
If yes, briefly explain:	

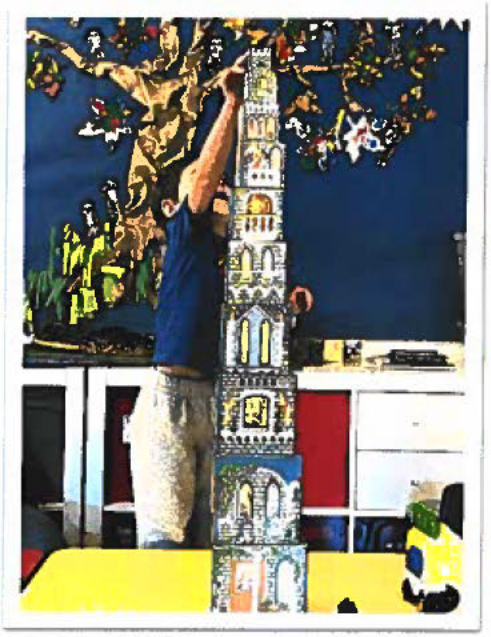
ATTACHMENTS: Before forwarding, please ensure all requested documentation is included:

- ☐ Detailed **project, program, service or special event** budget *(including all funding sources for the project) or see attached template*
- ☐ Latest Financial Statement *(Balance Sheet and Revenue / Expense Statement)*
- ☐ **Organizational** budget for current year *(including anticipated grant)*
- ☐ Proof of Society's registration number *(front page of tax return is sufficient)*
- ☐ Letter of support from society *(if application is made on behalf of a second organization)*
- ☐ Annual Report (if available)

HALFMOON BAY CHILD CARE CENTRE SOCIETY

Organisation's Purpose

The Halfmoon Bay Child Care Centre Society operates a vibrant and dynamic childcare centre located in the heart of Halfmoon Bay on Halfmoon Bay Community School grounds. We are the only licensed daycare in Halfmoon Bay, and it is imperative that we have the best possible learning and play environment for the children in our care.



Our staff are dedicated to the Halfmoon Bay Child Care Centre and as such have developed lasting relationships with each child in their care. Our space reflects this personal and professional dedication to the wellbeing of everyone who is involved as a child-in-care, as a parent, as a Board member, and as a volunteer. As we are often the introduction to elementary school and the community-at-large, the Centre plays a vital role in shaping a family's experience while in care with their natural progression to kindergarten. We have the additional benefit of watching our transitioned population grow to adolescence, as the playgrounds and school activities offer a connected experience. Children in the Centre are able to witness siblings at play and participate in school concerts and plays, and the school and daycare support one another when hosting event nights for parents, such as the Christmas craft fair. The Centre is fortunate to have the opportunity for an integrated experience that allows for a wraparound transition to an elementary school that is already familiar.

Population Served

Our daycare includes children aged 2 ½ to 5 years old from across the Sunshine Coast because we offer a program that serves the many needs of our communities. Families choose to use our daycare because of the exemplary care and to establish their children in the school culture before beginning Kindergarten. Our school has a cross-boundary population because of its excellent reputation and the lack of suitable rental properties in Halfmoon Bay. As a result, several families live outside of our small area but wish to remain entrenched in the school community.

The Early Years are understood to be a critical time in a person's development. Without nurturing and supportive relationships that include stable bonds and boundaries, we know that there are unintended consequences that lead to trauma and the repercussions of managing trauma in later life. We focus on connection with the children in our care as well as with the parents - it is the best opportunity Early Childhood Educators have because of the physical presence in care space and the trust that is established with engaged families. Our current population served includes the following:

* One-third of families reside in Sechelt
* One family resides in Sandy Hook
* One family resides in Madeira Park
* One family resides in Secret Cove
* Half of families served are located in Halfmoon Bay
* Seven children are waitlisted for the Speech and Language program with a representative scheduled for one full day of assessments because of need
* One child requires Supported Child Care assistance that is not yet in place
* 110 families are on our waitlist

Goals

The Halfmoon Bay Child Care Centre goals continue to be reviewed and confirmed regularly. These goals and their realisation are entrenched in our operations and assisted by a supportive Board, consistent and accessible accounting, and a parent population with the willingness and ability to volunteer. We strive to fulfil the following criteria as follows:

1. Maintain an environment for maximum safety and learning/play potential for the children in our care. Additionally, our space should reflect the high quality of the professionals employed at the daycare.

2. Offer the best possible environment for the children in our care by responding to concerns from our regulatory officer.

3. Maintain our current team of Child Care specialists for as long as possible, as they have grown with the Centre and the community. Each individual staff member enriches the Centre in their own way while being a complementary aspect of an incredible collaborative.

4. Engage with every child and family in our care to ensure that needs are met - unmet needs create circumstances that are difficult to navigate in later years.

5. Become competitive with better-funded centres to attract one new childcare specialist and offer our staff a fair raise.

The average child spends seven hours a day in childcare which requires our Centre to assist children in developing lifelong physical activity habits through play and facilitated activities that are proportionate to their time in care. Physical Activity Recommended Practices include the following[1]:

- Facilitated and unstructured physical activity and outdoor play daily, including a minimum of 120 minutes of facilitated
- Introduction of fundamental movement skills into active play daily.
- Indoor spaces that support a variety of physical activities.
- Limited prolonged sitting.
- Modelling by staff to promote physical activity habits as well as the exclusion of screen time on smart phones while children are in care.
- Communication with families in our capacity as educators about physical activity and physical literacy.

[1] Canada's Physical Activity Guidelines for the Early Years, https://www.appetitetoplay.com/physical-activity/recommended-practices/introduction-physical-activity-recommended-practices

- Policy-making that centres physical activity, physical literacy, and limits to staff screen time.

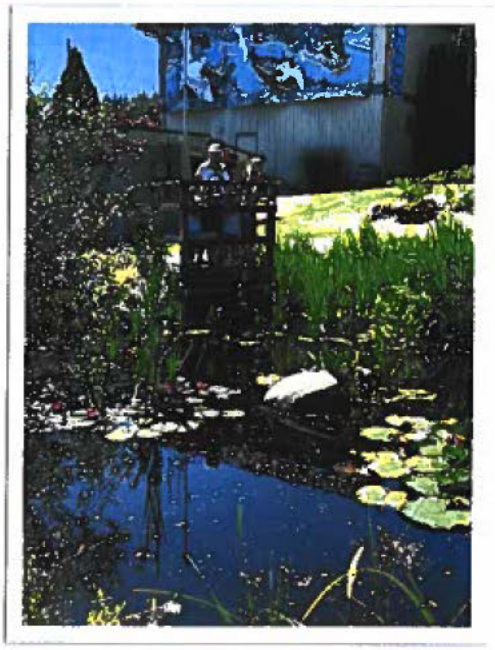
Our Environment

A Child Care Centre is an environment in which needs are continuously assessed. Contemporary research informs every decision we make in our day-to-day work with children and families and our guiding principles are compassion, empathy, and kindness. We believe this provides the foundation for the optimal experience for children in our care as well as their families.

As previously mentioned, the Halfmoon Bay Child Care Centre Society operates the only licensed daycare in our community. We are located on school grounds and are fortunate enough to integrate our children into school culture before they begin Kindergarten. The Elementary School is the hub of Halfmoon Bay and is the strongest motivating factor for families moving to our area.

The Centre has two full-time ECE staff with one part-time ECE working one day a week and subbing when necessary and when her schedule allows. We are fortunate this year to have one part-time sub who is able to assist for half of a day when necessary. Hours at the Centre are 8.5 to 9 hours a day to accommodate the needs of our community, which is an additional cost to the Centre. Additionally, the Centre's Board endeavours to maintain a competitive wage for staff as our funding prevented us from offering meaningful raises for a period of years. As a result, we are committed to a benefits plan to improve quality of life for employees.

Continued guidelines for Early Child Care providers emphasise outdoor play as one of the most effective ways to prevent COVID-19 and influenza infections[2]. Equally important is the frequent cleaning and disinfection of the Centre, which must be whenever possible. Cleaning the childcare space is equal in importance to other safety measures, such as hand hygiene and stay-at-home sickness policies. It is a natural recommendation that Child Care Centres transition to an Outdoor Classroom model as much as possible. We have continued to enforce COVID-19 measurements to protect our population with regular disinfection of toys and tools throughout the day as well as limits to persons inside the Centre. Parents have agreed to a drop-off and pick-up routine at our covered entrance to minimise transmission and we have experienced a reduced number of closures due to illness than other years. The Centre is fortunate this year to have an invested Board committed to the health, safety, and wellbeing of the community.



Our Society engages its members in many fundraising activities and relies on our participating base to carry the weight of many services that support the daycare, from help with gardening and maintenance to staffing tables at school events. We are also able to engage the community as a whole because Halfmoon Bay is an inclusive environment. We are fortunate enough to operate in an area in which much emphasis is placed on the importance of Early Years. From Strong Start to Early Years Centres to KinderSpark, we are a network of collaborative groups working to further the concept and reality of the Whole Child. Our committed community members inspire us to seek funding for specialised programs that enrich our overall organisation.

[2] Guidance_Child_Care.pdf (bccdc.ca)

Each staff person brings with them as an individual something fundamental and necessary to our Centre. Each staff person chooses to stay with us because they love the team with which they work as well as the families in our community. We work very hard as a non-profit to maintain this group of highly skilled and highly sought-after educators as a team because we are the only licensed daycare in Halfmoon Bay and because we continue to have a waiting list based the reputation of individual educators and their success as a team. The relationships drive our success, and these standards are deserving of investment.

Summer Program

Our Summer Program is a necessary effort to respond to health directives for fresh air and time outdoors as well as being an alternative to days spent indoors at our Centre during winter. We were forced to close because of extreme heat in the summer in 2021 and must plan for inevitable water restrictions as well as the potential for smoke pollution limiting outdoor activities on our grounds.

Every year, the Centre staff and Board establish a plan for its Summer Program before spring to ensure that there will be both funding for transportation and staff to support the enrolled population. Activities in the past have included the following and require rental of a bus:

- Sechelt Aquatic Centre
- Salmon Hatchery - education and community engagement
- Beaches - the Coast is home to many accessible beaches. Our Centre is not located within a reasonable walking distance for small children.
- Parks and playgrounds - including local bird sanctuaries and the water park.
- Iris Griffith Field Studies and Interpretive Centre - Located forty-five minutes away from our Centre, Iris Griffith Centre is an excellent hands-on education for young children about the Sunshine Coast environment and wildlife. It is the Science Centre of the Sunshine Coast that can provide our kids with weeklong programs provided we are able to transport them. It is also accessible throughout the year and kids are able to observe the stages of insect and plant life through the seasons.
- Sechelt Library - Our community library has a wonderful children's section and programs like Summer Reading Club, Summer Story-time, and the International Children's Digital Library.

In Summary

The Halfmoon Bay Child Care Centre Society has been a central part of the Sunshine Coast Community for almost thirty-five years. We have and excellent reputation and the best childcare staff available, and we are a trusted source of education, play, and familial support. So much emphasis is placed on the Early Years because we know so much more about what creates a happy, healthy child. We know that a loving and support community of caring adults can provide a child with everything they need to succeed. At the very least, we provide

that safe, stable, and loving engagement - we would like to feel as an organisation that we can always respond to the needs of the children and families in care.

Non-profit associations are at their best when they are free to focus on their goals and outcomes. The SCRD was generous in a difficult time and continues to be supportive as we develop as an organisation. The Centre's plan is to commit RGIA funds to rental of a bus through Thirdwave Bus Services, required fuel, and additional supplies to ensure optimal health of children in care. The success of the Summer Program is reiterated by families and children throughout the year and affords the Centre the opportunity to enrich connection across communities.

We hope that you will consider our proposal with the understanding that we will continue to honour your support by maintaining a Child Care Centre that fulfills its promises to you as a funder and meets its outcomes as an organisation worth its special place in our community.

Thank you for your continued support of our Centre and our community.

Sunshine Coast Regional District Electoral Areas' Grant-in-Aid PROJECT Budget Template				
Organization Name:	The Halfmoon Bay Child Care Cen			
For Period:	From	July 17, 2(	To	August 24, 2

REVENUE	
Grants (provide Names of Grantors)	
e.g. Government	
e.g. Foundations	
e.g. Corporations	
Earned Income (i.e. interest)	
Individual Contributions	
Fundraising events and sales	
Membership Income	
Additional Revenue (please specify):	
Parent fees	19,584.00
Government fee reduction for families	2,400.00
Government CCOF	2,100.00
Summer Job Grant - wages for student assistant	5,000.00
Sunshine Coast Credit Union Community Grant	4,800.00
TOTAL INCOME	33,884.00
EXPENSES	
Salaries and Wages	33,884.50
Consultant and Professional Fees	
Travel	
Equipment	
Supplies	
Advertising and printing	
Rent	
Utilities	
Other Expenses (please specify):	
Bus rental and insurance	4,081.00
Diesel	600.00
Supplies - sunscreen, supplemental snacks	300.00
TOTAL EXPENSES	38,865.50
IN KIND SUPPORT (PROVIDE DETAILS):	

Tara Crosby

From: Meredith Mitchell
Sent: Thursday, March 30, 2023 9:22 AM
To: Tara Crosby
Subject: Rural-Grant-in-Aid Submission - HMBCCCS
Attachments: 2023 RGIA Application Form.pdf; BC Society Annual Report 2022.pdf; BC Society Directors 2022.pdf; BC Society Filing Receipt.pdf; Halfmoon Bay Child Care Centre Society - 2022 FInancial information (1).pdf; RGIA Program Narrative 2023.pdf; RGIA reporting out HMB Childcare Centre.pdf; Sept 2022 - Jan 2023 Balance Sheet.pdf; Sept 2022 - Jan 2023 Profit & Loss Statement.pdf

External Message

Hello,

Please accept the attached files as the application for the SCRD's Rural-Grant-in-Aid program on behalf of The Halfmoon Bay Child Care Centre Society.

Thank you very much for your time.

Warmly,

Meredith Mitchell
Halfmoon Bay Child Care Centre Society

HALFMOON BAY CHILD CARE CENTRE SOCIETY

Financial Information

Year Ended August 31, 2022

HALFMOON BAY CHILD CARE CENTRE SOCIETY
Index to Financial Information
Year Ended August 31, 2022

Ocean Breeze CPA

Box 2240, 5587 Inlet Avenue
Sechelt, B.C. V0N 3A0
Tel: 604-885-0366
Fax: 604-885-0367
www.oceanbreeze.ca

COMPILATION ENGAGEMENT REPORT

To the Members of Halfmoon Bay Child Care Centre Society

On the basis of information provided by management, I have compiled the statement of financial position of Halfmoon Bay Child Care Centre Society as at August 31, 2022, and the statements of revenues and expenditures and changes in net assets for the year then ended, and Note 1, which describes the basis of accounting applied in the preparation of the compiled financial information ("financial information").

Management is responsible for the accompanying financial information, including the accuracy and completeness of the underlying information used to compile it and the selection of the basis of accounting.

I performed this engagement in accordance with Canadian Standard on Related Services (CSRS) 4200, *Compilation Engagements*, which requires me to comply with relevant ethical requirements. My responsibility is to assist management in the preparation of the financial information.

I have not performed an audit engagement or a review engagement, nor was I required to perform procedures to verify the accuracy or completeness of the information provided by management. Accordingly, I do not express an audit opinion or a review conclusion, or provide any form of assurance on the financial information.

Readers are cautioned that the financial information may not be appropriate for their purposes.

Ocean Breeze Accounting Inc.

Sechelt, British Columbia
October 20, 2022

CHARTERED PROFESSIONAL ACCOUNTANT

HALFMOON BAY CHILD CARE CENTRE SOCIETY
Statement of Financial Position
August 31, 2022

	2022	2021
ASSETS		
CURRENT		
Cash	$ 6,479	$ 18,429
Accounts receivable *(Note 3)*	12,476	-
Goods and services tax recoverable	561	-
Prepaid expenses	850	2,020
Wages recoverable	-	503
	20,366	20,952
PROPERTY AND EQUIPMENT *(Note 4)*	26,507	28,015
	$ 46,873	$ 48,967
LIABILITIES		
CURRENT		
Accounts payable	$ 4,333	$ 6,415
Employee deductions payable	3,988	-
Wages payable	620	-
	8,941	6,415
DEFERRED INCOME *(Note 5)*	12,500	6,673
	21,441	13,088
NET ASSETS	25,432	35,879
	$ 46,873	$ 48,967

ON BEHALF OF THE BOARD

_____ *Director*

_____ *Director*

See notes to financial information

HALFMOON BAY CHILD CARE CENTRE SOCIETY
Statement of Revenues and Expenditures
Year Ended August 31, 2022

	2022	2021
REVENUE		
Childcare income	$ 141,563	$ 191,602
Grants and donations received	23,573	71,517
Interest income	2	4
Fundraising income	-	945
	165,138	264,068
EXPENSES		
Accounting fees	2,000	331
Advertising and promotion	283	235
Amortization of tangible assets	1,508	-
Business taxes and licences	150	168
Fundraising expenses	-	630
General and administrative expenses	9,870	23,348
Insurance	6,171	7,029
Interest and bank charges	219	421
Office	398	847
Programming expenses	559	-
Repairs and maintenance	5,618	16,354
Salaries and wages	140,635	195,799
Sub-contracts	-	635
Supplies	4,145	8,113
Telephone	1,790	2,756
Travel	833	1,080
WCB Expense	1,406	2,403
	175,585	260,149
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENSES	$ (10,447)	$ 3,919

See notes to financial information

HALFMOON BAY CHILD CARE CENTRE SOCIETY
Statement of Changes in Net Assets
Year Ended August 31, 2022

	2022	2021
NET ASSETS - BEGINNING OF YEAR	**$ 35,879**	$ 31,960
DEFICIENCY OF REVENUE OVER EXPENSES	**(10,447)**	3,919
NET ASSETS - END OF YEAR	**$ 25,432**	$ 35,879

See notes to financial information

1. BASIS OF ACCOUNTING

The basis of accounting applied in the preparation of the statement of financial position of Halfmoon Bay Child Care Centre Society as at August 31, 2022, and the statements of revenues and expenditures and changes in net assets for the year then ended is the historical cost basis and reflects cash transactions with the addition of:

- accounts receivable
- property and equipment amortized over their useful lives
- accounts payable and accrued liabilities

2. PURPOSE OF THE SOCIETY

Halfmoon Bay Child Care Centre Society (the "Society") is a registered non-profit society incorporated provincially under the Society Act of British Columbia. As a registered charity the Society is exempt from the payment of income tax under Section 149(1) of the Income Tax Act.

The Society operates to provide high quality childcare services for children of preschool age in a safe, developmentally challenging, and nuturing manner.

3. ACCOUNTS RECEIVABLE

The $12,476 in accounts receivable include the following items that were due to the Society but were not received as of August 31, 2022 and consist of the following:

	2022
BC Provincial Gaming Grant	**$ 8,500**
Student Job Grant	**3,976**
	$ 12,476

4. PROPERTY AND EQUIPMENT

	Cost	Accumulated amortization	**2022 Net book value**	2021 Net book value
Buildings	$ 72,679	$ 48,110	**$ 24,569**	$ 25,592
Equipment	36,179	34,241	**1,938**	2,423
Motor vehicles	2,000	2,000	**-**	-
	$ 110,858	$ 84,351	**$ 26,507**	$ 28,015

5. DEFERRED INCOME

Deferred income consists of grants and payments received as deposits relating to upcoming programs provided by the Society. Recognition of these amounts as revenue is deferred to the periods when the expenditures are made and the obligations of the agreements are met. As of August 31, 2022, deferred income consisted of the following:

	2022
BC Provincial Gaming Grant	$ 8,500
Fall Childcare Deposits	4,000
	$ 12,500

6. REMUNERATION PAID TO DIRECTORS, EMPLOYEES, AND CONTRACTORS

In accordance with the Societies Act (B.C.) section 36.1 and Societies Regulations 9.2(b):

The Directors of the Society receive no remuneration for the performance of their responsibilities as Directors.

None of the Society's employees received rumuneration of $75,000 or more for the fiscal year ending August 31, 2022.

7. COMPARATIVE FIGURES

The prior year comparative figures were compiled by an unregistered accountant.

Halfmoon Bay Childcare Centre Society
Profit & Loss
September 2022 through January 2023

	Sep '22 - Jan 23
Ordinary Income/Expense	
Income	
4090 · Revenue-CC Operating Fund	32,173.13
4091 · ACCB Payments	32,759.04
4093 · CCOF/WE	4,667.37
4110 · Revenue-Donations	500.00
4460 · Miscellaneous Revenue	3,976.00
Total Income	74,075.54
Gross Profit	74,075.54
Expense	
5190 · Subcontracts	360.00
5410 · Wages & Salaries	74,467.24
5470 · Employee Benefits	1,776.12
5610 · Accounting & Legal	2,000.00
5690 · Interest & Bank Charges	82.00
5701 · Janitor Service	3,900.00
5765 · Repair & Maintenance	751.44
5772 · Supplies-Arts & Crafts	1,399.60
5784 · Transportation	4,197.73
Total Expense	88,934.13
Net Ordinary Income	-14,858.59
Net Income	**-14,858.59**

Halfmoon Bay Childcare Centre Society
Balance Sheet
As of January 31, 2023

	Jan 31, 23
ASSETS	
Current Assets	
Chequing/Savings	
1055 · SCCU-Gaming Account, 708651	40.60
1060 · SCCU-Operating #26-343-4,705210	6,369.38
1061 · SCCU-Shares887877,222405	82.94
1062 · SCCU-Shares Gaming 22722&59504	32.08
1067 · Investment Savings, 737758	566.12
Total Chequing/Savings	7,091.12
Total Current Assets	7,091.12
TOTAL ASSETS	**7,091.12**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2101 · Accrued Payables	-2,326.73
2170 · Vacation Payable	-2,315.58
Total Accounts Payable	-4,642.31
Other Current Liabilities	
24000 · Payroll Liabilities	20,672.67
25500 · GST/HST Payable	-1,231.08
Total Other Current Liabilities	19,441.59
Total Current Liabilities	14,799.28
Total Liabilities	14,799.28
Equity	
32000 · Unrestricted Net Assets	7,150.43
Net Income	-14,858.59
Total Equity	-7,708.16
TOTAL LIABILITIES & EQUITY	**7,091.12**

BRITISH COLUMBIA

STATEMENT OF DIRECTORS AND REGISTERED OFFICE

BC Society • Societies Act

CERTIFIED COPY
Of a document filed with the Province of British Columbia Registrar of Companies

T.K. SPARKS

NAME OF SOCIETY: **THE HALFMOON BAY CHILD CARE CENTRE SOCIETY**

Incorporation Number:	S0024768
Business Number:	13583 7821 BC0001
Filed Date and Time:	October 28, 2022 11:13 AM Pacific Time

REGISTERED OFFICE ADDRESS INFORMATION

Delivery Address:
8090 NORTHWOOD ROAD
HALFMOON BAY BC V7Z 1A8

Mailing Address:
8090 NORTHWOOD ROAD
HALFMOON BAY BC V7Z 1A8

DIRECTOR INFORMATION

Last Name, First Name Middle Name:
AEGERTER, LEANNE

Delivery Address:

Last Name, First Name Middle Name:
ALLENBY, CAITLIN

Delivery Address:

Last Name, First Name Middle Name:
GRAY, ASHLEY

Delivery Address:

Last Name, First Name Middle Name:
MITCHELL, MEREDITH

Delivery Address:

Last Name, First Name Middle Name:
NADERY, YASMINE

Delivery Address:

Last Name, First Name Middle Name:
ROGOWSKI, KLAUDIA

Delivery Address:

Last Name, First Name Middle Name:
STEINHILBERT, JESSICA

Delivery Address:

Last Name, First Name Middle Name:
WHITE, JORDANA

Delivery Address:

BRITISH COLUMBIA

2022 BC SOCIETY ANNUAL REPORT

BC Society • Societies Act

NAME OF SOCIETY: **THE HALFMOON BAY CHILD CARE CENTRE SOCIETY**

Incorporation Number:	S0024768
Business Number:	13583 7821 BC0001
Filed Date and Time:	October 28, 2022 11:13 AM Pacific Time
Annual General Meeting (AGM) Date:	October 20, 2022

REGISTERED OFFICE ADDRESS INFORMATION

Delivery Address:
8090 NORTHWOOD ROAD
HALFMOON BAY BC V7Z 1A8

Mailing Address:
8090 NORTHWOOD ROAD
HALFMOON BAY BC V7Z 1A8

DIRECTOR INFORMATION AS OF October 20, 2022

Last Name, First Name Middle Name:
AEGERTER, LEANNE

Delivery Address:

Last Name, First Name Middle Name:
ALLENBY, CAITLIN

Delivery Address:

Last Name, First Name Middle Name:
GRAY, ASHLEY

Delivery Address:

Last Name, First Name Middle Name:
MITCHELL, MEREDITH

Delivery Address:

Last Name, First Name Middle Name:
NADERY, YASMINE

Delivery Address:

Last Name, First Name Middle Name:
ROGOWSKI, KLAUDIA

Delivery Address:

Last Name, First Name Middle Name:
STEINHILBERT, JESSICA

Delivery Address:

Last Name, First Name Middle Name:
WHITE, JORDANA

Delivery Address:

CERTIFICATION

I, Jenn Hoile, certify that I have relevant knowledge of the society, and that I am authorized to make this filing.

BRITISH COLUMBIA

RECEIPT

BC Society • Societies Act

This is confirmation of payment for filing.

Form Filed:	BC Society Annual Report
Incorporation Number:	S0024768
Business Number:	13583 7821 BC0001
Society Name:	THE HALFMOON BAY CHILD CARE CENTRE SOCIETY
Filing Date and Time:	October 28, 2022 11:13 AM Pacific Time
Fee:	$40.00
Payment Method:	Credit Card
Payment Invoice Number:	REGI000005295405
Transaction ID:	10212446
Credit Card Type:	VISA
Credit Card Number:	XXXXXXXXXXXXXXX
Authorization Number:	

SUNSHINE COAST REGIONAL DISTRICT

AREA A - EGMONT/PENDER HARBOUR
ADVISORY PLANNING COMMISSION

September 27, 2023

RECOMMENDATIONS FROM THE AREA "A" ADVISORY PLANNING COMMISSION MEETING HELD AT PENDER HARBOUR SECONDARY SCHOOL, 13639 SUNSHINE COAST HIGHWAY, MADEIRA PARK, BC

PRESENT:	Chair	Alan Skelley
	Members	Sean McAllister Tom Silvey
ALSO PRESENT:	Area A Alternate Director	Christine Alexander (Non-Voting Board Liaison)
	Recording Secretary	Kelly Kammerle
REGRETS:	Members	Yovhan Burega Jane McOuat Dennis Burnham Gordon Littlejohn Catherine McEachern Bob Fielding
	Electoral Area A Director	Leonard Lee (Non-Voting Board Liaison)

CALL TO ORDER 7:00 p.m.

AGENDA The agenda was adopted as presented.

MINUTES

Area A Minutes

The Egmont/Pender Harbour (Area A) APC Minutes of July 26, 2023 were approved as circulated.

The following minutes were received for information:

- Halfmoon Bay (Area B) APC Minutes of July 25, 2023
- Roberts Creek (Area D) APC Minutes of July 17, 2023
- Elphinstone (Area E) APC Minutes of July 26, 2023
- West Howe Sound (Area F) APC Minutes of July 25, 2023

BUSINESS ARISING FROM THE MINUTES AND UNFINISHED BUSINESS

This APC again requests a meeting with the planning department with all APC's in attendance.

REPORTS

Recommendation No.1 Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027

The Area A APC recommended that the SCRD's response to BCTS referral be supported as follows:

> "THAT SCRD does not support the logging and construction of McNR005
>
> AND THAT SCRD recommends that in advance of proposing/ engineering cut blocks on Mount Elphinstone near Roberts Creek, that a review of the cumulative impact to ground water resources of Aquifer 555 by qualified experts selected by Local Government water service providers be completed. Historical and any proposed forestry activities for the next 5 years, and climate change considerations should be considered as part of such assessment.
>
> AND THAT BCTS completes a Watershed Assessment for the Roberts Creek watershed prior to auctioning of the proposed cut blocks.
>
> CONCLUSION
>
> SCRD received forestry referrals from BC Timber Sales regarding the 2023-2027 Operating Plan. SCRD analysis shows potential impact to drinking water services, and increased risk of flooding and sediment transfer which could impact downstream SCRD assets.
>
> SCRD has and will continue to emphasize strong concern to BCTS regarding cumulative impacts to:
>
> • Downstream private property owners' stormwater impact
> • Downstream public assets, such as roads, parks, watermains, and creeks
> • Regional and provincial emergency response requirements for stormwater impact such as recent events in Fall of 2021.
>
> SCRD has and will continue to advocate for:
>
> • A proactive, landscape-level, multidisciplinary, cumulative impact assessment framework;
> • Climate change informed, climate-resilient forest planning that recognizes and values local forests as local assets that protect against increasing climate impacts."

Area A APC feels that the SCRD should protect all areas whether they have any assets in the area.

DIRECTOR'S REPORT

No Director's Report

NEXT MEETING October 25, 2023

ADJOURNMENT 7:30 p.m.

SUNSHINE COAST REGIONAL DISTRICT

HALFMOON BAY (AREA B) ADVISORY PLANNING COMMISSION

September 26, 2023

RECOMMENDATIONS FROM THE HALFMOON BAY (AREA B) ADVISORY PLANNING COMMISSION MEETING HELD ELECTRONICALLY VIA ZOOM

PRESENT:	Chair	Nicole Huska (Recorder)
	Members	Len Coombes Ellie Lenz Alda Grames Kelsey Oxley Kim Dougherty
ALSO PRESENT:	Director, Electoral Area B	Justine Gabias (Non-Voting Board Liaison)
PUBLIC		1
ABSENT:	Members	Barbara Bolding Suzette Stevenson Matt Garmon

---

CALL TO ORDER 7:04 p.m.

AGENDA The agenda was adopted as presented.

MINUTES

Halfmoon Bay (Area B) Minutes

The Halfmoon Bay (Area B) APC minutes of July 25, 2023 were approved as corrected to reflect that Kim Doughtery was in attendance at the meeting.

Minutes

The following minutes were received for information:

- Egmont/Pender Harbour (Area A) APC Minutes of July 26, 2023
- Roberts Creek (Area D) APC Minutes of July 17, 2023
- Elphinstone (Area E) APC Minutes of July 26, 2023
- West Howe Sound (Area F) APC Minutes of July 25, 2023

The Halfmoon Bay (Area B) APC found it interesting that there are commonalities in the responses across the APCs with regards to Development Application process changes. The HMB APC feels additional training and better, clearer definitions would be of great utility to all.

REPORTS

Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027

Recommendation No.1 *Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027*

The Area B APC recommended that the report put forward by SCRD staff, in particular advocating for "a proactive, landscape-level, multidisciplinary, cumulative impact assessment framework" and the conclusions reached regarding cumulative water management, be supported.

DIRECTOR'S REPORT

The Director's report was received.

NEXT MEETING Tuesday, October 24, 2023 via Zoom

ADJOURNMENT 7:38 p.m.

SUNSHINE COAST REGIONAL DISTRICT

ROBERTS CREEK (AREA D)
ADVISORY PLANNING COMMISSION

September 18, 2023

RECOMMENDATIONS FROM THE ROBERTS CREEK (AREA D) ADVISORY PLANNING COMMISSION MEETING HELD ELECTRONICALLY VIA ZOOM

PRESENT:	Chair	Mike Allegretti
	Members	Meghan Hennessy Chris Richmond Bob Hogg Erik Mjanes Gerald Rainville
ALSO PRESENT:	Vicki Dobbyn	Recording Secretary
REGRETS	Electoral Area D Director	Kelly Backs (Non-Voting Board Liaison)

CALL TO ORDER 7:07 p.m.

AGENDA The agenda was adopted as presented.

MINUTES

The Roberts Creek (Area D) APC Minutes of July 17, 2023 were approved as circulated.

The following minutes were received for information:

- Egmont/Pender Harbour (Area A) APC Minutes of July 26, 2023
- Halfmoon Bay (Area B) APC Minutes of July 25, 2023
- Elphinstone (Area E) APC Minutes of July 26, 2023
- West Howe Sound (Area F) APC Minutes of July 25, 2023

REPORTS

Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027

Key Points of Discussion:

- No major concerns, appears there is less cutting.
- It was good to see ground water protection and storm water management being addressed.
- There needs to be recognition that the forest has other values besides fiber.

- What is missing in identifying the impacts of logging is the reliance on tourism for the local economy, as the forest is a big draw for mountain biking, hiking, and camping. There is also heavy use of forested areas by local residents for recreation.
- Also missing is more detail on climate change mitigation.
- Agree with the objection to logging due to water protection and wildfire risk.
- Left out of report is that there are many surface water permits and many wells are not identified, so the impact on water is not fully identified.
- MOTI was required to protect a private well during road construction.
- Agree with the report but it not addressing what happened in 2021 with the atmospheric river and floods.
- With few exceptions, most properties above the highway are not on regional water and have had to install expensive systems.
- Fire mitigation in relation to logging is complex and needs to be considered.
- This area that they want to log is really not forest anymore, but instead is an interface between populated residential areas and the natural environment, particularly in Area D. Hundreds of people use this natural environment for recreation. We are more comparable to the North Shore than to more remote areas.
- Consider no cutting at all on the Sunshine Coast, other values have to be considered.

Recommendation No. 1 *Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027*

The Area D APC recommended that the analyses and recommendations of staff in the report be supported and that the following additions be included:

- Other examples of flooding damage, including Whitaker Creek, Clack Creek, Stephens Creek, Flume Creek, Gough Creek, and others that were affected.
- Recognition of the value of the forest to the local tourism economy and recreational users.
- Climate change and fire mitigation considerations.
- Identification of the numerous water users that are not on regional water and the impact on them by logging.
- An economic case against logging because timber values are currently very low while economic opportunities from an intact forest (tourism, recreation, property values, etc) are all very high, therefore the forest stands to generate more revenue for the Province through tax dollars and a strong local economy through those other drivers, than they do through logging in this area.

DIRECTORS REPORT

No Director's Report was received.

NEXT MEETING

November 20, 7:00 pm, if needed. Location to be announced, possibly Roberts Creek Library

ADJOURNMENT 8:07 p.m.

SUNSHINE COAST REGIONAL DISTRICT

AREA E – ELPHINSTONE
ADVISORY PLANNING COMMISSION

September 26, 2023

RECOMMENDATIONS FROM THE AREA E ADVISORY PLANNING COMMISSION MEETING HELD AT FRANK WEST HALL, 1224 CHASTER ROAD, ELPHINSTONE, BC

PRESENT:	Chair	Mary Degan
	Members	Laura Macdonald Nara Brenchley (by zoom) Arne Hermann Clinton McDougall Anthony Paré Michael Sanderson
	Guest	Hermann Ziltener (Elphinstone community Association and Reed Road Forest Working Group)
ALSO PRESENT:	Electoral Area E Director	Donna McMahon Non-Voting Board Liaison (by zoom)
	Recording Secretary	Vicki Dobbyn

CALL TO ORDER 7:02 p.m.

AGENDA

The agenda was adopted as circulated.

MINUTES

Elphinstone (Area E) APC Minutes of July 26, 2023 were approved as circulated.

BUSINESS ARISING FROM THE MINUTES:

Recommendation No. 1 *Regional Growth Framework Baseline Research*

The Area E APC recommended that the SCRD hold a meeting of all APCs about the regional growth strategy.

There are questions about if and when the APC minutes go to senior planning staff at the SCRD. There needs to be a communication loop between APCs and planning staff to convey and respond to recommendations and questions.

Recommendation No. 2 *Regional Growth Framework Baseline Research*

The Area E APC recommended that Chair Mary Degan re-send recommendations #1, #2 and #3 from the July 26 Area E APC meeting to SCRD to forward to the appropriate staff in the Planning Department.

The following minutes were received for information:

- Egmont/Pender Harbour (Area A) APC Minutes of July 26, 2023
- Halfmoon Bay (Area B) APC Minutes of July 25, 2023
- Roberts Creek (Area D) APC Minutes of July 17, 2023
- West Howe Sound (Area F) APC Minutes of July 25, 2023

REPORTS

Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027

Keys points of discussion:

- Guest Hermann Ziltener reported that BC Timber Sales (BCTS) commissioned a 240 page Hydrology Report on Mount Elphinstone to support their case that they can continue logging the slopes above the town. The Reed Road Forest Working Group of the Elphinstone Community Association reviewed this report and created an 8 page rebuttal that makes three recommendations: no logging above aquifers 560 and 552, a moratorium on resource extraction, and development of a water sustainability plan by local governments.
- Thanks to the hydrology study, our creeks now have been accurately mapped but BCTS does not have expertise in hydrogeology so the report doesn't cover impacts to our aquifers. It is also based on poor data, since many registered wells are not identified on the province's database, which is outdated and inaccurate. The risk assessment is also not credible as it does not take into account what will happen as a result of adverse climate events.
- Who should be responsible for doing the risk assessment? Is there any legal framework for who should do assessments?
- Logging in our community's drinking watershed is not acceptable. 0519 is in the middle of aquifer recharge area.
- Watershed protection initiatives do not protect from logging; a change in the land use designation is needed to prevent logging. Local government has no control over activities on crown land. We used to have watershed reserves set up, but 20 years ago protection was removed from them, so they can be logged.
- Consider storm water management
- The BCTS report comes out with a 5-year plan and typically the SCRD and public complain and are then ignored.
- Concerns are not just drinking water; logging also endangers salmon
- Some cut blocks are outside watershed
- Annual allowable cut means the maximum but it is treated as the annual minimum cut.
- Would like to see a reference map where the cut blocks are, it is very cumbersome to have to go to the BCTS website.
- Question was raised - can a local municipality (SCRD) control logging through land use designations in the Official Community Plan (OCP) and/or Land Use Bylaw? Consensus of ACP members was that BCTS does not have to adhere to local regulations, that is, there is no local control of logging activities. Unless local

municipalities have some measure of local regulatory control then there are no means other than through political or public pressure to control logging activities.

Recommendation No.3 *Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027*

The Area E APC recommended that the staff analyses and recommendations be supported;

AND THAT the staff analyses and recommendations be sent directly to the MLA, the Minister responsible, and the Premier.

Recommendation No. 4 *Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027*

The Area E APC recommended that the SCRD expand their areas of concern in response to the report to include climate resilience against forest fires, protection of wildlife, salmon and other fish, and promotion of biodiversity.

Recommendation No. 5 *Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027*

The Area E APC recommended that the SCRD advocate to resume the protection of the watershed from logging by the redesignation of land use so watersheds are protected in perpetuity.

Recommendation No. 6 *Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027*

The Area E APC recommended that the SCRD advocate to require provincial agencies such as BC Timber Sales to adhere to local land use designations, recognizing that the SCRD is responsible for providing water but does not have the power to protect it.

NEW BUSINESS

Recommendation No. 7 Block *D Development Application*

The Area E APC recommended that staff include the Block D development application in the next meeting agenda as it meets the criteria for APC consideration with over 10 lots in the proposed subdivision.

DIRECTOR'S REPORT

The Director's report was received.

NEXT MEETING Tuesday October 24, 2023 at 7:00 p.m.

ADJOURNMENT 8:25 p.m.

SUNSHINE COAST REGIONAL DISTRICT

AREA F – WEST HOWE SOUND
ADVISORY PLANNING COMMISSION

September 26, 2023

RECOMMENDATIONS FROM THE WEST HOWE SOUND (AREA F) ADVISORY PLANNING COMMISSION MEETING HELD ELECTRONICALLY VIA ZOOM

PRESENT:	Chair	Susan Fitchell
	Members	Kevin Healy Ryan Matthews Jonathan McMorran Miyuki Shinkai Katie Thomas
ALSO PRESENT:	Recording Secretary	Diane Corbett
REGRETS:	Director, Electoral Area F Member	Kate-Louise Stamford Tom Fitzgerald

---

CALL TO ORDER 7:00 p.m.

AGENDA The agenda was adopted as presented.

MINUTES

West Howe Sound (Area F) Minutes

The West Howe Sound APC minutes of July 25, 2023 were approved as circulated.

Chair Fitchell announced she was present at the last meeting via her phone, but could not speak. Chair Fitchell clarified for APC members that, if they wished to comment on agenda referral items but were unable to attend the meeting, comments could be sent directly to the Planning Office Assistant.

Minutes

The following minutes were received for information:

- Egmont/Pender Harbour (Area A) APC Minutes of July 26, 2023
- Halfmoon Bay (Area B) APC Minutes of July 25, 2023
- Roberts Creek (Area D) APC Minutes of July 17, 2023
- Elphinstone (Area E) APC Minutes of July 26, 2023

REPORTS

Forestry Referrals: BC Timber Sales Operating Plan (CRN00155) 2023-2027

The APC discussed the staff report and the online mapping regarding BC Timber Sales Operating Plan (CRN00155) 2023-2027.

The following points were noted:

- Importance of riparian areas.
- "Incredible" numbers of salmon observed this summer.
- A key factor to consider, found on page 4 of the staff report:
  "The Hillside-Port Mellon OCP includes the following objective related to land use:
  2.1. To protect development from hazardous conditions in the form of land slip, erosion, flooding and debris torrents.
  2.2 To protect valuable fish and wildlife habitat areas associated with McNair and Dakota Creeks, Mohawk Creek, the Rainy River and the ocean foreshore.
  2.3 To satisfy the requirements of the provincial Fish Protection Act, in particular the Riparian Areas [Protection] Regulation, with respect to protecting fish habitat."
- Concerns regarding where Block MCNR002 is situated between McNair and McNab slopes. Would like to see some extra care taken. Concerns regarding logging practices on steep hillsides in that area. McNair and Dakota are known as having flash floods.
- Happy that we get a chance to make comment on the BC Timber Sales Operating Plan.

Recommendation No. 1 *Block McNR0005*

The Area F APC recommended that the draft recommendation on Block McNR0005 presented in the staff report be supported as follows:

> The SCRD does not support the logging of McNR0005 due to it being located within a Community Watershed, as well as the potential impact to downstream SCRD assets of the Dakota Creek berm and Hillside Industrial Park.

Recommendation No. 2 *Blocks ELPH010 and ELPH008*

The Area F APC recommended that the draft recommendation on Blocks ELPH010 and ELPH008 presented in the staff report be supported as follows:

> SCRD recommends that in advance of proposing/engineering cutblocks on Mount Elphinstone near Roberts Creek, that a review of the cumulative impact to ground water resources of Aquifer 555 by qualified experts selected by Local Government water service providers be completed. Historical and any proposed forestry activities for the next 5 years, and climate change considerations should be considered as part of such assessment.
>
> SCRD is concerned about the cumulative impacts of resource activity, including deforesting, that is proposed on or near Aquifer 555, which supports private wells who are not within the SCRD Regional Water Service Area and thus do not have access to other sources of water.
>
> SCRD understands that BCTS is undertaking a Watershed Assessment for the Roberts Creek area and recommends the implementation of findings prior to the auctioning of these lots.

Recommendation No. 3 *Blocks GRAN011 and MCNA002*

The Area F APC recommended that the comment on Blocks GRAN011 and MCNA002 presented in the staff report be supported as follows:

> The SCRD does not have any services or assets that would be impacted by this proposed cutblock.

Block MCNR002: Before the Area F APC can make a recommendation regarding Block MCNR002, the Area F APC would like clarification regarding whether the location is a mapping error and whether the cutblock was in an earlier Operating Plan.

DIRECTOR'S REPORT

There was no Director's Report.

The Area F APC would like to receive the Director's report on an update regarding the Hopkins Landing wharf.

NEXT MEETING Tuesday, October 24, 2023

ADJOURNMENT 8:15 p.m.