

Strategic Priorities Fund Application

Submission Date: June 30th, 2022

Draft Submission (as of June 27, 2022)

Section 1: Project Information

1. Project Title:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project, Capital Region, Victoria, BC
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project, Capital Region, Victoria, BC

2. Project Category:

- Capital Infrastructure Stream - Local Roads, Bridges and Active Transportation
- Capital Infrastructure Stream - Local Roads, Bridges and Active Transportation

3. Is this project the subject of a recent infrastructure grant application?

- No
- No

4. Project Rationale: Why is the project needed and how does the project meet the need?

- The Lochside Regional Trail and Brett Avenue Trestle Enhancement Project (the Project) is needed to:
 - i. Improve trail safety, infrastructure quality and user comfort, and increase overall capacity on a busy section the Capital Regional District (CRD) regional trail network in the District of Saanich.
 - ii. Improve active transportation and mobility choice along a key 1280 metre section of the Lochside Regional Trail (Saanich Spur), part of an existing multi-use regional trail network.
 - iii. Address the Brett Avenue Trestle critical infrastructure replacement need (built in 1917 and converted in 1995 for use in the CRD multi-use regional trail network). Condition assessments conducted in 2013 and 2018 indicate the Trestle is approaching end of useful life without the implementation of a significant renewal program.
 - iv. Provides strategic investment for a regionally significant project through the widening of a 1280 metre section of existing 3 to 4 metre wide multi-use trail (established in 2001) to create a 6.5 metre-wide separated use trail with LED lighting (installed at 45 metre intervals where applicable based on environmental considerations), as defined in the 2020 CRD Regional Trails Widening Study.
 - v. The 6.5 metre separated use pathway design with lighting recommended by the 2020 CRD Regional Trails Widening Study has received strong public support to improve safety and user comfort, and to accommodate a projected increase in trail users over the next 20 years.
 - vi. Provides the full replacement and widening of the Brett Avenue Trestle (while reflecting the aesthetic of the historical trestle), following asset management principles as the infrastructure approaches end of life. Condition assessments conducted in 2013 and 2018 indicate the Trestle is approaching end of life and is in need of major renewal/replacement.
 - vii. The project will enhance active transportation mobility, improve trail safety and user experience, and will reduce GHGs from increased active transportation.

- viii. The project will action key strategies identified in provincial, regional and municipal policy guidance, notably the goals identified in the 2020 BC South Island Transportation Strategy (to ensure sustainable options for a variety of travel modes, strengthen connections between communities, improve safety and reliability of the transport network, support and encourage active transportation options) and the 2018 CRD Regional Growth Strategy (to increase multi-modal connectivity and mobility).
- ix. Failure to undertake the full replacement and widening of the Brett Avenue Trestle will result in the need to explore major rehabilitation options which include increased long-term maintenance costs.
The Project aligns with the renewed CRD Regional Parks and Trails Strategic Plan (2022-2032) priority item – Climate Action and Resiliency Action 4-1b (plan for and implement priority regional trail enhancement and expansion projects).
- The Lochside Regional Trail and Swan Lake Trestle Enhancement Project (the Project) is needed to:
 - i. Improve trail safety, infrastructure quality and user comfort, and increase overall capacity on a busy section the Capital Regional District’s regional trail network in the District of Saanich.
 - ii. Improve active transportation and mobility choice along a key 625 metre section of the Lochside Regional Trail (Saanich Spur), part of an existing multi-use regional trail network.
 - x. Address the Swan Lake Trestle critical infrastructure replacement need (built in 1917 and converted in 1995 for use in the CRDs multi-use regional trail network). Condition assessments conducted in 2013 and 2018 indicate the Trestle is approaching end of useful life without the implementation of a significant renewal program.
 - iii. Provides strategic investment for a regionally significant project through the widening of a 625 metre section of existing 3 to 4 metre wide multi-use trail (established in 2001) to create a 6.5 metre-wide separated use trail with LED lighting (installed at 45 metre intervals where applicable based on environmental considerations), as defined in the 2020 CRD Regional Trails Widening Study.
 - iv. The 6.5 metre separated use pathway design with lighting recommended by the 2020 CRD Regional Trails Widening Study has received strong public support to improve safety and user comfort, and to accommodate a projected increase in trail users over the next 20 years.
 - xi. Provides the full replacement and widening of the Swan Lake Trestle (while reflecting the aesthetic of the historical trestle), following asset management practices as the infrastructure approaches end of life. Condition assessments conducted in 2013 and 2018 indicate the Trestle is approaching end of life and is in need of major renewal/replacement.
 - v. The project will enhance active transportation mobility, improve trail safety and user experience, and will reduce GHGs from increased active transportation.
 - vi. The project will action key strategies identified in provincial, regional and municipal policy guidance, notably the goals identified in the 2020 BC South Island Transportation Strategy (to ensure sustainable options for a variety of travel modes, strengthen connections between communities, improve safety and reliability of the transport network, support and encourage active transportation options).
 - vii. Failure to undertake the full replacement and widening of the Swan Lake Trestle will result in the need to explore major rehabilitation options which include increased long-term maintenance costs.

- The Project aligns with the renewed CRD Regional Parks and Trails Strategic Plan (2022-2032) priority item – Climate Action and Resiliency Action 4-1b (plan for and implement priority regional trail enhancement and expansion projects).
5. Project Description: Detailed list of the physical works and location of the project.
- The Lochside Regional Trail and Brett Avenue Trestle Enhancement Project includes:
 - i. Enhance (through widening, separating and lighting) a 1280 m section of an existing 3 to 4 metre wide multi-use trail (built in 1986) to create a 6.5 metre-wide separated use pathway with lighting.
 - ii. Full replacement and enhancement (through widening) of the Brett Avenue Trestle (built circa 1917, modified in 1995 for use in the CRDs multi-use regional trail network). The Brett Avenue Trestle is nearing end of life, as illustrated through condition assessments conducted in 2013 and 2018. Long-term renewal planning has identified replacement options, with full replacement and enhancement as the preferred option based on the significance of the structure as an active transportation link. Anticipated service life of replacement structure is 40 years (following standardized asset maintenance practices).
 - iii. The project is located in the District of Saanich, along a busy section of the CRDs Lochside Regional Trail (known as the Saanich Spur), between McKenzie Avenue and the Saanich Uptown Centre and Mobility hub (an emerging regional economic centre and planned transit hub providing multi-modal connection to all parts of the region).
 - iv. The trail corridor is owned by the BC Transportation Financing Authority and is managed by the BC Ministry of Transportation and Infrastructure. The trail is operated by the Capital Regional District through a Lease agreement. The Brett Avenue Trestle is under the jurisdiction of the Capital Regional District.
 - v. The project is located adjacent to Swan Lake Christmas Hill Nature Sanctuary and Swan Lake Park. Environmental restoration measures are proposed by Swan Lake Christmas Hill Nature Sanctuary in collaboration with the Lochside Regional Trail and Brett Avenue Trestle Enhancement Project.
 - vi. The project area is the busiest section of the regional trail used by approximately 2,000 users per day in peak times for active transportation, recreation, and tourism. 20-year user volume projections include a projected increase of 2.5% per year, reaching approximately 3,500 users per day by 2040. Approximately 80% of trail users are cyclists and 20% are pedestrians. Trail issues include: high use volumes, high speed differentials between user types, lack of safety and personal security, conflicts at intersections, poor trail etiquette, and emerging mobility technology. The separated use pathway with lighting design is based on the best practices for active transportation and accessibility and aims to address these issues.
 - vii. Project components will include project management and oversight, archaeological review, environmental and geotechnical assessments, detailed designs, continued public and First Nations consultation, trail construction, trestle replacement, installation of lights and reflectors, pavement markings, and the replacement of trail amenities including signage and benches.

- The Lochside Regional Trail and Swan Lake Trestle Enhancement Project includes:
 - i. Enhance (through widening) a 625 m section of an existing 3 to 4 metre-wide multi-use trail (built in 1986) to create a 6.5m wide separated use pathway with lighting.
 - ii. Full replacement and enhancement (through widening) of the Swan Lake Trestle (built circa 1917, modified in 1995 for use in the CRDs multi-use regional trail network). The Swan Lake Trestle is nearing end of life, as illustrated through condition assessments conducted in 2013 and 2018. Long-term renewal planning has identified replacement options, with full replacement and enhancement as the preferred option based on the significance of the structure as an active transportation link. Anticipated service life of replacement structure is 40 years (following standardized asset maintenance practices).
 - iii. The project is located in the District of Saanich, along a busy section of the CRDs Lochside Regional Trail (known as the Saanich Spur), between McKenzie Avenue and the Saanich Uptown Centre and Mobility hub (an emerging regional economic centre and planned transit hub providing multi-modal connection to all parts of the region).
 - iv. The trail corridor is owned by the BC Transportation Financing Authority and is managed by the BC Ministry of Transportation and Infrastructure. The trail is operated by the Capital Regional District through a Lease Agreement. The Swan Lake Trestle is under the jurisdiction of the CRD.
 - v. The project is located adjacent to Swan Lake Christmas Hill Nature Sanctuary and Swan Lake Park. Blenkinsop Creek flows through the area and environmental restoration/flood mitigation measures are proposed by Swan Lake Christmas Hill Nature Sanctuary in collaboration with the Lochside Regional Trail and Swan Lake Trestle Enhancement Project.
 - vi. The project area is the busiest section of the regional trail used by approximately 2,000 users per day in peak times for active transportation, recreation, and tourism. 20-year user volume projections include a projected increase of 2.5% per year, reaching approximately 3,500 users per day by 2040. Approximately 80% of trail users are cyclists and 20% are pedestrians. Trail issues include: high use volumes, high speed differentials between user types, lack of safety and personal security, conflicts at intersections, poor trail etiquette, and emerging mobility technology. The separated use pathway with lighting design is based on the best practices for active transportation and accessibility and aims to address these issues.
 - vii. Project components will include project management and oversight, archaeological review, environmental and geotechnical assessments, detailed designs, continued public and First Nations consultation, trail construction, trestle replacement, installation of lights and reflectors, pavement markings, and the replacement of trail amenities including signage and benches.

6. Project Location:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project coordinates:
 - i. South end of Phase D: N48 27.393, W123 22.666
 - ii. North end of Phase D: N48 27.794, W123 22.080
 - iii. Centre of Brett Ave Trestle: N48 27.658, W123 22.266

- Lochside Regional Trail and Swan Lake Trestle Enhancement Project coordinates:
 - i. South end of Phase E: N48 27.803, W123 22.068
 - ii. North end of Phase E: N48 28.220, W123 21.679
 - iii. Centre of Swan Lake Trestle: N48 27.878, W123 21.966

Section 2: Required Documentation

7. Requested Documents

- Detailed Cost Estimate Template (x1 per application)
 - i. Lochside Regional Trail and Brett Avenue Trestle Enhancement Project:

<https://goto.crd.bc.ca/teams/pcs/rp/1660AssetManagement/Detailed%20Cost%20Estimate%20Template-Strategic%20Priorities%20Fund-Captial%20Infrastructure%20Stream%20LRT%20Phase%20D%20and%20Brett.xlsx>
 - ii. Lochside Regional Trail and Swan Lake Trestle Enhancement Project:

<https://goto.crd.bc.ca/teams/pcs/rp/1660AssetManagement/Detailed%20Cost%20Estimate%20Template-Strategic%20Priorities%20Fund-Captial%20Infrastructure%20Stream%20LRT%20Phase%20E%20and%20Swan.xlsx>
- Map (x2 per application)
 - i. Lochside Regional Trail and Brett Avenue Trestle Enhancement Project:

https://goto.crd.bc.ca/teams/pcs/rp/6130ParksTrails/GIS%20Regional%20Trails/RT_GGLSWidening_ContextJune2022GrantApplication.pdf

https://goto.crd.bc.ca/teams/pcs/rp/6130ParksTrails/GIS%20Regional%20Trails/RT_GGLSWidening_PhaseDJune2022GrantApplication.pdf
 - ii. Lochside Regional Trail and Swan Lake Trestle Enhancement Project:

https://goto.crd.bc.ca/teams/pcs/rp/6130ParksTrails/GIS%20Regional%20Trails/RT_GGLSWidening_ContextJune2022GrantApplication.pdf

https://goto.crd.bc.ca/teams/pcs/rp/6130ParksTrails/GIS%20Regional%20Trails/RT_GGLSWidening_PhaseEJune2022GrantApplication.pdf
- Subset of reports to include:
 - i. Options Analysis for the Swan Lake and Brett Avenue Trestles (2018)
 - ii. Separated Use Pathway Design (2020)
 - iii. CRD Regional Trails Widening Study (2020) – conceptual designs per section
 - iv. Lease Agreement – BCTFA and CRD (2015)
 - v. Regional Trails Widening and Lighting Engagement Report (2021)
 - vi. Regional Parks and Trails Strategic Plan (2022-2032)
 - vii. Regional Trails Management Plan (2016)
 - viii. CRD Asset Management Strategy (2019)
 - ix. Additional exerts from documents include: CRD Regional Growth Strategy, CRD Regional Transportation Plan Report Card, Regional Parks Sustainable Service Delivery Report Cards, and the District of Sannich Active Transportation Plan.
- Board Resolution:
 - i. CRD Board Resolution - Regional Trails Widening and Lighting Project
 - ii. Planned 2022 CRD Board Resolution staff report & signed grant submission approval memo.

8. How funding is being secured?

- Funding is being secured through capital reserve funds. Reference: 2023-2027 Capital Plan. The 2022 budget planning process, in which departments specify the financial resources required to achieve identified service levels and capital investment requirements is currently underway. The preliminary financial plan will be presented to the Regional Park Committee October 27, 2022. Year-end adjustments will be presented to the CRD Board in February 2023, with approval of the Financial Plan Bylaw March 31, 2023.
- Borrowing option not included in this application. Application guidelines note the 3rd reading of borrowing bylaw would be required as part of the application.

9. Class of Cost Estimates

- Capital Infrastructure Stream Class of Cost Estimate:
 - i. Lochside Regional Trail and Brett Avenue Trestle Enhancement Project:
 - Brett Avenue Trestle (Class B) and Trail Widening and Lighting (Class D)
 - ii. Lochside Regional Trail and Swan Lake Trestle Enhancement Project:
 - Swan Lake Trestle (Class B) and Trail Widening and Lighting (Class D)
- Year cost estimates determined:
 - i. Lochside Regional Trail and Brett Avenue Trestle Enhancement Project:
 - Brett Avenue Trestle (2018) and Trail Widening and Lighting (2021)
 - ii. Lochside Regional Trail and Swan Lake Trestle Enhancement Project:
 - Swan Lake Trestle (2018) and Trail Widening and Lighting (2021)
- How were the cost estimates determined?
 - i. Lochside Regional Trail and Brett Avenue Trestle Enhancement Project:
 - Brett Avenue Trestle
 - Options Analysis for the Swan Lake and Brett Avenue Trestles on the Lochside Regional Trail, Saanich, BC – 2018
 - Trail Widening and Lighting
 - CRD Regional Trails Widening Study – 2020 (plus internal CRD review of cost estimates in 2021)
 - ii. Lochside Regional Trail and Swan Lake Trestle Enhancement Project:
 - Swan Lake Trestle
 - Options Analysis for the Swan Lake and Brett Avenue Trestles on the Lochside Regional Trail, Saanich, BC – 2018
 - Trail Widening and Lighting
 - CRD Regional Trails Widening Study – 2020 (plus internal CRD review of cost estimates in 2021)

10. What contingency plans are in place to increased project costs?

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project:
 - i. Brett Avenue Trestle Replacement: Options analysis report from 2018, demolish and full replacement with steel costing plus 12% used as baseline valuation for this submission. Design, construction, and project management costs have also been included, with a 10% contingency and a 5.2% increase for inflation (2023).
 - ii. Lochside Regional Trail Widening and Lighting: Baseline costing based on preliminary conceptual design and alignment, including design, construction, and project management cost, with a 33% contingency and a 10% increase for inflation.

- Lochside Regional Trail and Swan Lake Trestle Enhancement Project:
 - i. Swan Lake Trestle Replacement: Options analysis report from 2018, demolish and full replacement with steel costing plus 12% used as baseline valuation for this submission. Design, construction, and project management costs have also been included, with a 10% contingency and a 5.2% increase for inflation (2023)
 - ii. Lochside Regional Trail Widening and Lighting: Baseline costing based on preliminary conceptual design and alignment, including design, construction, and project management cost, with a 33% contingency and a 10% increase for inflation

Section 3: Project Details

11. Has the project started:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project: No
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project: No

12. Estimated Project Start Date:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project: 2023 (April)
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project: 2025 (January)

13. Estimated Project Completion Date:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project: 2026 (December)
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project: 2027 (December)

14. Risks to meet timelines (Same for both projects):

- Schedule Risks: Work may be required to be conducted within fish windows or outside of bird nesting periods. Mitigation measures include environmental assessments will be conducted to meet compliance.
- Environmental Risks: Full replacement of the Trestles may have ecological risks, from a potentially large disturbance area due to the logistics and materials, as well as the potential for mobilization of creosote during the removal of the existing structure. Mitigation measures include following environmental protection best practices, as outlined in the Lochside Trail Trestles at Brett Avenue and Swan Lake Environmental Review and through the development of a detailed Environmental Protection Plan.
- Archeological/Cultural Risks: Soil disturbance may result in uncovering archeological sites and/or items of cultural significance which may impact the schedule of construction. Mitigation measures include completing a CRD Heritage Site Information Review form which is then reviewed by an archeologist and follows the Province of BC Archeology Policy. A report will also be submitted to local First Nations for their review and input. The CRD First Nations Relation division provides assistant for Regional Parks day-to-day service delivery activities with First Nations and works directly with First Nations governments in areas of common interest.
- Material/Supply Chain Risks: Supply chain delays and skilled labour shortage may impact the ability to commence construction. Mitigation measures include issuing tender documents well in advance of projected construction start dates, connect with local community of contractors to gauge capacity, and build contingencies into project schedules.
- Budget Risks: Cost estimates have been drafted in the current economic climate and include contingencies. Unpredictable market conditions or inflationary pressures may pose

a risk to the project timelines. Mitigation measures include ensuring project contingencies and capital reserve funds are available to capture cost overruns.

- Multiple Partners Risk: The Lakeside Regional Trail (Saanich Spur) corridor is owned by the BC Transportation Financing Authority and managed by BC Ministry of Transportation and Infrastructure. The Lochside Regional Trail (Saanich Spur) is operated by the Capital Regional District through a Lease agreement.

15. Request to use own labor force and equipment for the project?

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project: No
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project: No

16. Phased Approach: No

- The Regional Trails Management Plan (2016) identified a short-term need to assess the feasibility of widening and lighting the Galloping Goose Regional Trail between Selkirk Trestle and McKenzie Avenue/Highway 1, as well as widening and lighting the Lochside Regional Trail between the Switch Bridge and McKenzie Avenue. The Regional Trails Widening Study (2021) provided recommended priorities for implementation. Due to the high dollar value of the trail widening and lighting, and critical infrastructure renewal, stand-alone project scope of works have been developed.
 - i. Selkirk Trestle and Galloping Goose Regional Trail Phase 1 (Section A, B, C)
 - ii. Brett Avenue Trestle and Lochside Regional Trail Phase 2 (Section D) – SPF Application #1
 - iii. Swan Lake Trestle and Lochside Regional Trail Phase 2 (Section E) – SPF Application #2
 - iv. Galloping Goose Regional Trail Phase 3 (Section F)

17. Alternative Project Options Considered? Yes, multiple alternatives have been considered to maximize funding opportunities.

18. Estimated Total Project Costs:

- Brett Avenue Trestle and Lochside Regional Trail Enhancement
\$4,388,131.00
- Swan Lake Trestle and Lochside Regional Trail Enhancement
\$8,156,619.00

19. Strategic Priorities Funding Request:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project
\$4,376,354.00
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project
\$6,000,000.00

20. Borrowing:

- Lochside Regional Trail and Brett Avenue Trestle Enhancement Project: No
- Lochside Regional Trail and Swan Lake Trestle Enhancement Project: No

21. Other Grants

- An Active Transportation Fund application has been submitted by the Ministry of Transportation and Infrastructure (March 31, 2022), in partnership with the Capital Regional District for the Selkirk Trestle and Galloping Goose Regional Trail Phase 1 (Section A, B, C) project. The Capital Regional District will take a lead role in this project to: contribute funding, provide staffing to coordinate, manage, procure contracts, oversee contracts,

facilitate engagement, and prepare communications material, as well as monitor and complete grant reporting, as outlined in existing agreements.

22. Other Contributions – No

23. Internal Contributions

- Brett Avenue Trestle and Lochside Regional Trail Enhancement (capital reserves, etc.)
\$11,777.00
- Swan Lake Trestle and Lochside Regional Trail Enhancement (capital reserves, etc.)
\$2,097,707.00

Section 4: Program Objectives (Questions 24 – 29 same for both applications/projects)

24. Productivity and Economic Growth: Describe the measurable economic benefits of the project in the community.

The measurable economic benefits of the project to the region include:

- Active Transportation projects create more jobs than vehicle-only projects, as demonstrated by Heidi Garrett-Peltier's research on 'Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts', Political Economy Research Institute, University of Massachusetts, Amherst, June 2011. Specifically, active transportation projects create 7.8 to 8.4 direct and indirect employment for each million dollars in investment, versus 6.07 direct and indirect employment for each million dollars spent on vehicle-only projects. The Brett Avenue Trestle and Lochside Regional Trail Enhancement project would result in 33 jobs within the region during construction of the project, and the Swan Lake Trestle and Lochside Regional Trail Enhancement project would result in 67 jobs within the region during construction of the project.
- Job creation through environmental assessments, design and construction, labor and material supply.
- Cost savings to residents through increased active transportation trips for work or shopping, and fewer vehicle trips reducing demand for gas.
- Increased retail sales due to increased appeal and ease of trail use to access commercial businesses at Saanich Uptown Centre.
- Increase to transit revenues due to enhanced multi-modal connection to transit hub.

25. Productivity and Economic Growth: Describe the non-measurable economic benefits of the project in the community.

- The Capital Region is a key tourism destination within British Columbia. The CRD regional trail network connects the BC Ferries terminal at Swartz Bay on Vancouver Island with the District of Sannich Uptown Centre (along the Lochside Regional Trail). The Lochside Regional Trail is a key attraction for cycling trips from Sidney, North Saanich, Central Saanich, and Saanich and links with the Galloping Goose Regional Trail at Saanich Uptown Centre. The Galloping Goose links users with Victoria, as well as the western communities of View Royal, Langford, Colwood, Metchosin, and Sooke. The Lochside Regional Trail (Saanich Spur) links to Elk/Beaver Lake Regional Park, Bear Hill Regional Park, and multiple Saanich community parks.
- Many people from the lower mainland come to ride the CRD regional trails and stay within the Capital Region while visiting. Enhancements to this section of the Lochside will improve

the experience of active tourism travelers and will potentially increase active tourism overall.

- Enhancements to this section of the Lochside, so close to the Saanich Uptown Centre, provide the potential for increased cycling tourism from the rest of Canada and the United States.
- Economic benefits are also tied to local businesses (as the Lochside Regional Trail links the business hubs of Saanich Uptown Center and Saanich Shopping Centre at McKenzie Avenue).

26. Cleaner Environment: Describe the environmental benefits of the project.

- Calculated GHG reduction - calculations based on Regional Trail use volumes and projected volumes (33,580 kg CO₂e/yr).
- The CRD Regional Growth Strategy identifies a mode share target of 42% of all trips made by walking, cycling and transit. The project is critical to helping achieve this objective.
- An environmental protection plan with best management practices will be developed once detailed plans have been proposed for the Brett Avenue and Swan Lake Trestle replacements, and will follow regulatory requirements and environmental permits when working in close proximity to water.
- Opportunities exist to collaborate with local nature sanctuary groups interested in creek restoration, replanting, invasive species removal, and interpretive signage.

27. Cleaner Environment: What environmentally sustainable considerations have been incorporated into the project?

- Environmental protection best management practices and a detailed environmental protection plan will be developed for the detailed design and construction phases.
- Environmental considerations will reflect findings and recommendations provided in the Lochside Trail Trestles at Brett Avenue and Swan Lake Environmental Review. Regulatory requirements include, but are not limited to, conducting a rare species/ecosystem assessment, requesting an exemption from SDPA (District of Saanich), submitting Section 11 notification, submitting DFO and BC Scientific Fish Collection permits, and conducting pre-clearing activities based on outcomes of nesting survey. Additional environmental protection measures to be undertaken during construction may include: erosion and sediment control, spill prevention and response, creosote management, and protecting identified ecosystem features. Ecological improvement options could also include: invasive species removal and planting of native species, and including bird habitat on trestle structures.
- Trail lighting will only be included on specific sections to cause less disturbance in ecologically sensitive areas. Low intensity reflective lights will be used on the Brett Avenue Trestle.
- Through the CRD procurement process, request for proposals will request proponents include environmentally friendly ideas, suggestions, and solutions where possible.
- Existing paved trail surface will be maintained where feasible on the trail.
- Low carbon emitting vehicles will be given preference when securing contractors.

28. Strong Cities and Communities: Describe the community health, social, and cultural benefits of the project.

- The project supports the intensification of urban mixed-use development at the Saanich Uptown Centre as planned for in Saanich's Uptown-Douglas Area Plan and CRD's Regional Growth Strategy. The project promotes the concept of "safe and complete communities" in CRD's Regional Growth Strategy including: multiple modes of mobility can be used to, from and within the community; places of work, shopping, learning, recreation and parks and green space can easily be accessed by walking and cycling.
- The project will improve accessibility to all trail users, and will benefit vulnerable populations in the region by improving active transportation accessibility, safety and user comfort. Widening the trail and trestle will increase the desired operating space for pedestrians and cyclists that incorporate space for mobility devices, strollers, side-by-side travel and passing for all ages and abilities, particularly youth, seniors, and persons with disabilities. The increased safety of the trail facility will benefit new cyclists who feel uncomfortable riding on-street.
- Cultural benefits of encouraging active transportation mobility choice can be realized from the enhanced trail facility
- Lighting will improve safety and perceived personal security.
- The CRD is developing an equity lens in partnership with the Community Social Planning Council that focuses on reviewing gender imbalance on the CRD regional trail network. The equity lens will be applied to the project.

29. Strong Cities and Communities: Describe how the project will advance the long-term goals and vision of the community as identified in applicable community plans. Include a copy of relevant sections.

- The project supports sustainability goals in several existing local, regional, and provincial plans:
 - The project supports the following goals in the BC's South Island Transportation Strategy: ensure sustainable options for a variety of travel modes; strengthen connections between travel modes and improve connections between communities; improve the safety and reliability of the transportation network; and support and encourage active transportation options.
 - The project meets or exceeds the active transportation facility design specifications in BC's Active Transportation Design Guide.
 - The project supports the goals in the CRD's Regional Growth Strategy and Regional Transportation Plan to improve multi-modal connectivity and mobility and to create exceptional environments for walking and cycling.
 - The project is consistent with the policies in the CRD's Regional Trails Management Plan for trail widening, separating and lighting to support active transportation, improve safety and enhance accessibility and with the goals in the Regional Parks Strategic Plan. 2012 – 2021 to provide recreation and active transportation routes. Also identified as a priority in the renewed Regional Parks and Trails Strategic Plan (2022-2032), Climate Action and Resiliency Action 4-1b (plan for an implement priority regional trail enhancement and expansion projects).

- The project supports the separate use pathway with lighting design recommendations in the CRD's Regional Trail Widening Study.
- The project aligns with CRD's Asset Management Strategy that aims for sustainable service delivery and resiliency in infrastructure renewal.
- The project aligns with the goals in the District of Saanich's Active Transportation Plan to build a culture for active transportation, observe a significant shift to active transportation modes, improve safety for active transportation, and create more connections and places for walking and cycling.

Section 5: Program Criteria

30. Large in Scale: Describe how the size, scale and/or benefits of the project is large in relation to the size of the community.

- The CRD Regional Trails system connects Capital Regional communities and facilitates access to key destinations within and beyond the region.
- The CRD Regional Trails system spans municipal boundaries and serve as off-street greenway corridors for both active transportation and recreation.
- The network facilitates active, healthy lifestyles for people of all ages and abilities.
- The project is located adjacent to Swan Lake Christmas Hill Nature Sanctuary and Swan Lake Park. Environmental restoration measures are proposed by Swan Lake Christmas Hill Nature Sanctuary in collaboration with the Lochside Regional Trail and Brett Avenue Trestle Enhancement Project.
- The project area is the busiest section of the regional trail used by approximately 2,000 users per day in peak times for active transportation, recreation, and tourism. 20-year user volume projections include a projected increase of 2.5% per year, reaching approximately 3,500 users per day by 2040. Approximately 80% of trail users are cyclists and 20% are pedestrians. Trail issues include: high use volumes, high speed differentials between user types, lack of safety and personal security, conflicts at intersections, poor trail etiquette, and emerging mobility technology. The separated use pathway with lighting design is based on the best practices for active transportation and accessibility and aims to address these issues.

31. What is the population of the community (making the application)?

- 415,451

32. What is the population that will be directly served by this project?

- 394,000

33. Regional in Impact: Describe the degree to which this project supports interjurisdictional collaboration and coordination.

- The trail corridor is owned by the BC Transportation Financing Authority and is managed by the BC Ministry of Transportation and Infrastructure. The trail is operated by the Capital

Regional District through a Lease Agreement. The entirety of the project is within the District of Saanich. All jurisdictions will require collaboration in order to see success.

- The Capital Regional District Board identifies this project as a Regional Priority.
- Coordination with the District of Saanich for relevant project permits, as well as collaboration with the District of Saanich to align project goals with objectives in the District of Saanich's Active Transportation Plan (to build a culture for active transportation, observe a significant shift to active transportation modes, improve safety for active transportation, and create more connections and places for walking and cycling).
- Environmental restoration and interpretation efforts with Swan Lake Christmas Hill Nature Sanctuary.

34. Does this project involve partnership? If yes, identify parties and their roles.

- Informal partnerships include the Ministry of Transportation and Infrastructure.

35. Regional in Impact: Describe the degree the project benefits more than one community, is identified as regional priority, and/or is regional in scope.

- At the October 13, 2021 Board meeting, the CRD Board motion was passed "That staff be directed to actively develop partnerships and pursue grant funding opportunities, including submission to the federal Active Transportation Fund, to support implementation of the separated use pathway design with lighting"
- At its February 10, 2021 meeting, the CRD Board directed staff to expedite public engagement on the proposed separated use pathway design, lighting and implementation priorities, including consideration of low-intensity lighting in the trail segment adjacent to Swan Lake, aiming for balance between wildlife and public safety considerations. The Board further directed that public engagement and detailed designs be expedited, with a view toward having a shovel-ready project.
- The project is consistent with the policies in the CRD's Regional Trails Management Plan for trail widening, separating and lighting to support active transportation, improve safety and enhance accessibility and with the goals in the Regional Parks Strategic Plan. 2012 – 2021 to provide recreation and active transportation routes. Also identified as a priority in the renewed Regional Parks and Trails Strategic Plan (2022-2032), Climate Action and Resiliency Action 4-1b (plan for an implement priority regional trail enhancement and expansion projects).
- The project is aligned to the CRD Board Strategic Priority to "plan for and deliver an effective, long-term multi-modal transportation system and to increase use of public transit, walking and cycling" and to a CRD Board Transportation Priority for active transportation to create a connected and consistent regional trail network.
- The project aligns with the goals in the District of Saanich's Active Transportation Plan to build a culture for active transportation, observe a significant shift to active transportation modes, improve safety for active transportation, and create more connections and places for walking and cycling.

36. Innovation: Describe any innovative component(s) of the project.

Energy efficient LED lights will be used. Although solar lighting was investigated, it is not a viable solution for the setting due to existing tree canopy and slope aspect of the trail corridor.

37. Describe what research, planning, testing, technology, or methodology supports the approach that will be used, and the additional risks associated with using this innovation.

Efforts will be made to make sure installation is appropriate and provides the intended illumination benefits while mitigating any possible negative impacts on the surrounding area. Energy efficient LED "warm colour" sources will be investigated for use with dimming, time of day and motion detection capability. Designs will be economical and concise with respect to light output and light control, energy consumption, longevity, maintenance, installation and replacement.

38. Innovation: Describe the relative benefit of the innovative process, method or technology over existing practice.

Consideration was given to solar light and dimming systems, but were deemed not suitable due to the challenges associated with solar exposure along the regional trail and associated capital costs and limited benefit with respect to power bill savings.

Section 6: Project Planning and Benefits

39. How do you manage your infrastructure assets?

- The CRD's 2019 Corporate Asset Management Strategy outlines how the CRD will apply an integrated approach, evidence-based decision-making, and life-cycle management to renew infrastructure and determine appropriate levels of service for regional trails.
- The CRD's asset management policy outlines key asset management objectives, principles and governance to promote sustainable service delivery. The policy establishes seven asset management principles, developed in alignment with industry standards, best practices and organizational values, and include: service delivery and community, decision-making, sustainability, risk and resiliency, financial strategy, transparency, and continual improvement.
- The 2019 Regional Parks Sustainable Service Delivery Plan Report Card provides a summary of the condition of regional trail assess and a snapshot of the services' financial state to help inform future asset renewal programs and to define appropriate levels of service delivery.
- CRD staff plan, implement, operate and maintain the regional trail infrastructure to provide an appropriate duty of care and deliver the regional trails service to visitors.
- Regional Parks follows the Asset Management BC Framework, which recognizes that asset management, and the best practices that support asset management, must be scalable to community size and capacity. The framework is supported by the ISO 55000 Standard for Asset Management.
- All major regional trail assets are stored in an asset registry, with key information such as install date, expected life, physical and functional condition ratings, criticality rating and risk valuations, ownership and primary user information, level of service, replacement value and an 80-year renewal profile. Key performance indicators per asset category are updated annually.
- The CRD manages assets by first understanding the demand and defining the appropriate level of service. Infrastructure assets are managed at a level to meet the defined level of

service. With limited resources available, the CRD identifies critical assets by completing criticality assessments. Additionally, the CRD identifies associated hazards, threats, and vulnerabilities through a risk management methodology to further help prioritize resources.

- Long-term financial planning uses the asset registry, criticality rating, and renewal profile to inform the 10-year Capital Program, 5-year Capital Plan, and 1-year Capital Projects List.

40. Does your local government have a long-term financial plan? Yes

- How long-term is your financial plan (in years) – 5-year Capital Plan
- How does the financial plan relate to an AM plan, Capital Works plan, OCP, or any other strategic community or corporate plans?
 - i. The financial plan links to the CRD Corporate Asset Management Strategy, and is used as the pathway to sustainable, resilient, and adaptive service delivery.
 - ii. The Regional Parks and Trails Strategic Plan (2022-2032) links to the CRD's Corporate Asset Management Strategy.
 - iii. The 2019 Regional Parks Sustainable Service Delivery Plan Report Card provides a summary of the condition of regional trail assess and a snapshot of the services' financial state to help inform future asset renewal programs and to define appropriate levels of service delivery.

41. Describe how operation and maintenance will be funded over the lifecycle of the infrastructure subject to this application.

The CRD currently operates and maintains the Regional Trails and Trestles using staff and dedicated Parks Operational Funding. The improvements will not have an impact on the current operational model. Annually, the CRD budget planning process, through service planning and budget planning, determines service levels, including specific actions, targets, and non-financial resources, required to achieve Board, corporate and core service priorities. Through budget planning, the financial resources required to achieve identified service levels and capital investment requirements are specified.

42. What portion (%) of infrastructure replacement for this project will be funded through current financial revenues? 100%

43. For the Asset Class subject to this application – is there an asset inventory/registry?

- Brett Trestle (2018) - Yes
- Swan Trestle (2018) - Yes
- Lochside Trail (2020) - Yes

44. For the Asset Class subject to this application – has a condition assessment been completed?

- Brett (2018) – Yes (Options Analysis for the Swan Lake and Brett Avenue Trestles Report)
- Swan (2018) – Yes (Options Analysis for the Swan Lake and Brett Avenue Trestles Report)
- Lochside Trail (2020) – Yes (Conceptual design feasibility was based on constraints identified in the corridor - slope, encumbrances, tree removal, maintenance activities, etc.).

45. For the Asset Class subject to this application – is there an asset management plan?

- Brett - Yes
- Swan - Yes
- Lochside Trail – Yes

46. Additional comments for AM questions listed above? Yes

- The 2022-2032 Regional Parks and Trails Strategic Plan identifies the following priority action (4-3c: develop and implement an asset management plan for regional parks and trails that achieves critical infrastructure life cycle renewal, is well planned, managed, and funded, is consistent with legislative requirements and receives First Nations input.
- The Regional Parks Sustainable Service Delivery Plan report cards provide a snapshot of key infrastructure renewal facts and analytics to enable informed decision-making.

47. What effects will the proposed project have on service levels and how will these be measured?

- Brett Trestle and Lochside Trail Enhancement will allow greater volumes of traffic based on current trail count analysis at peak periods. Use count volumes will continue to be measured using trail counters. The current volume of traffic sees 2,000 users a day for this section of trail. This data will become more accurate as the CRD installs and adopts new Eco-Counter data.
- Swan Trestle and Lochside Trail Enhancement will allow greater volumes of traffic based on current trail count analysis at peak periods. Use count volumes will continue to be measured using trail counters. The current volume of traffic sees 2,000 users a day for this section of trail. This data will become more accurate as the CRD installs and adopts new Eco-Counter data.
- Trail widening and lighting will allow greater volumes of traffic based on current trail count analysis at peak periods. Use count volumes will continue to be measured using trail counters. The current volume of traffic sees 2,000 users a day for this section of trail. This data will become more accurate as the CRD installs and adopts new Eco-Counter data.

48. Describe the long-term financial plan in place for renewal or replacement of the asset subject to this application.

- 10-year Capital Program looks at renewal profiles for like-for-like replacement, highlights financial and resource pressure points, and outlines strategies to reduce pressures. Renewal profiles and critical infrastructure definitions are re-confirmed annually. The program also includes life-cycle planning, maintenance program considerations, and condition assessments.
- 5-year Capital Plan looks at procurement strategies and grant opportunities to fund project ready initiatives.
- The Regional Parks Sustainable Service Delivery Plan report cards provide a snapshot of key infrastructure renewal facts and analytics to enable informed decision-making.

Section 7: Community Service Demands (Questions 24 – 29 same for both applications/projects)

49. Explain how community demands were used to identify the size and scope of project components and/or establish the appropriate service levels provided by the project.

- The 2022-32 Regional Parks and Trails Strategic Plan identifies this project as a priority. It also identifies asset management to maintain critical infrastructure in good or better condition.
- The Regional Trail Management Plan (2016) provided direction to conduct a comparative study to assess the engineering feasibility and cost/benefits of widening and separating the

urban portions of the Galloping Goose and Lochside regional trails and to study whether to install lighting along the corridors. The Capital Regional District (CRD) retained consultant services in 2019 to conduct the CRD Regional Trails Widening Study (2020). The Report was received by the Regional Parks Committee at its meeting of January 27, 2021.

- At the February 10, 2021 meeting, the CRD Board directed staff to expedite public engagement on the proposed separated use pathway design, lighting and implementation priorities, including consideration of low-intensity lighting in the trail segment adjacent to Swan Lake, aiming for balance between wildlife and public safety considerations. The Board further directed that public engagement and detailed designs be expedited, with a view toward having a shovel-ready project. Staff delivered an engagement process in spring 2021 for the Regional Trails Widening and Lighting Project that included opportunities for public, government and First Nations input and involvement, and that complied with COVID-19 safety protocols. Feedback highlights strong support for the separated use pathway design, proposed lighting scheme, and the priority sequence for implementation. Staff have also actively pursued partnerships with provincial and municipal agencies to determine funding options and to advance the project. At the October 13, 2021 Board meeting, the CRD Board motion was passed “That staff be directed to actively develop partnerships and pursue grant funding opportunities, including submission to the federal Active Transportation Fund, to support implementation of the separated use pathway design with lighting”
- Public engagement: In 2020, CRD conducted an online survey to seek public feedback about the proposed separated use pathway with lighting and the priority areas for implementation. In total, 1,784 online surveys were completed. The majority of respondents support or strongly support the separated use pathway design (90%) and lighting (87%).
- Stakeholder engagement: CRD and MOTI held meetings and interviews were held with organizations having direct interest in the project, including City of Victoria, District of Saanich, Swan Lake and Christmas Hill Nature Sanctuary, to determine mutual goals, project synergies, and partnership opportunities.
- First Nations engagement: Letters were sent in 2020 and 2022 to the following First Nations with Traditional Territory in the Project area seeking input on the separated use pathway with lighting: Songhees, Esquimalt, Paquachin, and the WSANEC Leadership Council. Responses from the First Nations indicates interest in understanding any archaeological and environmental implications, in having cultural monitors present during land altering activities, and in any economic development opportunities arising from the project.

50. Explain how resources are recovered and reused in this project.

- The existing regional trail and alignment along the existing rail corridor will continue to be utilised. The existing paved trail will remain, while the widening will be added to the footprint in order to reduce the overall environmental impacts.

51. What considerations have been or will be applied to protect the environment and/or reduce the demand on natural capital/resources?

- Keep the scope of the project within the existing rail corridor in order to remain on previously disturbed soils.

- A detailed environmental protection plan will be developed for the design and construction phases.
- An environmental impact assessment will be conducted prior to construction in order to determine if there are any areas of concern.
- A Section 11 notification will be submitted.
- Nesting surveys will be conducted.
- Work will occur within fish windows.
- Disturbance footprint will be minimized by reusing the existing alignment and rail corridor.

52. How has this project considered climate risk and what considerations (climate mitigation and/or adaptation) have been considered and integrated into this project to make it more climate resilient.

- By widening the existing regional trail and trestles, the anticipated environmental benefits of trail widening and separating are improved air quality through reduction of vehicle traffic, through increased active transportation capacity and choice, and connecting active transportation network to the planned Mobility Hub at Saanich Uptown Centre.
- Replacing the existing trestles boards soaked in creosote will be remove these boards from wet areas
- A new trestle will require far less maintenance reducing the carbon footprint by staff.
- The replacement trestle will be designed with the current climate data which will result in a far more resilient structure.

53. What, if any, regulatory requirements, or standards apply to this project? How will the infrastructure and/or service provided by this project affect these requirements?

- The CSA-S6-14 Canadian Highway Design Bridge Code (CHBDC) will apply to the project. The new trestles will be designed to the latest standards.
- Saanich Permitting. All applicable permits will be obtained prior to construction.
- Heritage Conservation Act may apply to this project. A CRD Heritage Site information review will be conducted. This form is reviewed by an archeologist and if deemed necessary an archeologist will be present on site in case any archeological site are found.
- BC Ministry of Transportation and Infrastructure Highway Specifications for Highway Construction as well as permits and agreements. CRD currently has an agreement with the Ministry of Transportation and Infrastructure to operate the regional trail and trestles, additional permits for traffic management will be acquired before constructions. Construction will follow all specifications from the 202 Standard Specification for Highway Construction.

54. Benefits of the project (why is the project needed and how it achieves this)?

- The project aims to improve active transportation accessibility and mobility choice in the Capital Region by widening a 1280/625 m section of existing 3-4 m wide multi-use trail (established in 2001) and existing trestle (built in 1915/1917) to create a 6.5 m wide separated use pathway with lighting. Rebuilding the trestle is critical for the continued operation of the regional trail network. Increasing active transportation accessibility and mobility choice is needed to reduce greenhouse gas emissions from vehicle transportation in the region. Reducing GHGs by improving active transportation mobility choice aligns with

the CRD's Climate Action Strategy, Regional Growth Strategy, Regional Transportation Plan, and Regional Parks and Trails Strategic Plan, as well as with the Province of BC's South Island Transportation Strategy and District of Saanich's Active Transportation Plan.

- The project aims to improve trail safety, user quality and comfort and increase overall capacity on the busiest section of regional trail within the Capital Region. Widening the trail and trestle will increase the desired operating space for pedestrians and cyclists that incorporate space for mobility devices, strollers, side-by-side travel and passing for all ages and abilities, particularly youth, seniors and persons with disabilities. The Project will benefit people who feel their personal safety is at risk when using the trail during periods of darkness by installing lighting along the trail corridor. A widened and separated trail facility will accommodate projected population growth in the region, as well as a cultural trend towards active modes of transportation and micro-mobility devices.
- The project aims to improve public safety by rebuilding the x year old trestle that has been identified as approaching end of life. The project addresses critical infrastructure renewal as part of asset management best practices.
- Other benefits of the project include: job creation; enhanced active transportation access to a regionally significant commercial centre and mobility hub; environmental restoration opportunities; reducing stigma towards those who may not afford a personal vehicle; promoting health and well-being benefits from active modes of travel; promoting climate action .