



To deliver effective and efficient, local government services that benefit our citizens, our businesses, our environment and our future.

THE CORPORATION OF THE CITY OF VERNON

AGENDA

Committee of the Whole

Monday, April 22, 2024, 8:40 a.m.

CITY HALL COUNCIL CHAMBER

3400 30 Street

Vernon B.C.

Pages

1. CALL COMMITTEE OF THE WHOLE MEETING TO ORDER

1.a Agenda

THAT the Agenda for the April 22, 2024 Committee of the Whole Meeting be adopted as circulated.

1.b Adoption of Minutes

THAT the minutes of the Committee of the Whole meeting of Council held April 8, 2024 be adopted.

3

2. BUSINESS ARISING FROM THE MINUTES

3. GENERAL MATTERS

3.a Historic O'Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan (5700-03)

7

Geoff Mulligan, Manager, Infrastructure Systems and Elana Zysblat from Ance Building Services(via zoom) will present the Historic O'Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan to Council.

THAT Council receive for information the report titled "Historic O'Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan", dated April 4, 2024 and respectfully submitted by the Manager, Infrastructure Systems.

3.b 2024 Tax Rate Bylaw Options

THAT Council rescind the original motion from the April 8, 2024 Council meeting as follows:

'THAT Council select Option 1, Using Prior Year Tax Base Proportions but Maximizing Utility Class Revenue, as identified on Page 2 of Attachment 1 in the report titled "2024 Tax Rate Options", dated March 28, 2024, respectfully submitted by the Manager, Financial Operations;

AND FURTHER, that Council direct Administration to prepare the Tax Rates Bylaw #5990 for initial readings at the April 22, 2024 Regular meeting of Council'.

THAT Council select Option 1, Using Prior Year Tax Base Proportions but Maximizing Utility Class Revenue, as identified on Page 1 of Attachment 1 in the report titled "2024 Tax Rate Options Corrected", dated April 12, 2024, respectfully submitted by the Manager, Financial Operations.

4. UNFINISHED BUSINESS

5. NEW BUSINESS

6. LEGISLATIVE MATTERS

7. COUNCIL INFORMATION UPDATES

8. RDNO / GVAC REGULAR MEETINGS

8.a Foreign Ownership at Silver Star Mountain Resort

The Mayor will speak to this item.

9. INFORMATION ITEMS

10. CLOSE OF MEETING

**THE CORPORATION OF THE CITY OF VERNON
MINUTES OF THE COMMITTEE OF THE WHOLE**

**April 8, 2024, 8:40 a.m.
CITY HALL COUNCIL CHAMBER
3400 30 Street
Vernon B.C.**

Mayor and Council
Members Present:

Mayor V. Cumming
T. Durning
K. Fehr
K. Gares
B. Guy
A. Mund
B. Quiring

Administration
Present:

K. Poole, Director, Corporate Administration
D. Law, Director, Financial Services
D. Lind, Chief, Fire Rescue Services
B. Bandy, Manager, Real Estate
C. Isles, Deputy Corporate Officer
C. Ovens, General Manager, Public Works
C. Sheel, Project Manager, Active Living Centre
J. Winqvist, Communications Officer
R. Nuriel, General Manager, City Planning
S. Melenko, Information Tech. I
D. Devries, Manager Transportation
J. Blood, Director, Recreation Services
S. Smith, Sr. Executive Assistant
K. Harper, Executive Assistant
T. Barton, Director, Planning and Community Services
C. Baldrige, Manager, Communications and Grants
E. Hamming, Director, Financial Services
D. Ross, Manager, Project Program
L. Walker, Manager, Customer Service - Recreation

1. CALL COMMITTEE OF THE WHOLE MEETING TO ORDER

Mayor Cumming called the Committee of the Whole to order at 8:43 am.

1.a Agenda

Moved by: Councillor Gares

Seconded by: Councillor Quiring

THAT the Agenda for the April 8, 2024 Committee of the Whole Meeting be adopted as circulated.

CARRIED

1.b Adoption of Minutes

Moved by: Councillor Guy

Seconded by: Councillor Durning

THAT the minutes of the Committee of the Whole meeting of Council held March 25, 2024 be adopted.

CARRIED

2. BUSINESS ARISING FROM THE MINUTES

3. GENERAL MATTERS

3.a Presentation - Validation of Active Living Centre (8:45 am)

Doug Ross, Manager, Project Program for the Active Living Centre provided Council with an overview of the validation.

- Purpose of validation process described
- Vernon Active Living Centre Integrated Project Delivery team identified
- Executive Summary overview
- Base Target Cost and Budget Summaries
- Validation Commitment explained
- Added Value Incentive Items defined
- Virtual Walkthrough of ALC provided

Moved by: Councillor Quiring

Seconded by: Councillor Mund

THAT Council receive for information the memorandum titled “Active Living Centre Validation Report” dated April 5, 2024 and respectfully submitted by the Senior Manager, ALC Project and the Manager, Project Program;

AND FURTHER, that Council receive and endorse the Active Living Centre Validation Report, including the IPD Design & Construction team’s commitment to “designing, constructing, and delivering this project to (the City): in accordance to the Base Program outlined (in the report), for a final Actual Cost not exceeding the Base Target Cost of \$121,030,909 described (in the report) and to strive for the goal of reaching substantial completion and opening in the fall of 2026”;

AND FURTHER, that Council authorize Administration to enter into an Integrated Project Delivery Hansen Bridgett Contract with the ALC IPD signatories as listed on the Validation Commitment page of the Active Living Centre Validation Report;

AND FURTHER, that Council authorize the City of Vernon ALC Project Team to approve the inclusion of Added Value Incentive Items up to the threshold of \$99,000 and direct the Project Team to bring forward any Added Value Incentive Items for consideration in excess of the threshold.

CARRIED

- 4. UNFINISHED BUSINESS**
- 5. NEW BUSINESS**
- 6. LEGISLATIVE MATTERS**
- 7. COUNCIL INFORMATION UPDATES**
- 8. RDNO / GVAC REGULAR MEETINGS**

8.a BX Creek Trail

The Mayor advised that there has been a landslide in BX Creek Valley on the north side of the trail, halfway up, just below Herbert Road. The lower part of the trail is still open as well as access from the top at Tillicum Road to the waterfalls.

- 9. INFORMATION ITEMS**
- 10. CLOSE OF MEETING**

Moved by: Councillor Durning
Seconded by: Councillor Guy

THAT the Committee of the Whole meeting of April 8, 2024 be adjourned.

CARRIED

Mayor Cumming closed the Committee of the Whole at 9:44 am.

Mayor

Corporate Officer



THE CORPORATION OF THE CITY OF VERNON REPORT TO COUNCIL

SUBMITTED BY: Geoff Mulligan, Manager
Infrastructure Systems

COUNCIL MEETING: REG COW I/C

COUNCIL MEETING DATE: Apr 22, 2024

REPORT DATE: April 4, 2024

FILE: 5700-3

SUBJECT: HISTORIC O'KEEFE RANCH HERITAGE CONSERVATION PLAN AND
CAPITAL & OPERATIONS MANAGEMENT PLAN

PURPOSE:

To present to Council the findings of the Historic O'Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan.

RECOMMENDATION:

THAT Council receive for information the report titled "Historic O'Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan", dated April 4, 2024 and respectfully submitted by the Manager, Infrastructure Systems.

ALTERNATIVES & IMPLICATIONS:

N/A

ANALYSIS:

A. Committee Recommendations:

N/A

B. Rationale:

1. Background

In the interest of providing safe and sustainable services to the public, Council at its Regular Meeting of June 12, 2023 directed Administration to prepare an Asset Management/Heritage Conservation Plan for the Historic O'Keefe Ranch. Council's direction also included the division of the plan into three separate phases, providing Council the opportunity to review each phase independently and assess and decide on the progression of subsequent phases.

- **Phase 1:** Conduct a Facility Condition Assessment (FCA) of the site (Attachment 1) including a brief Statement of Significance to provide guidance to the assessment (**completed**). The FCA provides a per-building and a per-systems approach to understanding the site and the various capital needs of the buildings and the building systems, and provides recommendations. Recommended work was risk prioritized and separated into phased programs and projects with associated costs.
- **Phase 2:** Prepare a Heritage Conservation Plan (HCP) with reference to the Canadian Standards and Guidelines for Heritage Conservation that will give the City guidance in preparing budgets and programs for ongoing maintenance and renewal of the Historic O'Keefe Ranch.

- **Phase 3:** Prepare a detailed 1-10-year Capital and Operations Management Plan, defining a maintenance, renewal, and improvement program for the site assets.

2. Heritage Conservation Plan

The purpose of a Heritage Conservation Plan is to explain how the historical significance of the Historic O'Keefe Ranch can be sustained, and to guide alterations, repair, and management. It is important to note that the HCP for the Historic O'Keefe Ranch does not include any consideration of or information relating directly to the heritage and traditional values of the Indigenous neighbours to the site. Council may wish to consider this as part of future planning for this site.

The HCP utilizes a simple thinking process which starts with describing what is there, the condition of each component, what is proposed to happen to the historic place and its components, and the principles by which it will be managed (following the Standards and Guidelines for the Conservation of Historic Places in Canada).

Through the completed Statement of Significance, it is clear that practically all structures, landscape elements, and artifacts in some way embody and contribute to the heritage value of the O'Keefe Ranch. The question is, do they all need to be conserved and to what degree?

The methodology to determine applicable conservation strategies involved analyzing the character-defining elements of the site while considering:

- **The requirements arising from the Statement of Significance.** Does the feature require conservation based on its level of heritage value and its role in the larger heritage narrative of the site?
- **The City's/Society's requirements.** Is the feature required for site programming?
- **The physical condition of the feature.** Do we know enough about the condition of the feature to plan for its conservation, and is its heritage conservation significant enough to require investment?
- **The requirements imposed by external factors.** Do safety and environmental considerations impact the decision to conserve a feature, if at all and how?

Based on this triaging approach, it was recommended whether a component is to be preserved, removed or relocated, restored, or rehabilitated. The HCP recommends a practical approach to conservation while heavily relying on preservation for the site, with some buildings considered for restoration or rehabilitation. The objective of preservation is simply to protect the heritage value through maintenance or stabilizing with an approach of minimal intervention.

Within the HCP, each character defining element of the site has been assigned a proposed conservation treatment. In addition, recommendations and future considerations have been provided. Conservation guidelines and principles have also been provided for the treatments specifically related to roofing, windows, and cladding.

When planning for the conservation of the Historic O'Keefe Ranch, it is important to understand the stakeholder's (City of Vernon, and the O'Keefe Ranch and Interior Heritage Society) vision and mission with regards to planning. In the HCP it was noted that in the past 6 years, a multitude of feasibility, strategic, land-use, and business plans have been commissioned that recommend different priorities and strategies to achieve these purposes in a financially sustainable manner. In addition, there have been significant changes to the Society's organizational structure post-pandemic, including the loss of a curator. It was

included in the HCP that a clear path forward be established to help ensure financial sustainability of the site.

3. Capital and Operations Management Plan

The purpose of the Capital and Operations Management Plan (COMP) is to operationalize the Facility Condition Assessment and the Heritage Conservation Plan for the Historic O'Keefe Ranch. It provides a guideline of typical maintenance and renewal activities that, if carried out, will extend the service life of the assets at the Ranch while protecting the heritage value.

These associated budgets are focused solely on renewal and maintenance activities for building capital assets and do not account for operating expenses incurred by the O'Keefe Ranch and Interior Heritage Society such as insurance, utilities, payroll etc.

Considering the conservation approaches and recommendations provided in the Facility Condition Assessment and the Heritage Conservation Plan, two scenarios have been prepared.

Scenario 1 - Restoration Approach

This scenario follows the recommendations derived from the FCA and adds recommendations that were identified in the HCP. This provides the City with a plan if a traditional capital renewal approach is selected with a conservation approach more aligned to that of restoration. This scenario is a typical predictive maintenance approach and provides a benchmark for comparison.

- Year 1,2 – Two years of large capital projects of \$550,000 and \$410,000 primarily focused on high priority projects and programs identified in the FCA.
- Years 3 through 10 – Follow a capital maintenance approach, primarily focused on identified programs and at reduced funding levels, totalling \$2,280,000.

The ten-year total projected cost is \$3,240,000.

Scenario 2 – Preservation Focus

Scenario 2 follows a similar framework to Scenario 1 but considers shifting to a focus on preservation, based on findings of the HCP. This plan results in higher frequency and an increase in ongoing maintenance with capital projects remaining where required to address items that impact the life safety or importance to the site programming.

- Year 1 – Maintenance and completion of recommended assessments/evaluation activities necessary to perform subsequent rehabilitation work, totalling a budget of \$90,000.
- Year 2 – Undertake a capital renewal program with a budget of \$700,000 primarily focusing on high priority projects and programs identified in the FCA and considering HCP approaches.
- Years 3 through 10 – Follow a capital maintenance approach, primarily focused on identified programs and at reduced funding levels, totalling \$1,230,000.

The ten-year total projected cost is \$2,020,000.

Depending on Council's direction in regards to the next steps with the Historic O'Keefe Ranch, Administration would recommend that Council consider using Scenario 2 – Preservation Focus philosophy for future planning and cost calculations for this site.

C. Attachments:

- Attachment 1 – Historic O’Keefe Ranch Facility Condition Assessment
- Attachment 2 – Historic O’Keefe Ranch Heritage Conservation Plan
- Attachment 3 – Historic O’Keefe Ranch Capital and Operations Management Plan

D. Council’s Strategic Plan Alignment:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Governance & Organizational Excellence | <input type="checkbox"/> Livability |
| <input type="checkbox"/> Recreation, Parks & Natural Areas | <input type="checkbox"/> Vibrancy |
| <input type="checkbox"/> Environmental Leadership | <input type="checkbox"/> Not Applicable |

E. Relevant Policy/Bylaws/Resolutions:

1. At its Regular Meeting of March 27, 2023, Council passed the following resolution:

“THAT Council receive the memorandum titled “O’Keefe Ranch Presentation”, dated March 14, 2023 and respectfully submitted by the Manager, Financial Planning and Reporting;

AND FURTHER that Council directs Administration to determine the cost of a high level building report and asset management plan which would include a historical value assessment;

AND FURTHER that Council approve additional funding for O’Keefe Ranch & Interior Heritage Society for \$100,000, funded by the 2022 Prior Year Uncommitted Unexpended Balance.”

2. At its Regular Meeting of June 12, 2023, Council passed the following resolution:

“THAT Council receive for information the memorandum titled “O’Keefe Ranch Asset Management/Heritage Conservation Plan” dated May 10, 2023 and respectfully submitted by the Manager, Infrastructure Systems;

AND FURTHER, that Council authorize the expenditure of up to \$70,000 for the Conservation Plan and Asset Management Plan of the O’Keefe Ranch, to be funded by the 2022 Unexpended Uncommitted Balance;

AND FURTHER, that Council direct Administration to separate the Conservation and Asset Management Plans into three phases, with an option to not proceed based on the findings in each phase.”

3. At its Regular Meeting of January 22, 2024, Council ratified the following from the January 22, 2024 Committee of the Whole meeting:

THAT Council receive for information the report titled “Historic O’Keefe Ranch Facility Condition Assessment”, dated January 4, 2024 and respectfully submitted by the Manager, Infrastructure Systems and the Manager, Financial Planning & Reporting;

THAT Council direct Administration to proceed with the budgeted phases 2 and 3 and complete the O’Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan;

AND FURTHER, that Council direct Administration to review and report back to Council at a future meeting.”

BUDGET/RESOURCE IMPLICATIONS:

N/A

FINANCIAL IMPLICATIONS:

- None
- Budget Previously Approved
- New Budget Request
(Finance Review Required)

Prepared by:

**Geoff
Mulligan**

Digitally signed by: Geoff Mulligan
DN: CN = Geoff Mulligan email =
GMulligan@vernon.ca OU = COV
Users, CSB
Date: 2024.04.16 15:48:28 -07'00'

Geoff Mulligan
Manager, Infrastructure Systems

**James
Rice**

Digitally signed by: James Rice
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JRice@vernon.ca OU = COV
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Date: 2024.04.17 07:02:39 -07'00'

James Rice
Director, Operations

Approved for submission to Council:



Patricia Bridal, CAO

Date: April 16, 2024

REVIEWED WITH

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| <input type="checkbox"/> Corporate Services | <input type="checkbox"/> Operations | <input type="checkbox"/> Current Planning |
| <input type="checkbox"/> Bylaw Compliance | <input type="checkbox"/> Public Works/Airport | <input type="checkbox"/> Long Range Planning & Sustainability |
| <input type="checkbox"/> Real Estate | <input type="checkbox"/> Facilities | <input type="checkbox"/> Building & Licensing |
| <input type="checkbox"/> RCMP | <input type="checkbox"/> Utilities | <input type="checkbox"/> Engineering Development Services |
| <input type="checkbox"/> Fire & Rescue Services | <input type="checkbox"/> Recreation Services | <input checked="" type="checkbox"/> Infrastructure |
| <input type="checkbox"/> Human Resources | <input type="checkbox"/> Parks | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Financial Services | | <input type="checkbox"/> Economic Development & Tourism |
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THE CORPORATION OF THE CITY OF VERNON REPORT TO COUNCIL

SUBMITTED BY: Geoff Mulligan, Manager
Infrastructure Systems

COUNCIL MEETING: REG COW I/C

COUNCIL MEETING DATE: Jan 22, 2024

REPORT DATE: January 4, 2024

FILE: 5700-3

Terry Martens, Manager Financial
Planning & Reporting

SUBJECT: HISTORIC O'KEEFE RANCH FACILITY CONDITION ASSESSMENT

PURPOSE:

To present to Council the findings of the Historic O'Keefe Ranch Facility Condition Assessment (FCA) in addition to information regarding the financial obligations of the Historic O'Keefe Ranch and financial assistance provided.

RECOMMENDATION:

THAT Council receive for information the report titled "Historic O'Keefe Ranch Facility Condition Assessment", dated January 4, 2024 and respectfully submitted by the Manager, Infrastructure Systems and the Manager, Financial Planning & Reporting;

AND FURTHER, that Council direct Administration to review and report back to Council at a future meeting.

ALTERNATIVES & IMPLICATIONS:

1. THAT Council direct Administration to proceed with the budgeted phases 2 and 3 and complete the O'Keefe Ranch Heritage Conservation Plan and Capital & Operations Management Plan;

Note: A Heritage Conservation Plan (HCP) is a document which builds upon a Facility Condition Assessment by providing strategy and policy to manage the conservation of the value of the heritage and the key features. An HCP increases the likelihood of heritage properties being successful with Heritage BC grant funding. A Capital & Operations Management Plan operationalizes the FCA and HCP, informed by budgets provided by the City and considers future funding, future grants and other costs in a more unified approach that can be acted upon on an annual basis. Considering that Phase 2 and 3 represent a relatively small proportion of the overall project, for efficient use of resources, it is suggested that the two remaining phases be combined.

AND FURTHER, that Council direct Administration to review and report back to Council at a future meeting.

ANALYSIS:

A. Committee Recommendations:

N/A

B. Rationale:

1. Background

In the interest of providing safe and sustainable services to the public, Council at its Regular Meeting of June 12, 2023 directed Administration to prepare an Asset Management/Heritage Conservation Plan for the Historic O’Keefe Ranch. Councils direction also included the division of the plan into three separate phases, providing Council the opportunity to review each phase independently and assess and decide on the progression of subsequent phases.

- **Phase 1:** Conduct a Facility Condition Assessment (FCA) of the site (Attachment 1) including a brief Statement of Significance (Attachment 2) to provide guidance to the assessment.
- **Phase 2:** Prepare a Heritage Conservation Plan with reference to the Canadian Standards and Guidelines for Heritage Conservation that will give the City guidance in preparing budgets and programs for ongoing maintenance and renewal of the Historic O’Keefe Ranch.
- **Phase 3:** Prepare a detailed 1-10-year Capital and Operations Management Plan, defining a maintenance, renewal, and improvement program for the site assets.

Remaining phases 2 and 3 are costed at \$5000 and \$5000 respectively, and are included within approved budget.

2. Facility Condition Assessment

The purpose of a FCA is to determine the present condition of the Historic O’Keefe Ranch facilities and to provide context to the development of a Heritage Conservation Plan and Capital and Operations Management Plan. The FCA provides a per-building and a per-systems approach to understanding the site and the various capital needs of the buildings and the building systems, and provides recommendations. Recommended work was risk prioritized and separated into phased programs and projects. These were then categorized and summarized into:

- **High Priority:** work recommended to be completed in the next fiscal year – totalling \$500,000 and including:
 - Bridge removal,
 - Replacement of the Greenhow Museum exit stairs,
 - Structural and wall repairs to the Meat and Dairy building,
 - Chimney repairs at O’Keefe House and the Blacksmith Shop,
 - Repair of concrete at the Hay Shed,
 - Visitor Centre carpentry repairs and drainage improvements,
 - Ventilation replacement at the Blacksmith Shop,
 - Hazardous materials and geotechnical assessment.
- **Medium Priority:** work recommended to be completed in two to five years, totalling \$950,000 and including a variety of projects and programs detailed in Attachment 1.
- **Lesser Priority:** Work recommended to be completed in six to ten years, totalling \$1,425,000 and including a variety of projects and programs detailed in Attachment 1.

The sum of the recommended work requires an investment totalling \$2.875 million over 10 years.

3. Financial Obligations of O’Keefe Ranch & Financial Assistance Provided

The following represents the amounts owed to the City of Vernon by O’Keefe Ranch & Interior Heritage Society as of the date of this report:

Non-interest bearing loan	\$70,000 (issued in October, 2019)
Insurance – 2019	\$22,268
Insurance – 2020	\$25,387
Insurance – 2021	\$29,033
Insurance – 2022	\$35,965
Insurance – 2023	<u>\$42,791</u> (invoiced in December, 2023)
Total	\$225,444

The due date for the repayment of the loan and for the payment of the 2019 to 2022 insurance charges was December 31, 2022. The 2023 insurance charge will become due January 17, 2024.

The following represents the direct operational funding provided by the City of Vernon to O’Keefe Ranch & Interior Heritage Society over the past five years:

2019	\$100,000
2020	\$100,000
2021	\$125,000
2022	\$125,000
2023	<u>\$150,000</u>
Total	\$600,000

Council approved operational funding of \$50,000 in the 2024 budget.

C. Attachments:

Attachment 1 – Historic O’Keefe Ranch Facility Condition Assessment
Attachment 2 – Statement of Significance for the Historic O’Keefe Ranch

*Included in Phase 2,3 Report under Attachment 2 - Heritage Conservation Plan

D. Council’s Strategic Plan Alignment:

- Governance & Organizational Excellence
- Recreation, Parks & Natural Areas
- Environmental Leadership
- Livability
- Vibrancy
- Not Applicable

E. Relevant Policy/Bylaws/Resolutions:

1. At its Regular Meeting of March 27, 2023, Council passed the following resolution:

“THAT Council receive the memorandum titled “O’Keefe Ranch Presentation”, dated March 14, 2023 and respectfully submitted by the Manager, Financial Planning and Reporting;

AND FURTHER that Council directs Administration to determine the cost of a high level building report and asset management plan which would include a historical value assessment;

AND FURTHER that Council approve additional funding for O’Keefe Ranch & Interior Heritage Society for \$100,000, funded by the 2022 Prior Year Uncommitted Unexpended Balance.”

2. At its Regular Meeting of June 12, 2023, Council passed the following resolution:

“THAT Council receive for information the memorandum titled "O’Keefe Ranch Asset Management/Heritage Conservation Plan" dated May 10, 2023 and respectfully submitted by the Manager, Infrastructure Systems;

AND FURTHER, that Council authorize the expenditure of up to \$70,000 for the Conservation Plan and Asset Management Plan of the O’Keefe Ranch, to be funded by the 2022 Unexpended Uncommitted Balance;

AND FURTHER, that Council direct Administration to separate the Conservation and Asset Management Plans into three phases, with an option to not proceed based on the findings in each phase.”

BUDGET/RESOURCE IMPLICATIONS:

Council authorized the expenditure of up to \$70,000 to complete all three phases of the O’Keefe Ranch Conservation and Asset Management Plan Should Council choose to continue with Phase 2 and 3.

FINANCIAL IMPLICATIONS:

- None
- Budget Previously Approved
- New Budget Request
(Finance Review Required)

Prepared by:

Approved for submission to Council:

 Geoff Mulligan
 Manager, Infrastructure Systems

 Patricia Bridal, CAO

Date: _____

 Terry Martens
 Manager, Financial Planning & Reporting

 James Rice
 Director, Operations

REVIEWED WITH

- | | | |
|--|---|---|
| <input type="checkbox"/> Corporate Services | <input type="checkbox"/> Operations | <input type="checkbox"/> Current Planning |
| <input type="checkbox"/> Bylaw Compliance | <input type="checkbox"/> Public Works/Airport | <input type="checkbox"/> Long Range Planning & Sustainability |
| <input type="checkbox"/> Real Estate | <input type="checkbox"/> Facilities | <input type="checkbox"/> Building & Licensing |
| <input type="checkbox"/> RCMP | <input type="checkbox"/> Utilities | <input type="checkbox"/> Engineering Development Services |
| <input type="checkbox"/> Fire & Rescue Services | <input type="checkbox"/> Recreation Services | <input checked="" type="checkbox"/> Infrastructure |
| <input type="checkbox"/> Human Resources | <input type="checkbox"/> Parks | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Financial Services | | <input type="checkbox"/> Economic Development & Tourism |
| <input type="checkbox"/> COMMITTEE: | | |
| <input type="checkbox"/> OTHER: | | |



Engineers

Historic O'Keefe Ranch

Facility Condition Assessment

9380 BC-97, Vernon, BC

Prepared for:

City of Vernon

3001 – 32 Avenue

Vernon, BC

V1T 2L8

Prepared by:

RJC Engineers

1626 Richter Street, Suite 214

Kelowna BC V1Y 2M3



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Executive Summary

To aid in providing safe and sustainable services to the public, the City of Vernon has, via RFP and subsequent contract, engaged a consulting team to provide an Asset Management and Heritage Conservation plan for the O'Keefe Ranch.

Owned by the City of Vernon and located in the Township of Spallumcheen, the O'Keefe Ranch site covers a total of 57 acres, 51 of which are City owned. The ranch was first established in 1867 and operated as a working ranch until 1965, after which it was converted into a heritage and tourist feature.

The site and buildings represent assets to the City. Conforming to the work plan, the services are delivered in Phases, with later phases informed by the work of earlier phases. Phase 1, including Preparation of Statements of Significance (SoS) and completion of a Facility Condition Assessment (FCA), is now complete.

Statements of Significance, prepared by ANCE Building Services, are documents to aid in understanding value of a place by briefly explaining that place and its importance. The Statements identify key aspects of each place or building that must be protected in order to preserve the value. These Statements use three lenses to achieve this goal; they *describe* the historic place, they *explain the value* of the heritage and they *define the key-features* that must be conserved in order maintain the described value.

A Facility Condition Assessment is a tool that aids owners in developing capital plans for their assets. They are a snapshot in time of the *current condition of the asset*, built up from the condition of the asset components such as foundations, superstructure, roofing, mechanical and electrical systems. Each component is catalogued, visually assessed and evaluated to document the as-found condition and make recommendations to maintain the component in a like-for-like condition over a prescribed future lifetime. The recommendations of the condition assessment are *informed by* the Statements of Significance.

After these first phase activities, and on approval to proceed to next phases, the overall program includes preparation of a Heritage Conservation Plan (HCP) and completion of plans to aid the City in Capital and Operations Management, both of which are informed by the SoS and FCA. An HCP builds upon the SoS and FCA by providing strategy and policy to manage the conservation of the value of the heritage and the key features. The strategy and policy are then made operational by developing Capital and Operating Plans. Statements of Significance are presented separately bound from this Facility Condition Assessment.

The Facility Condition Assessment identifies the current building and site asset conditions and provides recommendations. Priorities for each recommendation are derived from the risk of occurrence (risk probability) and the consequence of occurrence. These risks are then grouped into recommended timelines for remedial recommendations to be undertaken with related opinions of probable cost. By way of summary, the categories, timelines and total of probable costs are:



- High Priority – work recommended to be completed in the next fiscal year – totaling \$500,000 and including bridge removal, replacement of the Greenhow Museum exit stairs, structural and wall repairs to the Meat and Dairy Building, chimney repairs at O'Keefe House and the Blacksmith Shop, repair of concrete at the Hay Shed, Visitor Centre carpentry repairs and drainage improvements, ventilation replacement at the Blacksmith Shop, and hazardous materials and geotechnical assessments.
- Moderate Priority work – recommended to be completed in two to five years, totaling \$950,000 and including a variety of projects and programs.
- Lesser Priority work – recommended to be completed in six to ten years, totaling \$1,425,000 in probable costs and including a further variety of projects and programs.

Probable costs are order of magnitude projections based on current conditions and recent costs to complete similar recommended scopes. Allowance is made for contractor overhead and profit, soft costs, contingencies and abatement of hazardous materials. Actual project costs will depend on market conditions at the time work is tendered and actual project design and implementation requirements.



1.0 Introduction

At the City of Vernon's request Read Jones Christoffersen Ltd. (RJC) has completed a Facility Condition Assessment (FCA) at the Historic O'Keefe Ranch located at 9380 BC-97 near Vernon, BC per our proposal dated September 14, 2023. The FCA forms part of Phase 1 of the overall services. Phase 1 also includes preparation of Statements of Significance (SoS).

A FCA is an assessment of the facility at the specific time of the review with recommendations on how to maintain the assets. FCA's aid in developing plans for capital renewals of assets. Planning for renewals also needs to consider other criteria, including intended use of the assets. An FCA does not include a review of the current maintenance operations. The FCA is informed by the Statements of Significance, prepared by ANCE and separately submitted.

Phase 2 services, which will advance on approval from City of Vernon, builds on the SoS and FCA is further described in Section 7 of this report. Phase 2 activities include:

- Development of a Heritage Conservation Plan
- Preparation of a Capital and Operations Management Plan

The purpose of the FCA is to determine the present condition of O'Keefe Ranch, thus providing a benchmark and context from which to advise the City as the Capital and Operations Management Plan is developed. The FCA provides a per building and a per systems approach to understanding the site and the various capital needs of the buildings and the building systems.

In the development of this report, RJC and Falcon Engineering completed the following work:

- Review available documentation from the City of Vernon and O'Keefe Ranch and Interior Heritage Society.
- Visual review of all buildings and visible site works at the Ranch.
- Prepare a written report including observations, conclusions, recommendations, and opinions of probable cost.

The following appendices are included at the conclusion of this report:

- **Appendix A: Site Maps** provides reference site maps showing the locations of buildings, infrastructure, and services on site.
- **Appendix B: Facility Condition Assessment Background** provides information about the methodology and best practices for a heritage facility condition assessment followed in the preparation of this report.



- **Appendix C: Detailed Building Condition Assessments** provides detailed information about the condition of each building or site feature reviewed on a by-component basis using the UNIFORMAT II classification standard.
- **Appendix D: Overview, Structure, and Building Envelope Photos** is a log of relevant photographs of the condition of the site.
- **Appendix E: Mechanical Report** describes in more detail the reviewed mechanical systems. The appendix documents significant observations, provides recommendations for repair or renewals and includes OPCs to replace or repair certain building components. The reader is encouraged to review this appendix for more details regarding the facility mechanical systems.
- **Appendix F: Electrical Report** describes in more detail the reviewed electrical systems. The appendix documents significant observations, provides recommendations for repair or renewals and includes OPCs to replace or repair certain building components. The reader is encouraged to review this appendix for more details regarding the facility electrical systems.
- **Appendix G: Roof Maintenance Guide and Replacement Prioritization** is provided to guide the Society with general roof maintenance and as a decision-making tool when planning work in the recommended roof replacement program.
- **Appendix H: Limit of Liability** which provides limitations based on the visual methods used for a facility condition assessment.

2.0 Site Description

O'Keefe Ranch is located in the Township of Spallumcheen, British Columbia, 3 km north of the head of Lake Okanagan and 8 km north of the City of Vernon. The historic ranch and heritage site covers 57 acres, 51 of which are owned by the City under several titles. The site is divided by Deep Creek with most historical buildings and artifacts located on the East side of the creek. The West side of the site contains three historic buildings, an RV park, and farmed land. Access to the Ranch by vehicle is from BC Highway 97.

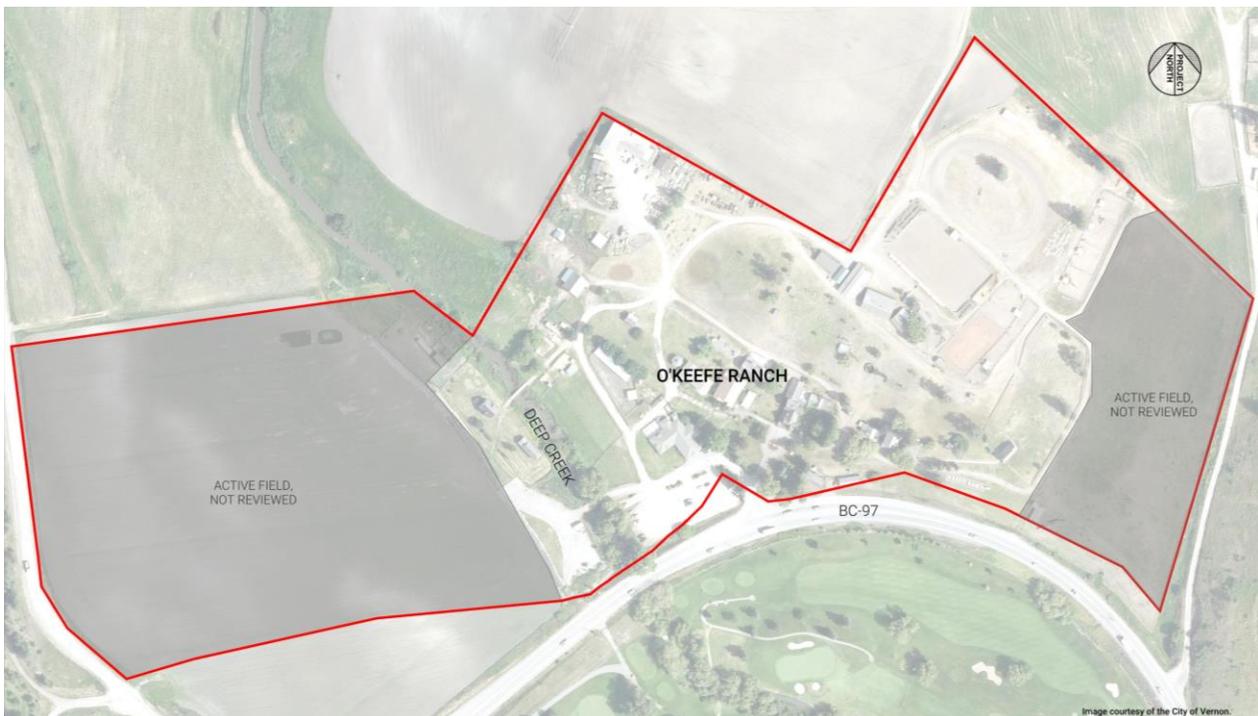


Figure 1: Historic O'Keefe Ranch Site Plan

The Ranch was established in 1867 and operated as a working ranch until 1965 when it was converted by Tierney O'Keefe to a heritage and tourist feature in the Okanagan Valley. We defer to the Statements of Significance prepared by ANCE and separately reported for further historical perspective.

Over 30 historic buildings form the O'Keefe Ranch. Together with site works, such as fencing, water supply, walkways and exterior lighting, they form the subject of this FCA.

All buildings and structures on the site are owned by the City of Vernon and leased to the O'Keefe Ranch & Interior Heritage Society which oversees operations at the ranch. The Society also holds sub-leases with the North Okanagan Model Railway Society, Field of Screams, and the Spallumcheen Pioneer Power Club for various spaces on site. Figure 1 is a key plan of the buildings located on the site.



Figure 2: Site and Building Plan from Appendix A

2.1 General Building and Site Descriptions

Typically, buildings are wood frame construction with stone, masonry or concrete foundations. Most buildings are clad in wood with the exception of the Greenhow Museum and O'Keefe House which have been reclad in stucco. Roofs are a mix of cedar shakes, corrugated metal, asphalt shingles and sheet metal of which cedar shakes are the most common. A large roof replacement program was completed in the 1980's where many of the cedar shake roofs were replaced. The steeple of St. Anne's Church is clad with metal shingles. In general, buildings have wood framed windows and wood doors in wood door frames. Interior finishes are typically plaster and lath with some drywall in new buildings, or where replaced during renovations.

Road access from BC Highway 97 leads to a paved parking lot with space for approximately 80 cars in front of the Visitor Center. There is also a paved road and circular driveway in front of O'Keefe House with access from the parking lot. Roads from the parking lot to the Caretaker's House and Glamping are unpaved.

Several foot paths run between building groups across the site as seen in Figure 3. There is a wood pedestrian boardwalk that runs from the Log House to St. Anne's Church. Access to the West side of the site is currently by the North footbridge near Schubert House. The bridge, which was used to move vehicles over the creek, has been decommissioned due to structural concerns raised previously by others.

Fences on site are generally wood pole with two to four rails including fences surrounding the perimeter of the site and animal enclosures. Some fences on site are also barbed wire and infilled with chicken wire. Figure 3 shows the location of fences on site.



Figure 3: Infrastructure Map from Appendix A.

Services on site include water supply, fire protection, sewage disposal, electrical power, natural gas, and telephone and communication systems. A summary of services available by building can be found on Figure 4.

Mechanical and electrical systems are reviewed by Falcon Engineering in Appendix E and F respectively.



Figure 4: Services Map from Appendix A

3.0 Facility Condition Assessment Methodology

Facility Condition Assessments are based on:

1. Understanding the items included with the asset, in the case of O'Keefe Ranch, this is the list of buildings, services and infrastructure.
2. Visual review of the assets to assess their apparent condition.
3. Documentation of condition and recommendations arising either from the apparent condition or the reported age and expected life of each asset / asset component.

During the various site visits RJC and Falcon Engineering reviewed the following building and site components:

- Wood-Framed Windows and Doors
- Exterior Cladding
- Cedar Shake, Asphalt, and Metal Roofs
- Stone, Concrete, and Wood Foundations
- Envelope Sealants
- Rainwater Management Systems
- Electrical systems, where present.
- Mechanical systems and equipment, where present.
- Vehicle and Pedestrian Pathways and Wayfinding
- Fences

Due to the number of buildings this section of the report is arranged by the priority assessment of observations, using the following structure.

- Observations and data collected during site reviews and discussion of the current condition.
- Discussion and Recommendations for maintenance, renewal programs, and specific projects.

A more detailed description regarding facility condition assessments and heritage conservation methodology is found in Appendix B.



3.1 Risk and Consequence Priority Assessment

The condition and associated repairs of each building system or site infrastructure item have been assessed using a risk matrix presented in Table 1. The matrix considers risk probability and severity of consequence criteria.

For the purposes of this report we have uses the following definitions for the consequence severity:

- Catastrophic: The consequence will result in a life safety concern.
- Hazardous: The consequence will result in a major project that will impact the use of the building if not addressed or can cause injuries.
- Major: The consequence will result in a large project and will impact the use of the building if not addressed.
- Minor: The consequence will result in a small project and will have minor impact to the use of the building if not addressed.
- Negligible: The consequence will likely not result in a project and will have minimal impact to the use of the building.

The definitions of risk probability were as follows:

- Very Probable: Risks that are almost certain to occur.
- Somewhat Probable: These risks need regular attention, as they are bound to reoccur and therefore require a consistent mitigation strategy.
- Moderately Probable: Possible risks may occur and need some attention.
- Somewhat Improbable: Risks that have a relatively low chance of occurring but they may still have an affect.
- Improbable: Risks with a low probability of occurring.

The resulting categories of risk are grouped to recommended activity timelines to address the assessed risk for the particular item. The timelines are summarized in Table 2 on the next page.



TABLE 1: RISK ASSESSMENT MATRIX						
		CONSEQUENCE SEVERITY				
		Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
RISK PROBABILITY	Very Probable 5	5A	5B	5C	5D	5E
	Somewhat Probable 4	4A	4B	4C	4D	4E
	Moderately Probable 3	3A	3B	3C	3D	3E
	Somewhat Improbable 2	2A	2B	2C	2D	2E
	Improbable 1	1A	1B	1C	1D	1E

TABLE 2: RECOMMENDED RISK REMEDIATION TIMELINES		
	High Priority	0-1 Years
	Moderate Priority	2-5 Years
	Lesser Priority	6-10 Years

4.0 Summary of Observations

RJC attended site on October 17, 2023, October 18, 2023. We revisited site in collaboration with Falcon Engineering on November 17, 2023. A summary of the observations can be found below. Where there are mechanical and electrical observations included in Appendices E and F these are brought forward for reference. Detailed building summaries with by-component notes are included in Appendix C.

When referring to a condition that affects multiple buildings “many” refers to twelve or more buildings, “a few” refers to three to eleven buildings, and individual buildings are listed when a condition affects three or fewer buildings.

To aid in transition to planning for the upcoming Phase 2 reporting, the following sections include observations that are summarized in order of Priority Ranking (i.e. higher priority items are followed by lower priority items). The methodology for developing the priority score for each item is outlined in Section 3. Our reporting is further organized by priority within each major category. This method of reporting has been carried through the summary and recommendation sections of the report.

4.1 High Priority

The observations noted in this section generally represent the 5A, 5B, 5C, 4A, 4B, and 3A priority categories as described in Section 3.

Items of interest noted by RJC are as follows:

- The wood-framed emergency exit stairs from the second floor of the Greenhow Museum are significantly deteriorated at the footing connections and railings.
- The wood stairs to the basement of the Greenhow Museum are sloped to the west and have deterioration on the step to stringer connections.
- The low-slope roof on the Garage (B3 in Appendix C) of the Meat & Dairy building is deflecting significantly. A post near the center of the room is providing support, resulting in a wave-like deflected shape. The joists supporting this roof span approximately 20' and are spaced generally at 16" on center.
- At the Blacksmith Shop there is no separation between the active chimney and the wood shake roof. This may pose a fire hazard. At the O'Keefe House the south most chimney is leaning and is currently supported by ties.
- The buttressed concrete walls at the Hay Shed are deflecting out of plane. The concrete at the base of wall is deteriorated and, in some locations, has exposed rebar reinforcement.
- The sheet metal roof of the Log House lean-to, which is situated to be eye-level due to the adjacent ground profile, has sharp edges and is a hazard to pedestrians.
- The wood retaining wall behind the Caretaker's House has displaced outwards at its base, likely due to earth pressure overload. Wood components at the tie back connections are deteriorating in some locations.
- The cedar shake roof on the Stagecoach Depot is in poor condition and has signs of an active leak, likely due to missing or otherwise failed shingles.
- One roof overhang post near the North side of the Visitor Center has rotted completely from its footing connection and is unsupported.
- Efflorescence and water staining is present on the interior face of the Greenhow Museum stone foundation wall. There is also evidence of previous water leakage in the form of staining on the vapour barrier surrounding the artifact storage space in the basement. Organic growth is present throughout the artifact collection. Efflorescence is also present at the base of wall on the interior face of the concrete basement wall in the Visitor Center.
- As outlined in the O'Keefe Ranch Bridge Field Review and Assessment Memo produced by McElhanney on April 28, 2023.
 - "The bridge is showing signs of moderate failure. This coupled with the lack of guardrails for pedestrians direct [McElhanney] to the conclusion that the bridge is beyond repair and must be removed and replaced."

4.2 Moderate Priority

The observations noted in this section generally represent the 5D, 5E, 4C, 4D, 4E, 3B, 3C, 3D, 2A, 2B, 2C, and 1A priority categories as described in Section 3.

Items of interest by RJC and Falcon Engineering are as follows:

4.2.1 Moderately High Priority Structural Conditions

- The brick foundation columns at O'Keefe House have freeze-thaw damage and are spalled.
- The Schubert Barn is leaning towards Deep Creek.
- The Schubert House foundation wall has water staining on the interior where the hose bibb is located at the exterior on the east side.
- The ceilings in the small dining room and bathroom in the O'Keefe House were also noted to be deflected. There are signs of water damage on the ceiling in the bathroom at the O'Keefe House and on the attic floor above.
- Joists in the Meat Building (B2) of the Meat & Dairy building were cut when the cooler room was installed and are currently cantilevered on the East side.
- Beams and joists in the Dairy Building (B1) of the Meat & Dairy building are deflecting at midspan.
- The masonry block foundation wall at the Schubert House has been damaged and is out of plane in two locations.
- Ceiling finish deflection was noted in the East room of the Red Shed with signs of water staining in localized areas.
- The concrete foundation wall of the Carriage Shed is undermined due to animal activities at the South-East elevation.

4.2.2 Moderately High Priority Roof Conditions

- Many cedar shake roofs have significant organic build up in the form of moss. Shakes were noted to be loose, curled or missing on multiple buildings.
- The fascia on a few of the buildings have chipped paint or are otherwise deteriorated from water damage. Areas where the fascia is deteriorated typically do not have gutters.
- A few buildings were noted to have water staining on the underside of roof sheathing or soffit.
- The low slope built up roof on the Meat and Dairy building is covered by organic growth and has ponding due to deflected roof structure. There is one scupper and downspout to divert water off of this roof. Drainage was noted to be poor.

4.2.3 Moderately High Priority Envelope Conditions

- Water ingress at the North and South elevations of Meat & Dairy building has resulted in deterioration and rot of floor structure (joists and rim board).
- Water staining is present at the floor joists and around the base of dormer windows at the Log House.
- Cladding along the North and South elevations of the Meat & Dairy is damaged and missing at areas of wood deterioration.
- Both ends of the Dairy room has areas of missing and deteriorated CMU blocks in the foundation wall.
- There is efflorescence and other signs of water ingress at multiple locations along the CMU basement wall in the Caretaker's House.
- The O'Keefe House attic was noted to have feces in the attic and exposed insulation. See Section 5.1.4 for further discussion on this item.

4.2.4 Moderately Low Priority Structural Conditions

- The wood posts of the lean-to shelter behind Implement Shed #1 have been buried below grade.
- The lateral bracing system for the Tack Shed and Spallumcheen Pioneer Power Club Display #2 has toe-nailed anchor straps connecting the beams to the poles.
- The handrail of the ramp at the back entrance to St. Anne's Church is rotted.
- Stairs to the Chinese Cook's House are supported by a concrete footing at the base and nailed into an exposed ledger attached to the cladding and sheathing at the top. The fasteners into the ledger are losing withdrawal resistance.
- Concrete stairs to the Dairy room of the Meat & Dairy building are spalled and the uneven surface poses a tripping hazard to pedestrians.
- The concrete at the base of the Log Barn's East lean-to has eroded and is poorly consolidated resulting in the slab not being supported.

4.2.5 Moderately Low Priority Envelope Conditions

- Cladding at a few of the buildings is deteriorated in the form of woodpecker holes, significant water staining, and loose or missing siding.
- The log wall of the Balmoral School House has rotted in some locations.
- Vegetation is in contact with the cladding at many of the buildings and has begun to deteriorate cladding.
- Windows and doors in most of the buildings have deteriorated trims. Windows either have no seals or seals are hard to the touch and exhibiting adhesive failure.
- Bricks are spalling at the top of chimneys at the Log House. At the Schubert House the mortar joints of the chimney are starting to fail.

- Painted white brick at the South side of the Meat & Dairy building is spalled resulting in cross-sectional area loss and paint being damaged.
- The wood porch at the O'Keefe House is rotting at the edges. There are no scuppers or rainwater leaders to allow water to move away from the edge of the porch.
- Exposed truss tails on the Visitor Center roof are rotted.

4.2.6 Moderate Priority Mechanical and Electrical Conditions

- Some of the inaccessible piping systems are getting close to the end of their service lives and could become increasingly unreliable.
- A few installations do not comply with current standards regarding fire rated enclosures around gas fired appliances at locations noted in section 2.0 of Appendix E.
- Hot water has not been provided in all washrooms.
- Some appliances are nearing the end of their service life, specific items at buildings are noted in section 2.0 of Appendix E.
- Gas piping does not appear to have the appropriate protective coatings at the Museum and SPPC Clubhouse.
- No drain pan has been provided at several hot water heaters.
- At the Stagecoach Depot there is an old meter base that is not in use.
- Communications and branch circuit wiring in the O'Keefe House basement and Schubert House crawlspace are messy.
- At Spallumcheen Pioneer Power Club Display #1 the non-weatherproof disconnect switch is exposed to the weather and is rusting.
- The disconnect switch at the Meat and Dairy Building is very old.
- There is an older style ITE panel in the Pump House for which replacement breakers will be difficult to obtain.

4.3 Lesser Priority

The observations noted in this section generally represent the 3E, 2D, 2E, 1B, 1C, 1D, and 1E risk categories as presented in Section 3.

Items of interest noted by RJC are as follows:

- Plaster and lath finish is cracking in most walls and ceilings in the Schubert House and O'Keefe House. In one location in the Schubert House plaster and lath has been replaced by drywall. There is a large section of finish missing in the Schubert House kitchen.



- Surface corrosion is present on the steel saddle connections at the base of posts in both Implement Sheds.
- A few cedar shake and metal roofs are in good condition with normal signs of aging.
- The siding of a few buildings has minor deterioration in the form of fading or chipped paint, water staining, or loose shingles.
- Insulation around piping is in poor condition or missing in some locations in buildings with domestic water distribution.
- Steel uninsulated piping is used for the hydronic heating systems at O'Keefe House. If the hot water heating systems gets above 140°F, the bare pipe can scald bare skin in seconds. It appears that these systems are well barricaded from the public, to avoid an inadvertent incident.
- The only building that is heated but not connected to Natural gas is the St Anne's Church that has a dedicated propane tank.
- The paint is chipping off the white picket fence surrounding the Cemetery.
- Small buildings (sheds, feed buildings, firewood storage, pens, etc.) are in generally good condition with the following exceptions:
 - A joist at the firewood storage structure west of Schubert House is rotted and deflecting significantly.
 - One animal feed building at the West pens is leaning.
 - The firewood storage structure in the Red Shed and Carriage Shed courtyard has sustained impact damage.
 - There is a missing rail at the North tractor shelter near the cemetery.
- Lateral and alligator cracking is observed throughout the paved asphalt surfaces.
- The wood platform outside the bathroom entrances to the Carriage Shed is wet and at high risk for rot due to continuous exposure and lack of cover.
- The concrete foundation wall at the Cowboy Bunkhouse is spalled on the South-West elevation. At other elevations the foundation is buried and could not be reviewed.
- The decorative shutters on the O'Keefe house are deteriorated and the paint is chipped.
- The concrete slab-on-grades outside the Carriage Shed and Red Shed exhibit minor cracking.
- There is cracking in the Red Shed addition concrete slab-on-grade.
- The wood retaining wall at the North side of the Log Barn is leaning outwards.
- Three posts of the Gazebo have checking, and one beam is cracked.
- There is minor cracking in the Stagecoach Depot foundation wall.
- The wood posts at the Windmills are buried at grade and are at risk for rot.

5.0 Discussion and Recommendations

Visually accessible building components and site features were visually reviewed from both the inside and outside of the buildings to identify evidence of distress or deterioration of the structural and envelope elements. Falcon Engineering completed reviews of the electrical and mechanical components where present in the buildings (not all buildings have mechanical and/or electrical components).

In general, the visual review found that the buildings overall are generally in fair condition with variation in condition for components in particular. Recommendations have been presented in two formats to accommodate the various roles of the reader: the first being a by-building summary and the second being a prioritized recommendation plan, typically grouped by system (e.g. roofs, window frames, etc.).

The by-building summary is intended to provide a brief discussion of the condition of each building and an overview of the recommended work. Detailed observations and by-building recommendations including maintenance items are included in Appendix C.

The prioritized recommendation plan is intended to be used as a tool to guide decision making for future work programs at the site. In the prioritized recommendations plan, recommendations have been considered into two categories: programs and projects. Programs are recommendations for work that occurs at many buildings and could be completed in phases over a period of years. Projects occur at one or a few buildings and are not considered suitable for phased completion.

A summary of our recommendations are as follows:

5.1 By-Building Summary of Recommendations

This section provides by-building recommendations for repair and preventative work. For further detail of the work that should be completed in each program and project see Section 5.2. Maintenance items have not been included and should be reviewed in Appendix C.

5.1.1 Visitor Center

The Visitor Center is in generally fair condition. The main structure appears to be performing as intended, and no overall evidence of structural distress was observed. The truss tails are rotted and may fall off becoming a hazard to pedestrians. If not addressed, ongoing rot will continue to some degree up the member and could result in more costly repair requirements. The rotted pole at the North corner which is not connected to the ground is a structural and pedestrian hazard and should be repaired. The roofing is in good condition at this time. Cladding has water staining up to half-height, likely from the in-ground irrigation, which should be re-directed away from the building. Insulated glass unit windows are in fair condition but are nearing the end of their service life and may need to be replaced in the next ten years. Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. Cooling is provided by a single

Lennox ten-ton cooling capacity Condensing Unit which was manufactured in 1999 and is nearing the end of its service life. To address the current condition of the Visitor Center we recommend the following:

- Complete miscellaneous carpentry repairs to remove rotted truss tails and repair and reconnect the rotted post. As an upgrade, consideration could be given to adding fascia boards and gutters. This upgrade is not included in Appendix C or in opinions of probable cost.
- Complete a roof maintenance program that includes maintenance on the Visitor Center roof.
- Complete cladding maintenance program that includes maintenance or replacement of the Visitor Center cladding.
- Upgrade domestic water system to provide hot water to washrooms.
- Provide the hot water heater with a drain pan to catch and direct the water to a drainage system in the event of a leak in the tank.
- Construct fire rated room to house furnaces.
- Replace cooling unit and cooling coil in furnaces.
- Complete a pipe and duct monitoring program to inspect domestic water pipes, sanitary pipes, and supply ducts every five years.
- Complete a landscaping program that includes the garden beds surrounding the Visitor Center.
- Replace IGU windows when required, plan for a window renewal program in 10 years.
- Upgrade existing insulation at domestic water supply pipes to save energy.

5.1.2 Greenhow Museum

Greenhow Museum is generally in fair condition except as noted following. The overall structure appears to be performing as intended, with no visual evidence of structural distress. The basement and second floor emergency stairs in Greenhow Museum are in poor condition and the emergency stairs are deficient when compared to the current Building Code. The organic growth present on artifacts in the Greenhow Museum Basement is a health and safety hazard. Greenhow Museum would benefit from roof maintenance and eventual replacement. Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. The Domestic hot water heater is old (approx. 40 years since manufactured) and is need of replacement. Gas piping does not appear to have the appropriate protective coatings. To address the current condition of the Greenhow Museum we recommend the following:

- Replace the second-floor emergency exit and basement stairs with Code compliant stairs, guards and railings.
- Complete a roof replacement program that includes replacing the Greenhow Museum roof.
- Complete a roof maintenance program that includes maintenance on the Greenhow Museum roof.
- Upgrade domestic water system to provide hot water to washrooms.
- Provide the hot water heater with a drain pan to catch and direct the water to a drainage system in the event of a leak in the tank.



- Construct fire rated room to house furnaces and domestic water heater.
- Replace hot water heater with new.
- Engage a technician to ensure the energy supply systems are configured to code.
- Complete a pipe and duct monitoring program to inspect domestic water pipes, sanitary pipes, and supply ducts every five years.
- Complete a landscaping program that includes the garden beds surrounding the Greenhow Museum.
- Retain an environmental professional to conduct a Hazardous Materials Assessment reviewing the organic growth in the basement. Recommendation pending basement treatment and collection storage proposal complete repair program.
 - If the artifacts are to remain in the basement considerations should be made to create a separate controlled environment. This may include creating a separate room or buffer zone to condition the current temperature and humidity of the basement to a more desirable level for the storage of artifacts. Capital cost related to creating a separate controlled environment is not included as this is considered an upgrade, and outside the scope of a Facility Condition Assessment.

5.1.3 Stagecoach Depot

The Stagecoach Depot is generally in fair to poor condition. The overall structure appears to be performing as intended, with no visual evidence of structural distress. There is active leaking in the roof causing water staining in the ceiling. Cladding is stained along the South elevation. Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. The Domestic hot water heater was manufactured in 2006. The hot water tank is approximately $\frac{3}{4}$ through the service life. The old meter base on West side of building should be removed. To address the current condition of the Stagecoach Depot we recommend the following:

- Complete a roof maintenance program that includes typical maintenance on the Stagecoach Depot roof and immediate repairs to active leaking.
- Complete a roof replacement program that includes replacing the Stagecoach Depot roof in the next two years.
- Complete a cladding maintenance program that includes maintenance or replacement of the Stagecoach Depot cladding.
- Remove meter base at West side of building.
- Upgrade domestic water system to provide hot water to washrooms.
- Replace hot water heater with new.
- Construct fire rated room to house domestic water heater.
- Upgrade existing insulation at domestic water supply pipes to save energy.
- Complete a pipe and duct monitoring program to inspect domestic water pipes and sanitary pipes every five years.

5.1.4 O'Keefe House and Caretaker's House

The O'Keefe House and attached Caretaker's House are in generally fair condition except as noted following. The overall structures appears to be performing as intended, with no visual evidence of structural distress.

The retaining wall behind the O'Keefe House is in poor condition. It is unknown if the tie back connections are from original construction or were installed to prevent further movement in the wall. The deterioration of the wood components of the wall puts it at high risk of failure.

There are reports that animal droppings and vermiculite insulation are present in the O'Keefe House attic, per the Interior Home Inspections report dated November 16, 2018, *"if these conditions are present they may pose a health and safety hazard and should be reviewed by a qualified environmental consultant"*. The chimney at the O'Keefe House is of structural concern and is a falling hazard. While it appears to be braced, the design of the brace is unknown and the condition of the chimney is such that a detailed review is required and an upgraded support may be warranted. An alternative to repairs to the chimney would be to decommission as suits Ranch operations. Costs have been carried to repair the chimney.

The plaster and lath finish in the O'Keefe House is in fair to poor condition and should be repaired or replaced to prevent it becoming a falling hazard. Although plaster and lath is a historic material there is already precedent on site at the Schubert House for replacement with drywall, so either repair with like materials or replacement with drywall is an option. Replacement with like materials will carry a higher cost than replacement with drywall. Costs to replace with drywall have been carried in the OPC.

The Domestic hot water heater was installed in 2008. The hot water tank is approximately $\frac{3}{4}$ through the service life. The condensate is intentionally plugged and is showing signs of degradation and rust. Care should continue to be made to keep the public from touching the heating piping and terminal units while the systems are hot. Communication wiring is messy in the basement. To address the current condition of the O'Keefe House and Caretaker's House building we recommend the following:

- Provide additional support to the leaning chimney which is currently supported by ties. Also complete any brick repairs at this time.
- Complete a roof maintenance program that includes maintenance on the O'Keefe House roof.
- Complete a roof replacement program that includes replacing the O'Keefe House roof.
- Complete a window and door program that includes maintenance and replacement of protective films and shutters on the O'Keefe House windows.
- Complete a landscaping program that includes the garden beds surrounding the Greenhow Museum.
- Retaining a report by a geotechnical engineer reviewing the retaining wall behind the Caretaker's House.
- Retain an environmental engineering to conduct a Hazardous Materials Assessment reviewing the animal feces and vermiculite insulation in the attic.
- Clean and repair the Caretaker's House CMU basement wall where there is water damage. Add drainage around the basement.

- Retain a structural engineering report reviewing the O'Keefe House roof and deflected ceilings in the Bathroom and Small Dining Room.
- Provide temporary shoring and complete repairs at brick foundation columns.
- Either repair plaster and lath wall and ceiling finishes with like materials or replace with drywall.
- Clean up messy communications and branch circuit wiring in the basement.
- Replace hot water heater with new.
- Construct fire rated room to house domestic water heater and boiler.
- Provide the hot water heater with a drain pan to catch and direct the water to a drainage system in the event of a leak in the tank.
- Replace condensate pump with new.
- Upgrade existing insulation at domestic water supply pipes to save energy.
- Complete a pipe and duct monitoring program to inspect domestic water pipes and five years.

5.1.5 Pavilion

The Pavilion is in generally good condition. The overall structures appears to be performing as intended, with no visual evidence of structural distress. Water staining on the soffit indicates an excess of moisture in the roof. To address the current condition of the Pavilion we recommend the following:

- Complete a roof Maintenance program that includes adding eavestroughs and downspouts and other typical maintenance at the Pavilion roof.

5.1.6 Gazebo

The Gazebo is in generally fair condition. The overall structures appears to be performing as intended, with no visual evidence of structural distress. To address the current condition of the Gazebo we recommend the following:

- Complete a roof maintenance program that includes maintenance on the Gazebo roof.
- Complete an annual monitoring program of the checking posts and cracked beam for changes in condition.

5.1.7 Pioneer Cabin

The Pioneer Cabin is in generally poor condition. The overall structures appears to be performing as intended, with no visual evidence of structural distress. To address the current condition of the Pioneer Cabin we recommend the following:

- Complete a roof Maintenance program that includes cutting back the overhanging tree, clearing debris from the roof and other typical maintenance at the Pioneer Cabin roof.
- Complete a roof replacement program that includes replacing the Pioneer Cabin roof.
- Complete a cladding maintenance program that includes the repair of the Pioneer Cabin cladding. The Pioneer Cabin should be considered one of the first buildings to be addressed under this program.

5.1.8 Cowboy Bunkhouse

The Cowboy Bunkhouse is in generally fair condition. The overall structures appears to be performing as intended, with no visual evidence of structural distress. To address the current condition of the Cowboy Bunkhouse we recommend the following:

- Complete a cladding maintenance program that includes maintenance to the Cowboy Bunkhouse cladding.
- Complete a window and door program that includes the door and door trims and other typical maintenance at the Cowboy Bunkhouse.
- Complete a roof maintenance program that includes maintenance on the Cowboy Bunkhouse roof.
- Complete a roof replacement program that includes replacing the Cowboy Bunkhouse roof.
- Complete an annual monitoring program of the spalled foundation wall for changes in condition.

5.1.9 Bird Pens

The Bird Pens are in generally good condition. There is currently no recommended work for the Bird Pens.

5.1.10 Windmill #1

Windmill #1 is in fair condition considering its age and does not currently pose a hazard to visitors. To address the current condition of Windmill #1 we recommend the following:

- Complete an annual monitoring program of the buried posts for changes in condition.

5.1.11 Log Barn

The Log Barn is in generally fair condition. The overall structure appears to be performing as intended, except as noted following. Load capacity of the barn loft should be assessed and use of the loft restricted to align with the structural capacity. The lack of support beneath the concrete slab-on-grade at the East lean-to of the Log Barn may lead to future cracking and failure. To address the current condition of the Log Barn we recommend the following:

- Assess structural capacity of the barn loft and restrict use based on the available capacity.
- Provide fill below the East lean-to concrete slab-on-grade.
- Complete a roof maintenance program that includes maintenance on the Log Barn roof.
- Complete a roof replacement program that includes replacing the Log Barn roof.
- Complete a cladding maintenance program that includes maintenance to the Log Barn cladding.

5.1.12 Hay Shed

The Hay Shed is generally in poor condition and is not suitable for its current use as feed storage. The concrete walls are in poor condition due to deterioration. It appears that the shed is of low use/value to the current operations. To avoid repairs this building could be decommissioned if feasible to Ranch operations. Otherwise, to address the current condition of the Hay Shed we recommend the following:

- Temporarily restrict access to the hay shed.
- Undertake a detailed structural review to develop a remediation program.
- Implement the structural remediation program, including concrete repairs at the buttressed walls
- Complete a roof maintenance program that includes maintenance on the Hay Shed roof.
- Complete a roof replacement program that includes replacing the Hay Shed roof.

5.1.13 Ye Ol' Feed Shed

Ye Ol' Feed Shed is in generally fair condition. To address the current condition of Ye Ol' Feed Shed we recommend the following:

- Complete a roof maintenance program that includes maintenance on the Ye Ol' Feed Shed roof.
- Complete a roof replacement program that includes replacing the Ye Ol' Feed Shed roof.
- Complete a cladding maintenance program that includes maintenance to the Ye Ol' Feed Shed cladding.
- Complete a window and door program that includes maintenance of the window and door at Ye Ol' Feed Shed.

5.1.14 Meat & Dairy Building

The Meat & Dairy Building is in generally poor condition, with noted areas of distress and deterioration affecting the structure and use of this building. Excessive water ingress at the floor of the Meat Building (B2 in Appendix C) has caused the structure to rot. If the floor is not repaired, it will continue to deteriorate and is in danger of collapsing. The CMU foundation walls of the Dairy Building (B1 in Appendix C) are also deteriorated and in need of repair. The joists in both the Dairy and Garage (B3 in Appendix C) are deflecting beyond what is typically allowed for occupancy and require structural assessment and likely remediation or alternate support. The cut



joists in the Meat Building are not currently of structural concern but could be supported for to reduce incidences of occupant discomfort when the current condition is observed. The disconnect switch is very old and should be replaced. To address the current condition of the Meat & Dairy Building we recommend the following:

- Complete repairs to the North and East Dairy walls and rotting Meat Building floor structure.
- Complete brick repairs at the South Dairy wall.
- Provide permanent additional support to joists in Dairy and Garage.
- Replace disconnect switches. Complete a roof maintenance program that includes maintenance on the Meat & Dairy Building roof.
- Complete a roof replacement program that includes replacing the Meat & Dairy Building roofs.
- Complete a window and door program that includes maintenance of the windows and doors at the Meat & Dairy Building.
- Complete a cladding maintenance and painting program that includes maintenance and painting at the Meat & Dairy Building.
- Complete a landscaping program that includes the garden beds surrounding and hill behind the Meat & Dairy Building.

5.1.15 Chinese Cook's House

The Chinese Cook's House is generally in poor condition. The overall structure appears to be performing as intended. Cedar shakes on the walls and roof have reached the end of their service life, although no leaking has been reported. The stairs to the Chinese Cook's House are not adequately supported at the top which may cause future failure and injury to visitors under continued use. To address the current condition of the Chinese Cook's House we recommend the following:

- Complete a cladding maintenance and painting program that includes typical repair or replacement of the Chinese Cook's House cladding and providing additional support or connection to the structure of the building at the top of the stairs.
- Complete a roof maintenance program that includes maintenance on the Chinese Cook's House roof within the next two years.
- Complete a roof replacement program that includes replacing the Chinese Cook's House roofs.
- Complete a window and door program that includes maintenance of the windows and doors at the Chinese Cook's House.

5.1.16 Log House

The Log House is in generally fair to poor condition. The overall structure appears to be performing as intended. The lean-to roof at the kitchen entrance is in fair condition but terminates at eye-level with sharp edges and is a



safety hazard to pedestrians. The chimney is in fair condition but is beginning to reach the end of its service life. If allowed to continue to spall the chimney could fall and will be a risk to pedestrians below. To address the current condition of the Log House we recommend the following:

- Complete a roof maintenance program that includes typical maintenance on the Log House roof and includes re-detailing the lean-to roof to remediate the risk to pedestrians.
- Replace spalled bricks and repoint mortar joints at chimney.
- Complete a roof replacement program that includes replacing the Log House roof.
- Complete a window and door program that includes maintenance of the windows and doors at the Log House.
- Complete a landscaping program that includes the garden beds surrounding the Log House.
- Complete annual monitoring program to review signs of active leaking at the interior of the building, particularly from the roof and floor.

5.1.17 General Store

The General store is in generally fair condition. The overall structure appears to be performing as intended. To address the current condition of the General Store we recommend the following:

- Complete a roof maintenance program that includes maintenance on the General Store roof.
- Complete a roof replacement program that includes replacing the General Store roofs.
- Complete a window and door program that includes maintenance of the windows and doors at the General Store.
- Complete a cladding maintenance program that includes maintenance of the General Store cladding.
- Complete a landscaping program that includes the garden beds surrounding the General Store.

5.1.18 Blacksmith Shop

The Blacksmith Shop is in generally fair condition. The overall structure appears to be performing as intended. Under current use the chimneys at the Blacksmith shop, which serves active forges, is a potential fire hazard. To address the current condition of the Blacksmith Shop we recommend the following:

- Provide a double walled flue flashing for the chimney at combustible roofs.
- The forge ventilation systems should be replaced, and appropriate thimbles are needed for the penetrations through the roof.
- Complete a roof maintenance program that includes maintenance on the Blacksmith Shop roof.
- Complete a roof replacement program that includes replacing the Blacksmith Shop roofs.
- Complete a cladding maintenance program that includes maintenance of the Blacksmith Shop cladding.

- Complete a window and door program that includes maintenance of the windows and doors at the Blacksmith Shop.

5.1.19 Red Shed

The Red Shed is in generally fair condition. The overall structure appears to be performing as intended. Minor cracking in the concrete slab on grade and extended slab are not currently of concern. As the foundation has been deflected out of plane for many years and there are no other signs of movement in the building the condition of the foundation is not currently of structural concern. To address the current condition of the Red Shed we recommend the following:

- Complete a roof maintenance program that includes maintenance on the Red Shed roof.
- Complete a roof replacement program that includes replacing the Red Shed roof.
- Complete a window and door program that includes maintenance of the windows and doors at the Red Shed.
- Complete a cladding maintenance program that includes typical maintenance of the Red Shed cladding and patch repair of stained plywood sheathing.
- Complete an annual monitoring program of the cracking in the concrete slab-on-grade for changes in condition. This program can be completed with typical maintenance completed by the Society.
- Complete an annual monitoring program of the foundation and building as a whole for signs of movement such as cracking in walls. This program can be completed with typical maintenance completed by the Society.

5.1.20 Carriage Shed

The Carriage Shed is in generally fair condition. The overall structure appears to be performing as intended, except as noted. Where the foundation is undermined, there is a lack of support for the foundation which may cause future failures. Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. The electric domestic hot water heater is nearing the end of its service life. To address the current condition of the Carriage Shed we recommend the following:

- Temporarily support the foundation where undermined and add fill below.
- Upgrade domestic water system to provide hot water to washrooms.
- Replace domestic hot water heater with new.
- Complete a roof maintenance program that includes maintenance on the Carriage Shed roof.
- Complete a roof replacement program that includes replacing the Carriage Shed roof.
- Complete a cladding maintenance program that includes maintenance of the Carriage Shed cladding.

5.1.21 St. Anne's Church

St. Anne's Church is in generally fair condition. The overall structure appears to be performing as intended. The wood ramp leading to the rear room of the building was noted to be in poor condition and the connection to the guards was failing. Water staining on the ceiling and wall of the sacristy is likely from the chimney penetration although further investigation is required to determine the root cause. St. Anne's Church is the only building that is heated but not connected to Natural gas and has a dedicated propane tank. Gas piping where visible appears to be in good condition. We assume there is a propane fired furnace in the ceiling space above the back entry to the church. Our sense is the unit is fairly old as the venting is an older style. Modern furnaces use plastic pipe for combustion air and venting. To address the current condition of St. Anne's Church we recommend the following:

- Remove and replace the existing wood ramp and guards with new. This project does not meet the minimum \$5,000 value of a project as set out by the RFP documents and would be considered a maintenance item. It is not included in the OPC.
- Update the propane furnace to a sealed combustion condensing furnace considering the cost of propane. Construct a fire rated room to house the new furnaces.
- Complete a supply duct monitoring program every five years.
- Complete a roof maintenance program that includes typical maintenance on the St. Anne's Church roof and investigation of the chimney penetration to confirm source of leaking in the sacristy and repair flashing.
- Complete a window and door program that includes maintenance of the windows and doors at St. Anne's Church.

5.1.22 Smoke House

The Smoke House is in generally fair condition considering its age and use. To address the current condition of the Smoke House we recommend the following:

- Complete a cladding maintenance program that includes patching the North-East corner and other typical maintenance of the Smoke House cladding.

5.1.23 Pump House

The Pump House is in generally fair condition. There was a leak noted in the North East corner of the building. The leak appears to be a result from the roof. The interior finishes should be removed to review to condition of the structure. The piping systems use galvanized, copper, and plastic piping. Galvanized piping is no longer approved on domestic water systems. The building has an older style ITE panel and replacement breakers will be hard to find. To address the current condition of the Pump House we recommend the following:

- Remove interior finishes and repair and deteriorated wood framing caused by the leak.
- The next time the system needs work, we recommend replacing the galvanized piping with approved domestic water systems.
- Replace ITE panel with new.
- Complete a roof maintenance program that includes typical maintenance and repair of the leaks at the Pump House roof.
- Complete a cladding maintenance program that includes replacing stained plywood sheathing and other typical maintenance of the Pump House cladding.
- Complete a landscaping program that includes the vegetation surrounding the Pump House.

5.1.24 Windmill #2

Windmill #2 is in fair condition considering its age and does not currently pose a hazard to visitors. To address the current condition of Windmill #2 we recommend the following:

- Complete an annual monitoring program of the buried posts for changes in condition.

5.1.25 Water Cisterns and Cover

The Water Cisterns and Cover are in generally fair condition. Cracking in the cisterns is minor and not of concern under current use. To address the current condition of the Water Cisterns and Cover we recommend the following:

- Complete an annual monitoring program of the cracking in the Water Cisterns for changes.
- Complete a roof maintenance program that includes maintenance on the Water Cistern Cover roof.
- Complete a roof replacement program that includes replacing the Water Cistern Cover roof.
- Complete a window and door program that includes maintenance of the window at the Water Cistern Cover.
- Complete a cladding maintenance and painting program that includes maintenance of the Water Cistern Cover cladding.

5.1.26 Spallumcheen Pioneer Power Club Display #1

The SPPC Display #1 is in generally good condition. The non-weatherproof disconnect switch is exposed to the weather and is rusting. To address the condition at SPPC Display #1 we recommend:

- Replace the disconnect switch.

5.1.27 Spallumcheen Pioneer Power Club Display #2

The SPPC Display #2 is in generally fair condition. However, the strap ties that currently provide the lateral bracing for the barn are not a sufficient structural system. To address the current condition of the Spallumcheen Pioneer Power Club Display #2 we recommend the following:

- Provide new strap anchors at steel ties.
- Complete a roof maintenance program that includes maintenance on the SPPC Display #2 roof.
- Complete a roof replacement program that includes replacing the SPPC Display #2 roof.

5.1.28 Implement Shed #1

Implement Shed #1 is in generally fair condition. Some posts of the lean-to structure have been buried over time and are in danger of rot if not re-exposed. Surface corrosion on the steel saddle connections at the base of the barn posts is not currently of concern but will continue to corrode the connection if not addressed. The roof currently has significant organic growth on the north side and has missing shakes on the south. To address the current condition of Implement Shed #1 we recommend the following:

- Complete a roof maintenance program that includes maintenance on the Implement Shed #1 roof.
- Complete a roof replacement program that includes replacing Implement Shed #1 roof.
- Complete a landscaping program that includes the vegetation surrounding Implement Shed #1.
- Expose lean-to posts up to concrete footing.

5.1.29 Implement Shed #2

Implement Shed #2 is in generally fair condition. Surface corrosion on the steel saddle connections at the base of the barn posts is not currently of concern but will continue to corrode the connection if not addressed. The roof has significant debris from the tree to the North and has had extensive localized shake replacement. To address the current condition of Implement Shed #2 we recommend the following:

- Complete a roof maintenance program that includes maintenance on the Implement Shed #2 roof.
- Complete a roof replacement program that includes replacing Implement Shed #2 roof.
- Complete a landscaping program that includes the vegetation surrounding Implement Shed #2.
- Complete a cladding maintenance program that includes maintenance of the Implement Shed #2 cladding.
- Expose lean-to posts up to concrete footing.

5.1.30 Tack Shed

The Tack Shed is in generally good condition. The strap ties that currently provide the lateral bracing for the barn are not sufficient from a structural perspective. To address the current condition of the Tack Shed we recommend the following:

- Provide new strap anchors at steel ties.

5.1.31 Corral

The fence and announcer booth are in generally good condition. The grandstand platform is a hazard to visitors in its current condition. It should be removed and could be replaced as desired by the City and the Society. Costs have been carried to remove and replace the grandstand. To address the current condition of the Corral we recommend the following:

- Remove grandstand platform with option to replace with new if desired.

5.1.32 Glamping

The glamping area appears to be in generally good condition. As the glamping site becomes more popular, the operator may need to add more toilet systems to keep up with demand. Improvement to toilet systems, including septic system upgrades are not included in recommendations or opinions of probable costs as these would be improvements to the current installations.

5.1.33 Balmoral School House

Balmoral School House is in generally fair condition. Localized rotting of logs at the exterior walls should be repaired before they become of structural concern. To address the current condition of Balmoral School House we recommend the following:

- Repair logs where they have deteriorated.
- Complete a roof maintenance program that includes maintenance on the Balmoral School House roof.
- Complete a roof replacement program that includes replacing Balmoral School House roof.
- Complete a window and door program that includes maintenance of the window at the Balmoral School House.
- Complete a cladding maintenance program that includes maintenance of the Balmoral School House cladding.

5.1.34 Schubert House

Schubert House is in generally fair condition. The foundation at Schubert House is in fair condition. Some localized damage to the concrete masonry foundation appears to have been caused during the restoration process or other work and should be repaired. The plaster and lath finish is in poor condition and should be repaired or replaced to prevent it becoming a falling hazard. While plaster and lath is a heritage material, a precedent for replacement with drywall has already been set. The chimney is in fair condition but is beginning to reach the end of its service life. If allowed to continue to deteriorate the chimney poses a projectile risk to pedestrians below. There is messy wiring in the crawlspace that should be cleaned up. To address the current condition of the Schubert House we recommend the following:

- Complete localized foundation wall repairs at the wood pony wall where tilted and repair any damaged CMU.
- Complete a roof maintenance program that includes maintenance on the Schubert House roof.
- Complete a roof replacement program that includes replacing the Schubert House roof.
- Complete a window and door program that includes maintenance of the windows and doors at Schubert House.
- Complete a cladding maintenance and painting program that includes maintenance of the Schubert House cladding.
- Complete a landscaping program that includes the vegetation surrounding the Schubert House.
- Repoint mortar at the chimney.
- Either repair plaster and lath wall and ceiling finishes with like materials and heat in the winter or replace with drywall.
- Clean up wiring in crawlspace.

5.1.35 Schubert Barn

The Schubert Barn is in generally fair condition considering its age. However, it is leaning towards Deep Creek which is of structural concern. RJC had no access to the interior of the barn during our visit so the cause of the leaning could not be determined. To address the current condition of the Schubert Barn we recommend the following:

- Retain structural engineer report to review whole building structural system.
- Complete a roof maintenance program that includes maintenance on the Schubert Barn roof.
- Complete a roof replacement program that includes replacing the Schubert Barn roof.
- Complete a cladding maintenance program that includes maintenance of the Schubert Barn cladding.

5.1.36 Spallumcheen Pioneer Power Club Clubhouse (a.k.a. Maintenance Building)

The SPPC Clubhouse and Maintenance Building is in generally good condition. Some posts supporting the lean-to at the back and side of the building have rotted and should be repaired. The hole in the North lean-to roof also diminishes its weather-proofing abilities. The Domestic hot water heater is nearing the end of its service life and is in need of replacement. The furnace is at the end of its service life. Gas piping does not appear to have the appropriate protective coatings. To address the current condition of the Spallumcheen Pioneer Power Club Clubhouse we recommend the following:

- Remove rotted wood from posts and add new pedestal.
- Complete a roof maintenance program that includes maintenance on the SPPC Clubhouse roof.
- Complete a cladding maintenance program that includes maintenance of the SPPC Clubhouse cladding.
- Replace domestic water heater. Provide the hot water heater with a drain pan to catch and direct the water to a drainage system in the event of a leak in the tank.
- Upgrade heat generation system.
- Construct fire rated room to house domestic water heater and furnaces.
- Engage a technician to ensure the energy supply systems are configured to code.
- Complete a pipe and duct monitoring program to inspect domestic water pipes, sanitary pipes, and supply ducts every five years.
- Upgrade existing insulation at domestic water supply pipes to save energy.
- Complete a landscaping program that includes the vegetation surrounding the SPPC Clubhouse and lean-tos.

5.1.37 Storage Building

The Storage Building is in generally fair condition. To address the current condition of the Storage Building we recommend the following:

- Complete a landscaping program that includes the vegetation surrounding the Storage Building.

5.1.38 Storage Shed

The storage shed is in generally poor condition. Although the super structure appears to be in fair condition with minor staining at the base of posts, the roofing is in poor condition with missing sheathing and shingles, excessive moss, and poor condition of the existing shingles. To address the current condition of the Storage Shed we recommend the following:

- Complete a roof replacement program that includes replacing the Storage Shed roof.
- Complete a roof maintenance program that includes maintenance on the Storage Shed roof.

5.1.39 Foot Bridge

The new Foot Bridge is in generally good condition. There is currently no recommended work for the Foot Bridge.

5.1.40 Vehicle Bridge (Currently Decommissioned)

The Decommissioned Bridge is currently in poor condition and, per report by McElhanney, is not suitable for use. To address the current condition of the Decommissioned Bridge we recommend the following:

- Retain environmental engineer Environment Impact Assessment for the removal of the bridge.
- Remove and dispose of bridge
- Assess whether a new bridge is beneficial to the site and, if so, replace with new.

5.1.41 Log Foot Bridge

The Log Foot Bridge is in poor condition and it is not suitable for use. To address the current condition of the Log Foot Bridge we recommend the following:

- Retain environmental engineer Environment Impact Assessment for the removal of the bridge.
- Remove and dispose of bridge.

5.1.42 Small Buildings

The animal feed buildings and other small buildings are in generally good condition. A few buildings are in poor condition due to age or have sustained previous damage and require repair. To address the current condition of the Small Buildings on site we recommend completing the following:

- Complete a small building maintenance program which includes the following items in the next five years:
 - Repair fire storage structure West of Schubert House.
 - Replace north most animal feed building in group South of Log Barn
 - Replace railing on North tractor shelter near cemetery.
 - Repair wood storage building near Carriage Shed and Red Shed.
- Complete a landscaping program which addresses the vegetation around small buildings.



5.1.43 Parking Lots and Roads

The parking lots are in fair condition. Repair will be required to maintain drivability. To address the current condition of the Parking Lots and Roads we recommend the following:

- Complete a road maintenance program to repair paved surfaces over the next seven years as required.

5.1.44 Fences

Fencing is in varying but generally good condition with areas of maintenance being required. To address the current condition of the Fences we recommend the following:

- Complete a fencing maintenance program over the next 15 years that allows for the repair and replacement of 2 km of fence per year.

5.1.45 Irrigation and Water Lines

Irrigation Lines are varying but generally good condition where visible. However, the majority of the system is buried and was not reviewed. The Water lines and hydrant servicing the O'Keefe Ranch were installed in 2010 and are assumed to be in good condition. It has been reported that the O'Keefe Ranch site is on a permanent water quality advisory from Interior Health as they have low chlorine issues and have had positive coliform samples. Further assessment will be required to determine a long term solution to this issue. Cost associated with addressing this problem are not known and have not been included in the evaluation.

To address the current condition of the Irrigation and Water Lines we recommend the following:

- Complete an irrigation and water line maintenance program over the next 50 years that allows for the repair and replacement of 50 m of water lines and connected hydrants per year.

5.2 Prioritized Recommendation Plan

This section proposes a prioritized recommendation plan of programs and projects based on the recommended actions above and the risk assessment matrix presented in Section 3.0. The opinion of probable costs for each program and project can be found in Section 6.0 of this report. Recommended work has been grouped into Programs and Projects based on the following criteria:

Programs: work is to be completed at multiple buildings in phases over a period of several years.

Projects: work is to be completed at one building or at multiple buildings and is not phased over several years.



5.2.1 High Priority Programs

Table 3, identifies programs address conditions considered to be of moderate priority and should begin within the next year.

TABLE 3: HIGH PRIORITY PROGRAMS			
Item	Location	Program Title	Description
1	All Building Roofs	Roof Maintenance Program	<p>Clean eavestroughs, remove vegetation and debris from roofs bi-annually (fall/spring). Replace loose or missing shingles as required. Repair and repaint fascia as required.</p> <p>Immediate repairs to active leaking at Stagecoach Depot.</p> <p>Cut back overhanging tree and remove debris from Pioneer Cabin roof.</p> <p>Re-Detail Log House Lean-To roof edge with mitered edges and add signage and post to redirect pedestrians.</p> <p>Investigate chimney penetration at St. Anne's Church to confirm source of leaking and repair flashing.</p> <p>Review and repair leaks at Pump House roof.</p>
2	All Buildings and Small Buildings	Landscaping, Small Building Maintenance, and Monitoring Budget Program	<p>Landscape to provide 4" clearance around buildings.</p> <p>Repair or replace small buildings as required. See Section 5.1 for immediate projects.</p> <p>Continue to monitor conditions indicated in Section 5.1 for changes. Monitoring can be completed internally. Notify a professional if conditions change. At a minimum the following items should be included in the annual monitoring program.</p> <ul style="list-style-type: none"> ▪ Gazebo checking posts and cracked beam. ▪ Cowboy Bunkhouse spalled foundation wall. ▪ Both Windmills buried posts. ▪ Log House active leaking at the interior of the building. ▪ Red Shed cracking in the extended concrete slab-on-grade, foundation, and building for movement. ▪ Water Cisterns cracking in walls. <p><i>Note. This program is considered high priority based on the recommended timeline not the severity of the condition.</i></p>

5.2.2 Moderate Priority Programs

Table 4, on the next page, identifies programs address conditions considered to be of moderate priority and should begin with two to five years.



TABLE 4: MODERATE PRIORITY PROGRAMS

Item	Location	Program Title	Description
3	All Building Roofs	Roof Replacement Program	Complete a roof replacement program starting in the next 5 years. The program is recommended to replace the roofs of four buildings a year for the next nine years. The first roofs considered for replacement should include the Stagecoach Depot and Chinese Cook's House. For a full prioritization of roof replacements see Appendix G.
4	All Sanitary and Domestic Distribution Piping and Supply Ducts	Mechanical System Monitoring and Assessment Program	See Section 2.0 in Appendix E for detail. Inspect and clean sanitary pipes. Look for pinhole leaks in domestic water distribution and sanitary waste piping. Inspect and clean supply ducts. This program is recommended to be completed every 5 years.
5	All Windows and Doors	Window and Door Program	Repair and paint window and door trims, replace glazing seals and broken glass, repair or replace door doors. The program is recommended to repair or replace windows in three buildings a year for the next seven years.
6	All Building Cladding	Cladding Maintenance and Painting Program	Replace damaged cladding trims and loose or missing cladding as required. Clean and paint cladding as required. Paint at risk cladding to extend service life. This program is recommended to replace 5% of cladding in the next 30 years. Provide additional support or connection to the structure of the building at the top of the Chinese Cook's House stairs. Repair stained sheathing at Red Shed and Pump House.

5.2.3 Lesser Priority Programs

Table 5 identifies programs address conditions considered to be of lesser priority and should begin with six to ten years.

TABLE 5: LOW PRIORITY PROGRAMS

Item	Location	Program Title	Description
7	All Buildings	Assessment Budget	Allowance for building assessments as required. This program is recommended for assessment of 2-4 buildings every five years.
8	All Fences	Fence Maintenance Program	Repair fencing in the spring with like materials as required.
9	All Paved Surfaces	Road Maintenance Program	Repair potholes and slope for drainage as required.
10	All Water Lines	Irrigation and Water Line Replacement Program	Replace damaged lines and garden hydrants in the spring as required.



5.2.4 High Priority Projects

Table 6 identifies projects address conditions considered to be a high priority and should be completed within the next year.

TABLE 6: HIGH PRIORITY PROJECTS			
Item	Location	Project Title	Description
11	Visitor Center, Greenhow Museum & O'Keefe House	Hazardous Materials Assessment	Retain environmental engineer report for review of organic growth in Visitor Center and Greenhow Museum basements and animal dropping and vermiculite insulation in O'Keefe House attic.
12	Greenhow Museum	Stair Replacement and Repair	Replace basement and second floor emergency exit stairs.
13	Meat & Dairy Building	Additional Structural Support	Add permanent support at Dairy Building, Garage (B3 in Appendix C). Complete structural review and design to address as-found conditions. Add blocking at cut joists at Meat Building.
14	Meat & Dairy Building	Wall and Floor Repairs	Temporarily support and repair North and East wall in Dairy Building (B1 in Appendix C) and rotted floor structure in Meat Building (B2 in Appendix C). Landscape to expose structure. Remove and reinstate cladding at North wall. Install vents over openings at North wall. Patch concrete steps to Dairy Building front entrance.
15	Blacksmith Shop	Forge Ventilation System Replacement	See section 2.0 of Appendix E for detail. Systems should be replaced, and appropriate thimbles are needed for the penetrations through the roof.
16	O'Keefe House & Blacksmith Shop	Chimney Repairs	Provide additional support to leaning chimney at O'Keefe House. Replace spalled bricks and repoint mortar. Provide double wall flashing at combustible roof at Blacksmith Shop.
17	Hay Shed	Concrete Repair	Remove deteriorated concrete, clean rebar, replace any reinforcement with significant cross-sectional area loss, and repair concrete.
18	Decommissioned Vehicle Bridge & Log Foot Bridge	Bridge Removal and Replacement	Retain environmental engineer report for environmental impact of bridges removal. Remove and dispose of bridges. Cost to install a new bridge is carried as Optional Item 43. This cost has been budgeted using the Ministry of Transportation of BC's guidelines as is recommended to be reviewed.



TABLE 6: HIGH PRIORITY PROJECTS

Item	Location	Project Title	Description
19	O'Keefe House	Geotechnical Report	Retain geotechnical engineer report for review of retaining wall.
20	Visitor Center	Carpentry Repairs	Temporarily support roof structure, remove rotted wood from post and add new pedestal. Remove rotted truss trails and provide flashing.
21	Visitor Center	Basement Repairs	Clean basement walls and extend rainwater leaders. If condition persists, add drainage and waterproofing.

5.2.5 Moderate Priority Projects

Table 7 identifies projects address conditions considered to be at moderate risk and should be completed within two to five years.

TABLE 7: MODERATE PRIORITY PROJECTS

Item	Location	Project Title	Description
22	O'Keefe House & Schubert Barn	Structural Assessment	Retain structural engineer report for review of O'Keefe House roof structure and deflecting ceilings in bathroom and small dining room, Log Barn hay loft, and Schubert Barn structural system.
23	Corral	Grandstand Removal	Remove grandstand platform. Cost to install a new grandstand has been carried as an optional cost in addition to the removal.
24	Various	New Fire Rated Rooms	See section 2.0 of Appendix E for detail. Construct new fire rated rooms to house furnaces and water heaters as recommended.
25	O'Keefe House, Log Barn, Carriage Shed & Schubert House	Foundation Repairs	Provide support and repair foundation columns at O'Keefe House. Replace spalled bricks and repoint mortar joints. Provide fill below Log Barn East Lean-To concrete slab. Provide fill where Carriage Shed foundation is undermined. Repair Schubert House pony wall where tilted and repair CMU blocks that are damaged.
26	Various Locations	Miscellaneous Electrical Repairs	See Appendix F for detail. Remove old meter outside of Stagecoach Depot. Replace disconnect switches in Meat and Dairy Building and SPPC Display #1. Clean up wiring in O'Keefe House and Schubert House.



TABLE 7: MODERATE PRIORITY PROJECTS

27	Schubert House & Log House	Chimney Repairs	Replace spalled bricks and repoint mortar joints where required.
28	O'Keefe House	Water Management	Repair CMU basement wall and add extend rainwater leaders. If condition persists, add drainage away from the area. Remove rotted portions of porch and repair. Add new scuppers.
29	Visitor Center	Cooling Unit Replacement	See section 2.0 of Appendix E for detail. Replace cooling unit in the near future.
30	Greenhow Museum	Hot Water Heater Replacement	See section 2.0 of Appendix E for detail. Remove and dispose of old heater and install new.
31	Stagecoach Depot	Hot Water Heater Replacement	See section 2.0 of Appendix E for detail. Remove and dispose of old heater and install new
32	O'Keefe House	Condensate Pump Replacement	See section 2.0 of Appendix E for detail. Remove and dispose of old condensate pump and install new.
33	Carriage Shed	Hot Water Heater Replacement	See section 2.0 of Appendix E for detail. Remove and dispose of old heater and install new
34	SPPC Clubhouse	Furnace Upgrade	See section 2.0 of Appendix E for detail. System should be upgraded soon.
35	SPPC Clubhouse	Hot Water Heater Replacement	See section 2.0 of Appendix E for detail. Remove and dispose of old heater and install new
36	Various	Hot Water Upgrade	See section 2.0 of Appendix E for detail. Upgrade systems to provide hot water at sinks.
37	Various	Miscellaneous Mechanical Repairs	See section 2.0 of Appendix E for detail. Configure natural gas piping in Museum and SPPC Clubhouse. Provide drain pans for hot water heaters. Replace galvanized piping at Pump House. Upgrade piping insulation.

5.2.6 Lesser Priority Projects

Table 8, on the next page, identifies projects address conditions considered to be lesser priority and should be completed within six to ten years.



TABLE 8: LESSER PRIORITY PROJECTS

Item	Location	Project Title	Description
38	Implement Sheds, SPPC Displays and SPPC Clubhouse	Minor Structural Repairs	Expose base of lean-to wood posts to concrete footing were buried. Remove rotted wood and add new pedestals at these locations. Provide new strap anchors at SPPC Display #2 and Tack Shed. Clean saddle connections at base of posts in Implement Sheds.
39	Visitor Center, Caretaker's House, & SPPC Clubhouse	IGU Replacement	Replace IGUs as required.
40	O'Keefe House & Schubert House	Plaster and Lath Repair or Replacement	Option 1: Repair existing plaster and lath. Heat buildings in the winter to extend service life. Option 2: Replace damaged plaster and lath with drywall (carried in OPC).
41	O'Keefe House	Air Handling Unit Repair	See section 2.0 of Appendix E for detail. Replace cooling coil in air handling unit.
42	St. Anne's Church	Heating Upgrade	See section 2.0 of Appendix E for detail. Update heating to sealed combustion condensing unit.

6.0 Opinions of Probable Cost

Opinions of Probable Costs (OPC) for the recommended options are presented by RJC to provide an expectation as to the magnitude of costs required to complete the recommended work. The opinions provided are based on conceptual repair methods, recently obtained broad unit rates and past experience with similar projects. A detailed estimate of costs has not been provided, as it would require the preparation of plans, details, specifications, and schedules to achieve a quantified summary of estimated costs. It is assumed in the creation of these costs that work will be completed by a contractor.

Opinions of Probable Costs are based on RJC's review of the present condition of the building. Deferral of the work could result in increased repair costs. Please note that the cost of remediation could vary greatly depending upon the materials chosen and any deterioration uncovered during the remediation work.

Contract administration range depending on the scope and can run from 10% through 20%, typically smaller projects are found to have a higher percentage of costs. For the purposes of the provided OPCs we have included soft costs to be 18% of construction costs.

When budgeting, soft costs, including Society costs, engineering fees, costs for management, permits, and testing should also be added. Soft costs range depending on the scope and can run from 15% through 25%, typically smaller projects are found to have a higher percentage of soft costs, depending on the project details and requirements. For the purposes of the provided OPCs we have included soft costs to be 25% of construction costs.



An Owner contingency of 20% is included with each Opinion of Probable Cost. A contingency of at least this amount should be included in all construction budgets to allow for variation in estimated unit prices due to competitive bidding, repair work resulting from additional deterioration, and additional work required to repair any damage caused by or discovered during construction.

Due to the known potential of hazardous materials we have included a Hazardous Material Contingency of 15% of the construction costs. This contingency does not include for the testing of materials but rather the potential increase in effort to abatement and contain work areas with hazardous materials.

Table 9, on the next page, summarizes the opinions of probable costs for remediation and repair programs and projects for the O'Keefe Ranch. As noted earlier, items are presented in order of priority. The items recommended in the table are intended to maintain or improve the performance of the facility and to protect the building's structures from deterioration due to moisture ingress. A summary of OPCs for all programs and projects discussed are included below.



TABLE 9: OPC SUMMARY

Item	Description	High Priority	Moderate Priority					Lesser Priority					Optional Timeline	Comments
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
Programs														
1	Roof Maintenance Program	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000		Ongoing Maintenance Program.	
2	Landscaping, Small Building Maintenance, and Monitoring Program	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000		Ongoing Maintenance Program.	
3	Roof Replacement Program			\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000		Program completed in 40 years.	
4	Mechanical System Monitoring and Assessment Program		\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000		Ongoing Maintenance Program.	
5	Window and Door Program		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000		Program completed in 30 years.	
6	Cladding Maintenance and Painting Program		\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000		Program completed in 30 years.	
7	Assessments Budget						\$8,000						Budget \$8,000 every 5 years. Ongoing program.	
8	Fencing Maintenance Program						\$10,000	\$10,000	\$10,000	\$10,000	\$10,000		Program completed in 15 years.	
9	Road Maintenance Program						\$15,000	\$15,000	\$15,000	\$15,000	\$15,000		Program completed in 7 years.	
10	Irrigation and Water Line Replacement Program							\$40,000	\$40,000	\$40,000	\$40,000		Budget \$400,000 every 10 years for 50 years.	
Projects														
11	Hazardous Materials Assessment	\$10,000												
12	Greenhow Museum Stair Replacement and Repair	\$25,000												
13	Meat and Dairy Building Additional Structural Support	\$7,000												
14	Meat and Dairy Building Wall and Floor Repairs	\$20,000												
15	Blacksmith Shop Forge Ventilation Replacement	\$18,000												
16	O'Keefe House & Blacksmith Shop Chimney Repairs	\$5,000												
17	Hay Shed Concrete Repair	\$25,000												
18	Bridge Removal	\$125,000												
19	O'Keefe House Geotechnical Report	\$8,000												
20	Visitor Center Drainage Improvement	\$25,000												
21	Visitor Center Carpentry Repairs	\$8,000												
22	Structural Assessments at Various Buildings		\$10,000											
23	Corral Grandstand Remove		\$10,000									\$40,000	Optional item to replace grandstand in addition to the removal cost.	
24	New Fire Rated Rooms at Various Buildings		\$60,000											
25	Foundation Repairs at Various Buildings		\$25,000											



TABLE 9: OPC SUMMARY

Item	Description	High Priority	Moderate Priority					Lesser Priority					Optional Timeline	Comments
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033			
26	Miscellaneous Electrical Repairs		\$9,000											
27	Log House and Schubert House Chimney Repairs		\$5,000											
28	O'Keefe House Water Management		\$5,000											
29	Visitor Center Cooling Unit Replacement		\$14,000											
30	Greenhow Museum Hot Water Heater Replacement		\$6,000											
31	Stagecoach Depot Hot Water Heater Replacement		\$6,000											
32	O'Keefe House Hot Water Heater Replacement		\$2,000											
33	Carriage Shed Hot Water Heater Replacement		\$3,000											
34	SPPC Clubhouse Furnace Upgrade		\$13,000											
35	SPPC Clubhouse Hot Water Heater Replacement		\$6,000											
36	Hot Water Upgrade		\$10,000											
37	Miscellaneous Mechanical Repairs		\$8,000											
38	Minor Structural Repairs Project						\$6,000							
39	IGU Replacement Project						\$50,000							
40	O'Keefe House Air Handling Unit Repair						\$6,000							
41	O'Keefe & Schubert House Plaster and Lath Repair or Replacement*						\$14,000							
42	St. Anne's Church Heating Upgrade						\$13,000							
43	Optional - Bridge Replacement											\$325,000	Optional item to replace bridge. Based off of the Ministry of Transportation BC Guidelines. A class 'D' estimate is recommended by a cost consultant.	
Subtotal**:		\$291,000	\$227,000	\$105,000	\$105,000	\$105,000	\$227,000	\$130,000	\$130,000	\$130,000	\$130,000	\$365,000		
Contract Administration Overhead (18%):**:		\$52,380	\$40,860	\$18,900	\$18,900	\$18,900	\$40,860	\$23,400	\$23,400	\$23,400	\$23,400	\$65,700		
Soft Costs (25%):**:		\$72,750	\$56,750	\$26,250	\$26,250	\$26,250	\$56,750	\$32,500	\$32,500	\$32,500	\$32,500	\$91,250		
Contingencies (20%):**:		\$29,100	\$22,700	\$10,500	\$10,500	\$10,500	\$22,700	\$13,000	\$13,000	\$13,000	\$13,000	\$73,000		
Hazardous Material Contingency (15%)		\$43,650	\$34,050	\$15,750	\$15,750	\$15,750	\$34,050	\$19,500	\$19,500	\$19,500	\$19,500	\$54,750		
Total***:		\$500,000	\$425,000	\$175,000	\$175,000	\$175,000	\$425,000	\$250,000	\$250,000	\$250,000	\$250,000	\$650,000		

Note. The total is calculated on the first year for programs or projects that span multiple years.

*Cost carried is to replace cracked plaster and lath with drywall not to repair or replace with like materials.

**Opinions of Probable Costs do not include extended warranties, engineering fees, or GST/PST unless noted otherwise. The opinions of probable costs should be considered class "D" estimates.



***The total costs provided in the table above and the executive summary have been rounded based on the following rounding protocol:

- Rounded to the nearest \$1,000 for budget values up to \$20,000
- Rounded to the nearest \$5,000 for budget values between \$20,000 and \$100,000
- Rounded to the nearest \$25,000 for budget values between \$100,000 and \$500,000
- Rounded to the nearest \$50,000 for budget values between \$500,000 and \$1,000,000
- Rounded to the nearest \$100,000 for budget values of more than \$1,000,000

7.0 Next Steps

As discussed in the introduction of this report Phase 2 of the overall consulting program builds from the Statements of Significance (SoS) and this Facility Condition Assessment (FCA). Taken together, the overall goal is to understand the heritage value of O'Keefe Ranch as a historic place (SoS) and its current condition (FCA) then plan for the ongoing use and conservation of the heritage value (Phases 2 and 3). To help understand the value of these reports and the pending additional phases, ANCE has provided the following summary, with emphasis and additions by RJC:

Before any plans are put in place, or work carried out, the Standards and Guidelines for the Conservation of Historic Places in Canada call for producing SoSs to cohesively and formally recognize the heritage value of the place. This requirement is now met as the Statements are complete.

The SoS was created by the federal Historic Places Initiative (HPI) as a succinct and consistent format to express the heritage values of places that matter to Canadian communities. A SoS, in its simple, non-technical language, is "a declaration of value that briefly explains what a historic place is and why it is important". It is both a starting point and a guide for communities, property owners, architects, developers, planners and anyone who may be planning the future of a historic place. The completed SoSs are submitted by the local government to the Province of BC, and from there to the Canadian Register of Historic Places (historicplaces.ca).

*An SOS and a Condition Assessment are both **requirements for conservation grant applications** with the provincial Heritage Legacy Fund, administered by Heritage BC, and which provide hundreds of thousands of dollars towards heritage awareness, planning and conservation work each year.*

The advancement of the work to develop the Heritage Conservation Plan (HCP) explains how The City of Vernon will sustain the significance identified in the Statement of Significance (the heritage values and character defining elements) in any new use, alteration, repair or management.

The HCP utilizes a simple thinking process which starts with describing what is there, the condition of each part, what is proposed to happen to the historic place and its components, and the principles by which you will manage it (following the Standards and Guidelines for the Conservation of Historic Places in Canada).

The HCP then outlines more detailed work programs for maintenance, management, access, use or other issues.

Within the HCP each part of the property (building and site) will be specified to be either Preserved, Restored or Rehabilitated (the three possible Conservation treatments) depending on its condition, its significance and its intended function. The HCP document outlines how to technically implement the above conservation approaches.

The biggest funding source for heritage properties in BC, the Heritage Legacy Fund, as mentioned above, prioritizes applications that have a professionally written Statement of Significance, Condition Assessment



and Heritage Conservation Plan. **Having this work completed now, in advance of grant intake announcements, will help the City be prepared to act when new grant intakes are announced.**

Whether the grant application is successful or not, having these documents is especially useful in the case of historic places that are owned, run and managed by non-profit societies and a board or committee. The HCP provides a consensual, professional and comprehensive guide to how to care for the place, the priority items and order in which money and efforts should be invested, and, offer a continuity of knowledge about a site when board members, site managers and maintenance staff may turn-over or have different ideas over time.

From this conservation plan the proposed capital and operations management plan will be formed. The capital and operations management plan operationalizes the studies, informed by budget boundaries provided by the City and considers existing funding, future grants and other costs in a more unified approach that can be acted upon on an annual basis.

8.0 Closing

We trust the information contained within this report satisfies your current requirements. Should you have any comments, questions or concerns, please contact the undersigned. We remain available to review and discuss findings and future action.

Yours truly,

READ JONES CHRISTOFFERSEN LTD.

A handwritten signature in black ink, appearing to read 'Michael Blackman', with a long horizontal flourish extending to the right.

EGBC Permit to Practice number: 1002503

Michael Blackman, BSc, P.Eng., LEED® AP BD+C, FEC
Principal

Trenton Squair, BSc, P.Eng., CAHP, BCAHP
Project Engineer

ELW/vml



Engineers

Appendix A

Site Maps



BUILDING MAP

Building Key

1. Visitor Center
 2. Greenhow Museum
 3. Stagecoach Depot
 - 4A. O'Keefe House
 - 4B. Caretaker's House
 5. Pavilion
 6. Gazebo
 7. Pioneer Cabin
 8. Cowboy Bunkhouse
 9. Bird Pens
 10. Windmill #1
 11. Log Barn
 12. Hay Shed
 13. Ye Ol' Feed Shed
 14. Meat & Dairy Building
 15. Chinese Cook's House
 16. Log House
 17. General Store
 18. Blacksmith Shop
 19. Red Shed
 20. Carriage Shed
 21. St. Anne's Church
 22. Smoke House
 23. Pump House
 24. Windmill #2
 25. Water Cisterns
 26. SPPC Display #1
 27. SPPC Display #2
 28. Implement Shed #1
 29. Implement Shed #2
 30. Tack Shed
 31. Corral
 32. Glamping
 33. Balmoral School House
 34. Schubert House
 35. Schubert Barn
 36. SPPC Clubhouse
 37. Storage Building
 38. Storage Shed
-
- A. Foot Bridge
 - B. Decommissioned Bridge
 - C. Cistern Ruin
 - D. Fields
 - E. Cemetery
 - F. Log Foot Bridge



SERVICES MAP

Building Key

1. Visitor Center
 2. Greenhow Museum
 3. Stagecoach Depot
 - 4A. O'Keefe House
 - 4B. Caretaker's House
 5. Pavilion
 6. Gazebo
 7. Pioneer Cabin
 8. Cowboy Bunkhouse
 9. Bird Pens
 10. Windmill #1
 11. Log Barn
 12. Hay Shed
 13. Ye Ol' Feed Shed
 14. Meat & Dairy Building
 15. Chinese Cook's House
 16. Log House
 17. General Store
 18. Blacksmith Shop
 19. Red Shed
 20. Carriage Shed
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 22. Smoke House
 23. Pump House
 24. Windmill #2
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 26. SPPC Display #1
 27. SPPC Display #2
 28. Implement Shed #1
 29. Implement Shed #2
 30. Tack Shed
 31. Corral
 32. Glamping
 33. Balmoral School House
 34. Schubert House
 35. Schubert Barn
 36. SPPC Clubhouse
 37. Storage Building
 38. Storage Shed
-
- A. Foot Bridge
 - B. Decommissioned Bridge
 - C. Cistern Ruin
 - D. Fields
 - E. Cemetery
 - F. Log Foot Bridge

Legend

- 4-WIRE BARBED WRE FENCE
- 2-3 RAIL WOOD POLE FENCE
- ANIMAL ENCLOSURES (WOOD FENCE)
- CHICKEN WIRE FENCE
- WHITE PICKET FENCE
- ROPE FENCE
- 3 POLE WOOD FENCE
- - - TBD BY TDS
- ROADS AND PATHS

FENCING MAP

Building Key

1. Visitor Center
 2. Greenhow Museum
 3. Stagecoach Depot
 - 4A. O'Keefe House
 - 4B. Caretaker's House
 5. Pavilion
 6. Gazebo
 7. Pioneer Cabin
 8. Cowboy Bunkhouse
 9. Bird Pens
 10. Windmill #1
 11. Log Barn
 12. Hay Shed
 13. Ye Ol' Feed Shed
 14. Meat & Dairy Building
 15. Chinese Cook's House
 16. Log House
 17. General Store
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 19. Red Shed
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 27. SPPC Display #2
 28. Implement Shed #1
 29. Implement Shed #2
 30. Tack Shed
 31. Corral
 32. Glamping
 33. Balmoral School House
 34. Schubert House
 35. Schubert Barn
 36. SPPC Clubhouse
 37. Storage Building
 38. Storage Shed
-
- A. Foot Bridge
 - B. Decommissioned Bridge
 - C. Cistern Ruin
 - D. Fields
 - E. Cemetery
 - F. Log Foot Bridge





Engineers

Appendix B

Facility Condition Assessment Background



Notation

A condition assessment is provided for each building component. The condition is generally categorized as Good, Fair, and Poor.

Good generally applies to building components that are in the first half of their expected service life, are well-maintained, require only basic maintenance if any, are fully functional and serving their intended purpose without known issues.

Fair generally applies to building components that are in the second half of their expected service life, require some regular maintenance, are fully functional and serving their intended purpose, however may have known issues.

Poor generally applies to building components that require increasing effort to maintain in a functional state or are not serving their intended purpose reliably.

When a component cannot be visually reviewed, such as underground storm water piping or building components hidden inside walls or behind other building components, Unknown may be used. When the component condition varies significantly, such as for buildings where portions of the exterior cladding have been restored at different times, Varies may be used.

Estimated Remaining Service Life

The estimated remaining service life, as well as the timing for work required before the component reaches the end of its expected service life, is based on the year the component was installed, its expected service life (published and internal data), and the condition at the time of the site review, and the field observer's knowledge of the component. If the installation date is unknown, the condition assessment becomes the primary means of estimating the year of installation. If deemed useful (and included in the agreed-upon scope of work for the BCA), the condition assessment is supplemented by a review of available documentation and discussions with maintenance staff or service providers. This can improve the estimates of the component's remaining service life. For this report the estimated lifespan is compiled in the Asset Inventory in Appendix G.

There are numerous factors that can affect the service life and performance of a component. Furthermore, certain evidence which might impact our opinions of estimated remaining service life or work required before the component reaches the end of its expected service life may be hidden within walls, inside the component or behind other components, underground or in crawl spaces, for example. As a result, there remains a significant margin of error for certain building components. Actual conditions may differ significantly from the conditions assumed during the visual review. In some cases, components could require significant expenditures earlier or later than what is noted in this report.



Preservation, Restoration, and Rehabilitation

The Historic O'Keefe Ranch is part of the historic fabric of British Columbia. As such, any works proposed for the Ranch should be proposed within the context of the Standards and Guidelines for The Conservation of Historic Places in Canada (The Standards). The current iteration of this document is the Second Edition.

The Standards prescribe three (3) primary approaches or "treatments" for conservation of historic or heritage value. These are preservation, rehabilitation and restoration. Each of the three (3) treatments can be present in any particular conservation context, but one (1) will be the primary focus.

In the case of O'Keefe Ranch it is RJC's current understanding that the overarching goal is to preserve the structures and are not intended to be returned to an occupied state. While preservation is the long-term goal, rehabilitation is also a prudent course of action in order to effectively conserve the heritage fabric of The Ranch. Rehabilitation activities will largely focus on the repair of deteriorated building components, such as roofs, that will extend the lifespan of the building as a whole system.

Assuming that the recommended funding is available, and work can move forward with the recommended scopes of rehabilitation, the services of a heritage consultant will be invaluable to help ensure that The Standards are met and that schematic designs for the rehabilitation can be submitted to the responsible authorities to vet the proposed works.



Engineers

Appendix C

Detailed Building Condition Assessments



OPC for Programs

Opinions of Probable Cost for recommended programs have not been included in the summary tables in the header of the following sheets. A summary of Recommended Programs OPCs is below in Table C1.

TABLE C10: SUMMARY OF PROGRAM OPCS			
Program Title	Typical Annual Cost	Ten Year Cost	Comments
Roof Maintenance Program	\$ 10,000	\$ 100,000	n/a
Landscaping, Small Building Maintenance, and Monitoring Budget Program	\$ 5,000	\$ 50,000	n/a
Roof Replacement Program	\$ 70,000	\$ 560,000	Total replacement project to run over 40 years with a projected total cost of \$ 2,800,000
Mechanical System Monitoring and Assessment Program	\$ 4,000	\$ 36,000	n/a
Window and Door Program	\$ 10,000	\$ 90,000	Total replacement project to run over 30 years with a total cost of \$ 300,000
Cladding Maintenance and Painting Program	\$ 6,000	\$ 54,000	Total replacement project to run over 30 years with a total cost of \$ 180,000
Assessment Budget	\$ 8,000	\$ 8,000	A budget of \$8,000 every 5 years.
Fence Maintenance Program	\$ 10,000	\$ 50,000	50% replacement project to run over 15 years with a total cost of \$ 150,000
Road Maintenance Program	\$ 15,000	\$ 75,000	50% replacement project to run over 7 years with a total cost of \$ 105,000
Irrigation and Water Line Replacement Program	\$ 40,000	\$ 160,000	Total replacement project to run over 50 years with a total cost of \$ 2,000,000

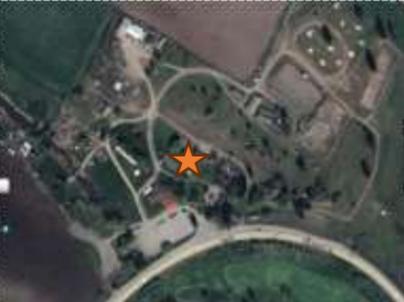
Visitor Center

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	1	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1981 constructed.	A		\$ 35,000			\$ 35,000			
Description	1988 restaurant patio added.	B			\$ 8,000	\$ 50,000	\$ 58,000			
	2006 patio removed, re-roofed (summer).	C					\$ -			
One-storey building with attic and basement. Visitor center also houses a gift shop, non-operational restaurant, and administrative offices.	Interior bathroom renovation in the last 5 years.	D			\$ 27,400	\$ 1,000	\$ 28,400			
		E					\$ -			
		F					\$ -			
		G					\$ -			
			Total	\$ 35,000	\$ 35,400	\$ 51,000	\$ 121,400			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010.1 Standard Foundations	Concrete foundation wall.	Poor	Efflorescence and water staining at the base of the wall.	A1010.1 Hazardous Materials Assessment. See A1010 at buildings 2, B1020 at building 4A.	4B	\$ 10,000		
		A1020 Special Foundations	Wood foundation on grade at the exterior washrooms.	Fair	No comment on condition.	A1010.2 Add perimeter drainage and extend RWL.	4B	\$ 25,000		
		A1030 Slab on Grade	Concrete slab on grade patio at North-West of the building.	Fair	Minor cracking.	No Recommendation.	N/A	N/A		
	A20 Basement Construction	A2020 Basement Walls	See A1010.	Poor	See A1010.	No Recommendation.	N/A	See A1010.		
B Shell	B10 Superstructure	B1010 Floor Construction	Wood deck at the front entrance. Wood framed. Concrete slab in basement.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Pole barn style glulam rafters in gift shop and restaurant. Elsewhere, 2x wood rafters or trusses.	Fair	Truss tails extend beyond edge of the roof and are rotted. Some checking in poles.	Remove deteriorated wood and add flashing. Continue monitoring checked poles for changes.	4D	\$ 8,000		
	B20 Exterior Enclosure	B2010 Exterior Walls	Untreated board and batten cladding. Wood framed.	Fair	Cladding very close to grade and covered by landscaping in some areas. Water staining from irrigation. Some boards loose or rotted and some battens missing.	Landscape to provide 4" clearance between cladding and vegetation.	3D	See Landscaping Program.		
		B2020 Exterior Windows	Double glazed fixed windows circa 1980.	Fair	1980 windows may need replacement in next ten years.	Carry partial IGU replacement.	2D	\$ 50,000		
		B2030 Exterior Doors	Fibreglass doors at kitchen and giftshop, else wood. Wood trims.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs and downspouts and wood fascia.	Poor	Moss below dormer along patio and on east and south facing rooves. Water staining below south-east dormer. Fascia on south side of washroom building deteriorated.	Clean and maintain roof.	N/A	See Roof Maintenance Program.		
B3020 Roof Openings		Box vents.	Fair	No comment on condition.	No Recommendation.	N/A	N/A			
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame partitions.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1020 Interior Doors	Wood doors and trims. Style varies.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C20 Stairs	C2010 Stair Construction	Wood stairs to second floor (1) and basement (2).	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3010 Wall Finishes	Drywall and plaster.	Good	Plaster cracking in north attic. Staining in kitchen from previous use.	No Recommendation.	N/A	N/A		
		C3020 Floor Finishes	Mostly hardwood. Linoleum tile in kitchen and vinyl in bathrooms.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C3030 Ceiling Finishes	Drywall with textured finish.	Fair	Taped joints failing.	No Recommendation.	N/A	N/A		

Visitor Center

D Services	D20 Plumbing	D2010 Plumbing Fixtures	Washrooms with toilets, urinals, sinks. One set indoors and the other outdoors. Kitchen equipment is in good shape but has been abandoned in place, as the restaurant is no longer in use.	Good	Lavatories and water closets are in good condition and seem to have been recently upgraded. The lavatory is only served with cold water. Hot water has not been provided. The existing fixtures should provide good service for the near future.	Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene.	3D	\$	2,500
		D2020 Domestic Water Distribution	Piping system.	Fair	Original piping systems are copper systems. Recent upgrades have used approved plastic piping systems. The insulation is in poor condition or missing in certain locations. Some elbows witnessed look suspiciously to be made with asbestos. The domestic water piping should provide good service for the near future.	D2020.1 Look for pinhole leaks from time to time.	3B	\$	100
						D2020.2 Consideration should be made for upgrades to the existing insulation to save energy.	1E	\$	500
						D2020.3 The piping system should be assessed by a hazardous materials professional to determine if there is asbestos on these systems.	3B		See A1010.1
		D2030 Sanitary Waste	Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.	Fair	The sanitary drainage piping should provide good service for the near future. However, the system is at an age where blockages could occur.	Should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future.	3D	\$	300
D2090 Other Plumbing Systems	Domestic hot water has been recently upgraded with a 3 kW Electric Domestic Water Heater.	Fair	The domestic water heater should provide good service for the near future.	Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank.	2C	\$	500		
D Services	D30 HVAC	D3010 Energy Supply	The bulk of the facilities that are heated are served through the natural gas meter and pressure regulation systems. These systems are owner and operated by the utility supplier.	Good	Gas piping where visible appears to be in good condition.	No upgrades to the system are anticipated unless significant upgrades to the existing systems is initiated.	N/A		N/A
		D3020 Heat Generating Systems	Three furnaces have been recently upgraded with sealed combustion energy efficient units.	Fair	These gas fired appliances have been installed in a room that is not fire rated.	No upgrades to the system are anticipated in the near future. Consideration should be made to fire rate the room that the furnaces are installed.	2B	\$	10,000
		D3030 Cooling Generating Systems	Cooling is provided by a single Lennox ten-ton cooling capacity Condensing Unit. The unit was manufactured in 1999.	Poor	The unit is nearing the end of its service life. The cooling equipment is near the end of its service life, but has effectively been abandoned in place, as the restaurant is no longer in use.	Replace in the near future. Due to the change in refrigerants, the cooling coil on the furnaces will need to be replaced as well.	5D	\$	14,000
		D3040 Distribution Systems	Supply duct system.	Fair	The supply duct systems are in good shape considering the age of the system.	At most, an internal inspection of the duct and a duct cleaning every 5 years or so.	3E	\$	500
	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguishers.	Fair	No comment on condition.	No Recommendation.	N/A		N/A
	D50 Electrical	D5010 Electrical Service & Distribution	400A-3PH BC Hydro service. Wiring consists of AC90 and NMD90 cable.	Fair	Service is adequate for the facility.	Routine maintenance of circuit breakers (maintenance).	2D		N/A
		D5020 Lighting and Branch Wiring	Interior, Exterior, and Emergency lighting.	Poor	Emergency lighting is minimal but has been maintained. Lighting is generally fluorescent in fair condition.	Continue annual checks of EM lighting. Upgrade general lighting to LED as fixtures fail or when funding is available (maintenance).	2D		N/A
		D5030 Communications & Security	Security alarm & fire alarm.	Fair	Minimal fire detectors installed.	Adding fire alarm devices could improve early detection of fires.	3C		N/A
D5090 Other Electrical Systems		Branch circuit wiring.	Fair	Wiring is untidy in places but code compliant.	No Recommendation.	1D		N/A	
E Equipment & Furnishings	E10 Equipment	E1090 Other Equipment	Kitchen equipment and cooler room.	Fair	Water at base of basement cooler room.	No Recommendation.	N/A	N/A	
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Pavers around South-East side. 3-ply 2x6 posts at porch.	Poor	Pavers are cracked. One post rotted, not connected to grade.	Support post and add new pedestal.	3D		See B1020.
		G2040 Site Development	4-rail fence surrounding.	Fair	Fence in fair condition.	No Recommendation.	N/A		N/A
		G2050 Landscaping	Garden beds surrounding.	Fair	Vegetation touching cladding.	See B2010.	N/A		See B2010.

Greenhow Museum

Building Info		Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	2	History	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1893 foundations built. 1941 constructed.	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	A	\$ 25,000			\$ 25,000		
Greenhow House			B	\$ 25,000			\$ 25,000		
Description			C				\$ -		
Two-storey wood frame building with stone and concrete basement. Cedar shake shingle roof. Wood framed doors and windows. Stucco siding.			D		\$ 19,400	\$ 1,000	\$ 20,400		
			E				\$ -		
			F				\$ -		
			G				\$ -		
			Total	\$ 50,000	\$ 19,400	\$ 1,000	\$ 70,400		

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation wall at front (South) and stone foundation wall at rear (North) elevation.	Fair	Water staining and efflorescence on interior face of foundation wall in the basement stair. Efflorescence starting at the floor and moving upwards.	Hazardous materials assessment. See A1010 at building 1, B1020 at building 4A. Recommendation pending basement treatment and collection storage proposal complete repair program.	4B	\$ 25,000
		A1030 Slab on Grade	Concrete slab on grade in the basement.	Fair	Minor cracking.	See A1010.	N/A	See A1010.
	A20 Basement Construction	A2020 Basement Walls	Vapour barrier installed on the ceilings around artifact storage in basement. Wood lattice over openings in foundation/basement wall.	Fair	Water staining on vapour barrier.	See A1010.	N/A	See A1010.
B Shell	B10 Superstructure	B1010 Floor Construction	Wood front steps. Timber posts in basement. 2x12 wood joists at 16" o/c with cross bracing. Wood stairs to basement and at second floor emergency exit.	Good	All exterior stairs in poor condition.	Replace both exterior stairs.	4B	\$ 25,000
		B1020 Roof Construction	2x6 wood rafters at 16" o/c. 1x10 shiplap. 8x10 beam north-south on three 8x8 columns. 18x12 concrete beam spans 8' over south foundation wall. 18x12 concrete beam on 10'8" opening on east and west walls.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Pea gravel and cement stucco cladding. Walls consist of brick masonry and 2x4 stud wall at 16" o/c. Some horizontal wood, shake shingle, and board and batten.	Fair	Minor cracking and previous patches in stucco. Wood members built into wall at former porch.	No Recommendation. Consider sealing cracks in stucco to limit potential water ingress (maintenance).	N/A	N/A
		B2020 Exterior Windows	Single pane fixed windows first floor and hung windows second floor circa 1996. All wood trim. Some stained-glass in-fill.	Good	No comment on condition.	Repair windows as required.	N/A	See Cladding Maintenance Program.
		B2030 Exterior Doors	Wood doors and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B30 Roofing	B3010 Roof Coverings	Asphalt shingle roof with eavestroughs and downspouts and wood fascia.	Fair	Debris build up at roof overhang.	Clean eavestroughs and front roof. Roof replacement.	3C	See Roof Replacement and Maintenance Programs.
		B3020 Roof Openings	Brick chimney.	Fair	Loose bricks at top of chimney.	No Recommendation.	N/A	N/A
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame partition walls.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C1020 Interior Doors	Wood doors and frame excepting plywood doors in basement.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	C20 Stairs	C2010 Stair Construction	Wood stairs to second floor.	Fair	No comment on condition.	Repair where required.	3B	See B1010.
	C30 Interior Finishes	C3010 Wall Finishes	Painted drywall on main and second floors. Unpainted drywall and VB in basement.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	Hardwood.	Good	No comment on condition.	No Recommendation.	N/A	N/A
C3030 Ceiling Finishes		White painted wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	

Greenhow Museum

D Services	D20 Plumbing	D2010 Plumbing Fixtures	Sink on main floor.	Good	The existing fixtures should provide good service for the near future.	Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene.	3D	\$	2,500
		D2020 Domestic Water Distribution	Original piping systems are copper systems. Recent upgrades have used approved plastic piping systems.	Fair	The insulation is in poor condition or missing in certain locations. Non the less, the operators should look for pinhole leaks from time to time.	D2020.1 Look for pinhole leaks from time to time.	3C	\$	100
						D2020.2 Consideration should be made for upgrades to the existing insulation to save energy.	1E	\$	500
		D2030 Sanitary Waste	Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.	Good	The sanitary drainage piping should provide good service for the near future.	System is at an age where blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at	3D	\$	300
		D2090 Other Plumbing Systems	Domestic water heater.	Poor	The Domestic hot water heater is old (approx. 40 years since manufactured) and is need of replacement. The Water heater has not been provided with a drain pan.	D2090.1 The domestic water heater should be replaced soon.	4C	\$	5,500
	D2090.2 Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank.					4C	\$	500	
	D30 HVAC	D3010 Energy Supply	The facility has a natural gas connection and pressure regulation station.	Fair	Gas piping does not appear to have the appropriate protective coatings.	The owner will want to engage a technician to ensure the systems are configured to code.	2C	\$	500
		D3020 Heat Generating Systems	The furnace was upgraded with sealed combustion energy efficient unit about 12 years ago.	Fair	This gas fired appliances have not been installed in a room that is fire rated.	No upgrades to the system are anticipated in the near future. Consideration should be made to build a fire rated room that would house the furnaces and domestic water heater.	2B	\$	10,000
		D3030 Cooling Generating Systems	Cooling is provided by a single window mount air conditioning unit.	Fair	No comment on condition.	If the unit fails, replacement units are readily available and relatively inexpensive.	3E		N/A
		D3040 Distribution Systems	Supply duct system.	Fair	The supply duct systems are in good shape considering the age of the system.	At most, an internal inspection of the duct and a duct cleaning every 5 years or so.	3E	\$	500
	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguishers.	Fair	No comment on condition.	No Recommendation.	N/A		N/A
	D50 Electrical	D5010 Electrical Service & Distribution	100A-single phase BC Hydro service.	Fair	Service is adequate for facility.	Maintain circuit breakers	2D		N/A
		D5020 Lighting and Branch Wiring	Mixture of fluorescent and screw base track lighting.	Fair	Lighting is in fair condition.	Upgrade general lighting to LED as fixtures fail or funding becomes available	2E		N/A
		D5030 Communications & Security	Fire exits & emergency lighting.	Fair	Minimal but acceptable level of emergency lighting and exit signage. No fire alarm system.	Continue annual checks of EM lighting.	2D		N/A
		D5090 Other Electrical Systems	Branch circuit wiring.	Fair	Mainly NMD cable.	No Recommendation.	1D		N/A
	G Sitework	G20 Site Improvements	G2050 Landscaping	Garden beds at the front to around sides.	Fair	Good clearance between vegetation and side of building.	No Recommendation.	N/A	N/A

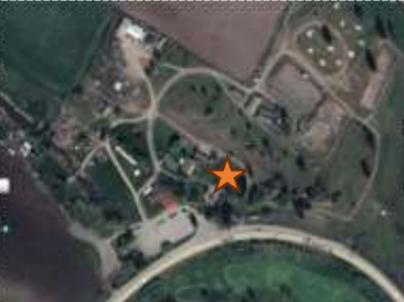
Stagecoach Depot

Building Info		Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	3	History	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1978 constructed.	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	A				\$ -		
Cowboy Showers, Green Room, Stove Museum, Display Barn, Firehall Barn			B				\$ -		
Description			C				\$ -		
Two-storey wood framed building with cedar shake hip roof. Access from two levels and no interior stairs. Concrete foundation wall follows grade. Clad in board and batten with wood windows and doors.			D		\$ 9,400	\$ 100	\$ 9,500		
			E				\$ -		
			F				\$ -		
			G				\$ -		
			Total		\$ -	\$ 9,400	\$ 100		
Level 1	Level 2		Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation/retaining wall sloped with grade.	Fair	Minor cracking.	Continue monitoring for changes.	N/A	N/A	
		A1030 Slab on Grade	Upper patio is slab on grade.	Fair	Some organic growth and minor cracking.	No Recommendation.	N/A	N/A	
	A20 Basement Construction	A2020 Basement Walls	See A1010.		See A1010.	See A1010.	N/A	See A1010.	
B Shell	B10 Superstructure	B1010 Floor Construction	Concrete slab on grade and wood framed.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		B1020 Roof Construction	Hip roof. Wood framed.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
	B20 Exterior Enclosure	B2010 Exterior Walls	Board and batten cladding with horizontal wood cladding on gable ends.	Fair	Cladding stained at base up to half height.	Repair cladding.	3D	See Cladding Program.	
		B2020 Exterior Windows	Wood frame fixed windows.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		B2030 Exterior Doors	Wood barn door at South. Else door and wood frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs and downspouts and wood fascia.	Poor	Shingles curling or missing and organic growth. Facia and soffit have organic growth.	Immediate roof repairs to address leak.	5C	See Roof Replacement and Maintenance Programs.		
					Replace Roof.	4C	See Roof Replacement and Maintenance Programs.		
C Interiors	C10 Interior Construction	C1010 Partitions	Wood framed partitions.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
	C30 Interior Finishes	C3010 Wall Finishes	Painted drywall.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		C3020 Floor Finishes	Mix of plywood and vinyl tile.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		C3030 Ceiling Finishes	Mix of painted plywood and acoustic tiles.	Fair	Water staining at Stove Museum ceiling.	See B3010.	N/A	See B3010.	
D Services	D20 Plumbing	D2010 Plumbing Fixtures	Lavatories, Urinal, Shower and water closets	Good	Facilities are new and well appointed. The existing fixtures should provide good service for the near future.	Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene.	3D	\$ 2,500	
		D2020 Domestic Water Distribution		Fair	The insulation is in poor condition or missing in certain locations. The domestic water piping should provide good service for the near future.	D2020.1 Look for pinhole leaks from time to time.	3C	\$ 100	
						D2020.2 Consideration should be made for upgrades to the existing insulation to save energy.	1E	\$ 500	
		D2030 Sanitary Waste	Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.	Fair	The sanitary drainage piping should provide good service for the near future.	Blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future.	3D	\$ 300	
	D2090 Other Plumbing Systems	The Domestic hot water heater was manufactured in 2006.	Poor	The hot water tank is approximately ¾ through the service life. This gas fired appliances has not been installed in a room that is fire rated.	D2090.1 The domestic water heater should be replaced soon.	4C	\$ 5,500		
					D2090.2 Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank.	4C	\$ 500		

Stagecoach Depot

D Services	D30 HVAC	D3010 Energy Supply	The facility has a natural gas connection and pressure regulation station.	Good	The system should provide good service for the near future.	No Recommendation.	1D	N/A
		D3020 Heat Generating Systems	Most areas are unheated. Occupied areas use baseboard electric heaters.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		D3030 Cooling Generating Systems	Cooling is provided by a single window mount air conditioning unit.	Fair	No comment on condition.	If the unit fails, replacement units are readily available and relatively inexpensive.	3E	N/A
	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	D50 Electrical	D5010 Electrical Service & Distribution	Newer 200A single phase BC Hydro service and panel.	Good	Panel in good condition.	Old meter base on west side of building to be removed	5D	\$ 500
		D5020 Lighting and Branch Wiring	Exterior, interior, and emergency lighting.	Fair	Newer LED lighting in washrooms, fluorescent and screw base track in other areas.	Upgrade general lighting to LED as fixtures fail or funding becomes available	2E	N/A
G Sitework	G20 Site Improvements	G2010 Roads	Dirt road at North elevation.	Fair	Road in fair condition.	No Recommendation.	N/A	N/A
		G2030 Pedestrian Paving	Rock stairs with metal railing on East side. Exterior wood stair and ramp provide access to Stove Museum and Green Room.	Fair	Organic growth on wood ramp and platform. Some water staining at the base of posts.	Clean stairs (maintenance).	N/A	N/A

O'Keefe House

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	4A	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1886 built.	A			\$ 25,000		\$ 25,000			
Description	1896 Log House removed, addition added, roofline altered.	B		\$ 5,000	\$ 20,000		\$ 25,000			
Two-storey wood building with attic and mixed concrete and stone basement. Stucco cladding over original and wood door and windows with decorative shutters. Covered wood wrap around porch. Cedar shake roof.	1900 single storey addition.	C				\$ 14,000	\$ 14,000			
	1910 central hot water heating and hardwood flooring.	D			\$ 10,000	\$ 2,000	\$ 12,000			
	1989 most recent roof replacement.	E					\$ -			
	1994 stucco reclad.	F					\$ -			
	1997 porch repaired	G			\$ 5,000		\$ 5,000			
	Total			\$ 5,000	\$ 55,000	\$ 16,000	\$ 81,000			
	Level 1	Level 2		Level 3	Assessment					
	Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1010 Standard Foundations	Stone foundation wall and clay brick masonry columns. Two 2'x2' concrete pillars. Wood trellis above grade.	Poor	Parging is mostly gone. Brick has freeze/thaw damage. Trellis deteriorated. Stone walls in good condition.	Provide temporary support and repair brick foundation columns. See A1010 at buildings 20 & 34, A1030 at building 11.	3B	\$ 25,000		
	A20 Basement Construction	A2020 Basement Walls	Basement below kitchen and crawlspace below rest of building. See A1010 for construction.	Fair	See A1010.	See A1010.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Wood framed.	Fair	Floor deflecting in bathroom.	Structural assessment. See B1020 at buildings 11 & 35.	3B	\$ 10,000		
		B1020 Roof Construction	Wood truss with collar ties. Partially finished attic.	Poor	Ceilings deflecting in bathroom and small dining room. Animal droppings in attic.	Hazardous Materials Assessment. See A1010 at buildings 1 & 2. See B1010 for deflection.	3B	\$ 10,000		
	B20 Exterior Enclosure	B2010 Exterior Walls	Stucco over original siding. Wood framed.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		B2020 Exterior Windows	Fixed wood framed windows.	Fair	Shutters deteriorating. Protective films on windows poorly applied.	Repair and paint shutters. Replace protective films.	3E	See Window and Door Program.		
		B2030 Exterior Doors	Wood doors and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs and downspouts and wood fascia.	Poor	Normal aging, some organic growth. Eavestroughs leak. Downspouts discharge close to building.	Replace roof.	3C	See Roof Replacement and Maintenance Programs.		
B3020 Roof Openings		Brick chimneys (2).	Poor	Chimneys spalled at top. South chimney is leaning towards house and is currently supported by ties.	Decommission or support leaning chimney. See B3020 at building 18.	4B	\$ 5,000			
C Interiors	C10 Interior Construction	C1010 Partitions	Wood framed stud walls.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1020 Interior Doors	Wood and wood framed.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1030 Fittings	Wood handrail in second floor hall.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
	C20 Stairs	C2010 Stair Construction	Wood stair with wood handrail (3) between all levels.	Fair	Stair to attic is very steep and handrail is not fully attached.	Reattach handrail (maintenance).	N/A	N/A		
		C2020 Stair Finishes	Carpet finish on stair to second floor. Membrane taped over stair to attic.	Fair	Finish is chipping on second floor handrail.	Paint handrail (maintenance).	N/A	N/A		
	C30 Interior Finishes	C3010 Wall Finishes	Mixture of wallpaper, painted plaster, wainscoting, and tile.	Fair	Cracking in sewing room.	Repair or replace plaster and lath. See C3010 at building 34.	2E	\$ 14,000		
C3020 Floor Finishes		Mix of hardwood and carpet, and wood plank in attic.	Good	No comment on condition.	No Recommendation.	N/A	N/A			
C3030 Ceiling Finishes		Plaster and lath.	Poor	Cracking everywhere, water staining in governess room, bathroom, and small dining room.	Repair or replace plaster and lath.	2E	See C3010.			
D Services	D20 Plumbing	D2010 Plumbing Fixtures	The plumbing fixtures for the historic part of the mansion are of course old.	Fair	The existing fixtures should provide good service for the near future.	No Recommendation.	2E	N/A		
		D2020 Domestic Water Distribution	The piping systems in the historic part of the mansion are not in use.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		

O'Keefe House

D Services	D30 HVAC	D3010 Energy Supply	The facility has a natural gas connection and pressure regulation station.	Good	The system should provide good service for the near future.	No Recommendation.	1D	N/A	
		D3020 Heat Generating Systems	The hot water heating systems for the historical portion of the building is served by a modern sealed combustion condensing boiler manufactured in 2013. The boiler is approximately 1/2 through its service life.	Fair	This gas fired appliances have not been installed in a room that is fire rated.	No upgrades to the system are anticipated in the near future. Consideration should be made to build a fire rated room that would house the boiler.	2B	\$ 10,000	
		D3030 Cooling Generating Systems	Cooling is provided by a single Rheem five-ton cooling capacity condensing unit. The unit was manufactured in 2016.	Fair	The unit is 1/3 through its service life and should provide good service for the near future. If the outdoor cooling unit is replaced, the indoor cooling coil will need to be replaced to match the outdoor unit.	No Recommendation.	2D	N/A	
		D3040 Distribution Systems	Steel uninsulated piping is used for the hydronic heating systems.	Fair	If the hot water heating systems gets above 140°F, the bare pipe can scald bare skin in seconds. It appears that these systems are well barricaded from the public, to avoid an inadvertent incident. The system should provide good service for the near future.	Care should continue to be made to keep the public from touching the heating piping and terminal units while the systems are hot.	1D	N/A	
		D3050 Terminal & Package Units	The heating systems are original and are still in use.	Fair	It is hard to determine the life expectancy of these older system, but they seem to be built to last as there are lots of facilities that utilize them.	Deal with failing systems as they occur.	1C	N/A	
	D40 Fire Protection	D4090 Other Fire Protection Systems	Smoke alarm and some heat detectors.	Fair	Some fire alarm heat detectors but no bells or pull stations. Fire alarm panel was not located	Fire alarm system could be upgraded but would provide little additional benefit in the absence of fire sprinklers.	2D	N/A	
	D50 Electrical	D5010 Electrical Service & Distribution	200A single phase BC Hydro service. 60A sub panel adjacent.	Fair	Service is adequate.	Maintain circuit breakers.	2D	N/A	
		D5020 Lighting and Branch Wiring	Mainly residential style screw base fixtures	Fair	Lighting is in fair condition.	Ensure LED lamps are used.	2D	N/A	
		D5030 Communications & Security	Communications in entry of basement.	Fair	Communications wiring in basement is messy	Clean up wiring.	2D	\$ 1,000	
		D5090 Other Electrical Systems	Branch circuit wiring.	Fair	Wiring in basement is messy.	Clean up wiring.	2D	\$ 1,000	
	G Sitework	G20 Site Improvements	G2010 Roads	Circular driveway at front.	Fair	Lateral and alligator cracking found throughout. Pot holes developing. Parking line paint has worn off.	Repair potholes and slope surface to drainage.		See Road Maintenance Program.
			G2030 Pedestrian Paving	Wrap around wood front porch with steps.	Fair	Wood is rotting at edges of front porch. Nowhere for water to drain.	Repair porch and add scuppers. <i>See A2020 at building 4B.</i>	3B	\$ 5,000
G2050 Landscaping			Garden beds around front porch.	Fair	Vegetation is restricting air flow around the building.	Landscape to provide 4" clearance between cladding and vegetation.	3D	See Landscaping Program.	

Caretaker's House

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	4B	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1886 built.	A			\$ 5,000		\$ 5,000			
Description	1896 Log House removed, addition added, roofline altered.	B					\$ -			
Single-storey addition to the O'Keefe House with concrete basement. Wood framed with stone veneer cladding. Aluminum framed windows and doors. Cedar shake roof.	1900 single storey addition.	C					\$ -			
	1910 central hot water heating and hardwood flooring.	D			\$ 17,600		\$ 17,600			
	1989 mosr recent roof replacment.	E				\$ -				
	1994 stucco reclad.	F				\$ -				
	1997 porch repaired	G		\$ 8,000		\$ 8,000				
		Total		\$ -	\$ 22,600	\$ -	\$ 30,600			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete masonry units. Two 2'x2' concrete pillars. Wood trellis above grade. Stone pedestal footings.	Poor	Parging is mostly gone. Brick has freeze/thaw damage. Trellis deteriorated. Stone walls in good condition.	See A1010 on O'Keefe House sheet.	3B	N/A		
	A20 Basement Construction	A2020 Basement Walls	CMU basement wall.	Fair	Water damage in corner of CMU wall.	Repair leak through CMU wall and add perimeter drainage. See G2030 at building 4A.	3C	\$ 5,000		
B Shell	B10 Superstructure	B1010 Floor Construction	Concrete slab on grade in basement and approximately 8x8 wood center beam. Wood framed.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Built-up beams.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	Stone cladding and wood frame.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		B2020 Exterior Windows	Fixed and sliding windows. Wood frame.	Fair	Windows are in aged but fair condition.	Repair or replace as required.	N/A	See Window and Door Program.		
		B2030 Exterior Doors	Wood and fiberglass doors. Wood frame. Glass sliding door with aluminum frame to patio.	Fair	Doors are in aged but fair condition.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs and downspouts and wood fascia.	Poor	Normal aging and organic growth. Eavestroughs leaking.	Replace roof.	2C	See Roof Replacement and Maintenance Programs.		
B3020 Roof Openings		Box vents.	Fair	No comment on condition.	No Recommendation.	N/A	N/A			
C Interiors	C10 Interior Construction	C1010 Partitions	Wood stud walls.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1020 Interior Doors	Wood doors and frames.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1030 Fittings	Wrought-iron guardrail at basement stairs.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
	C20 Stairs	C2010 Stair Construction	Wood stairs with no handrail.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3010 Wall Finishes	Mix of tile and painted drywall.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		C3020 Floor Finishes	Mix of tile and hardwood.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
C3030 Ceiling Finishes		Drywall with textured finish.	Fair	No comment on condition.	No Recommendation.	N/A	N/A			
D Services	D20 Plumbing	D2010 Plumbing Fixtures	Lavatories, Urinal, Shower and water closets for the residence appear to be recently installed.	Fair	The existing fixtures should provide good service for the near future.	No Recommendation.	2E	N/A		
		D2020 Domestic Water Distribution	The residence appears to have relatively recent upgrades have used approved plastic piping systems. Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.	Fair	The domestic water piping should provide good service for the near future. The sanitary drainage piping should provide good service for the near future.	D2020.1 The operators should look for pinhole leaks from time to time. D2020.2 Consideration should be made for upgrades to the existing insulation to save energy.	3C 1E	\$ 100 \$ 500		

Caretaker's House

D Services	D20 Plumbing	D2090 Other Plumbing Systems	The Domestic hot water heater was installed in 2008. The hot water tank is approximately ¾ through the service life.	Fair	This gas fired appliances has not been installed in a room that is fire rated. The Water heater has not been provided with a drain pan.	D2090.1 The domestic water heater should be replaced relatively soon.	4C	\$	5,500
						D2090.2 Consideration should be made to build a fire rated room that would house the domestic water heater.	2B	\$	10,000
						D2090.3 Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank.	4C	\$	500
	D30 HVAC	D3010 Energy Supply	The facility has a natural gas connection and pressure regulation station.	Good	The system should provide good service for the near future.	No Recommendation.	1D		N/A
		D3030 Cooling Generating Systems	Cooling is provided by a single Rheem five-ton cooling capacity condensing unit. The unit was manufactured in 2016.	Fair	The unit is 1/3 through its service life and should provide good service for the near future. If the outdoor cooling unit is replaced, the indoor cooling coil will need to be replaced to match the outdoor unit.	No Recommendation.	2D		N/A
		D3040 Distribution Systems	Cooling distribution systems	Fair	The fan and cooling coil are in fair shape considering the age of the system. The condensate is intentionally plugged and is showing signs of degradation and rust.	Consideration should be made to provide a condensate pump.	3D	\$	1,500
	D40 Fire Protection	D4090 Other Fire Protection Systems	Smoke alarm	Fair	Smoke alarm condition is fair.	Smoke alarms should be added to all bedrooms and outside bedrooms.	1B		N/A
	D50 Electrical	D5010 Electrical Service & Distribution	Electrical panel	Fair	Located in main house. See O'Keefe House sheet.	No Recommendation.	2D		N/A
		D5020 Lighting and Branch Wiring	Mainly screw base style residential fixtures	Fair	Lighting is in fair condition.	Ensure LED lamps are used.	2D		N/A
		D5030 Communications & Security	Communications entry in basement of main house.	Fair	Communications wiring in basement is messy.	Clean up wiring.	2D		N/A
D5090 Other Electrical Systems		Branch circuit wiring. Electrical heaters.	Fair	Wiring in basement is messy.	Clean up wiring, ensure electric heaters are not blocked by clothing, furniture etc.	5D		N/A	
G Sitework	G20 Site Improvements	G2010 Roads	Dirt road and driveway at rear.	Fair	Driveway is in fair condition.	No recommendation.	N/A	N/A	
		G2030 Pedestrian Paving	Paved patio	Fair	Patio is in fair condition.	No recommendation.	N/A	N/A	
		G2040 Site Development	Wood retaining wall with ties at back of house.	Poor	Wall is heaving our at base near driveway.	Geotechnical Report.	4B	\$	8,000

Pavilion

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	5	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Construction date unknwn.	A					\$ -			
n/a		B					\$ -			
Description		C					\$ -			
Wood post and beam structure with engineered trusses and asphalt shingle roof. Wood half wall at some locations around the perimeter. Houses stage and picnic tables. Concrete slab-on-grade floor.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -				
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1020 Special Foundations	Pressure-treated buried posts. Embedded plate steel saddle connection for posts near stage.	Fair	Water staining at base of buried posts.	No Recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Concrete slab on grade.	Good	Concrete slab in good condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Post and beam construction. Engineered trusses at 4' o/c. Plywood sheathing.	Fair	Water staining on soffit.	Add eavestroughs and downspouts.	4D	See Roof Maintenance Program.		
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood plank half walls with mesh upper half. Hardie panels behind stage. Wood plank on gable end.	Good	Posts and wood members stained at east side.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Asphalt shingle.	Good	Fascia in good condition. No rainwater management.	No Recommendation.	N/A	N/A		
D Services	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.				
	D50 Electrical	D5010 Electrical Service & Distribution	100A single phase service sub-fed from adjacent building.	Fair	Service appears adequate.	Maintain circuit breakers (maintenance).	2D	N/A		
		D5020 Lighting and Branch Wiring	Screw base residential fixtures and string lights.	Fair	Lighting is suitable for location as long as no water spraying is done.	Ensure led lamps are utilized. Weatherproof fixtures should be considered as an upgrade. Maintain emergency lighting packs (maintenance).	2D	N/A		
		D5090 Other Electrical Systems	Receptacles for event power.	Good	Receptacles are in good condition.	Maintain devices as required (maintenance).	2D	N/A		

Gazebo

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	6	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 	
Other Names	1986 constructed.	A					\$ -			
n/a	1987 relocated to present location.	B					\$ -			
Description	2008 reconstructed.	C					\$ -			
White painted wood post and beam construction with asphalt shingle roof.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total	\$ -	\$ -	\$ -	\$ -				

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1020 Special Foundations	Wood sleeper foundations and decorative wood lattice.	Fair	Foundation is in fair condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Wood framed.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	White painted post and beam with wood rafters and wood plank sheathing.	Fair	3 posts with checking and 1 beam with cracking.	Repair posts (maintenance). Continue to monitor for changes.	N/A	N/A
	B30 Roofing	B3010 Roof Coverings	Asphalt shingle roof and wood fascia.	Good	Fascia deteriorated at cupola.	Repair and paint fascia (maintenance).	3D	See Roof Maintenance Program.
C Interiors	C10 Interior Construction	C1030 Fittings	White painted wood guardrail.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	C30 Interior Finishes	C3020 Floor Finishes	Grey painted plywood.	Fair	Paint peeling on floor.	Paint steps and floor (maintenance).	N/A	N/A
D Services	D50 Electrical	D5010 Electrical Service & Distribution	Circuit sub-fed from Pavilion.		No comment on condition.	No Recommendation.	N/A	N/A
		D5020 Lighting and Branch Wiring	Screw base floodlight lamp holders.		No comment on condition.	Ensure led lamps are utilized. Replace missing lamps (maintenance).	5D	N/A
G Sitework	G20 Site Improvements	G2050 Landscaping	Landscaping around base.	Fair	Vegetation may deteriorate lattice in future.	Continue monitoring for changes and remove vegetation as required.	N/A	N/A

Pioneer Cabin

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	7	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Chicken Coop, Chicken House	Pre-1900 constructed. 1989 re-shingled roof, replace bottom logs. 1992 lifted onto new concrete slab.	A				\$ -			
Description	13' x 13' log cabin with painted white interior. Wood framed cedar shake shingle roof. Board and batten cladding.		B				\$ -			
			C				\$ -			
			D				\$ -			
			E				\$ -			
			F				\$ -			
			G				\$ -			
			Total	\$ -	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1030 Slab on Grade	Standard slab on grade circa 1992.	Good	Concrete slab in generally good condition.	No recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	See A1030.	Good	See A1030.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Wood rafters.	Fair	Roof structure was not accessible for review.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	Split log w/ chinking and V-notched corners. Board and batten cladding.	Poor	Cladding touching grade and failing on south walls. Chinking failing.	Repair or replace cladding.	4C	See Cladding Program.		
		B2020 Exterior Windows	Single pane fixed windows with wood trim.	Fair	One window boarded over and one with mesh covering.	No Recommendation.	N/A	N/A		
		B2030 Exterior Doors	Wood doors and trim.	Fair	Doors aged but functional.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs and downspouts and wood fascia.	Poor	Roof in fair to poor condition with organic growth. Fascia in varying condition.	Clear debris from roof and cut back overhanging tree. Replace roof.	3C	See Roof Replacement and Maintenance Programs.		
B3020 Roof Openings		Reports of a square hole for smoke ventilation.	Fair	Square hole not visible at the time of the review. No comment on condition.	No Recommendation.	N/A	N/A			
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	White paint.	Poor	Paint is chipping and peeling.	Repaint (maintenance).	N/A	N/A		
		C3030 Ceiling Finishes	White painted 1x4 tongue and groove.	Fair	No comment on condition.	Repaint (maintenance).	N/A	N/A		
G Sitework	G20 Site Improvements	G2040 Site Development	3-rail fence with wire mesh.	Good	Fence is in good condition.	Repair or replace as required.	N/A	See Fence Program.		
		G2050 Landscaping	Grass and animal pens surrounding.		No comment on condition.	No Recommendation.	N/A	N/A		

Cowboy Bunkhouse

Building Info		Notes	Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	8	History	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	
Other Names	1941 constructed. 1980s modified.	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	A				\$ -	
Ford House			B				\$ -	
Description			C				\$ -	
Wood framed single-storey structure with wood siding. Concrete foundation wall. Cedar shake roof. Wood awning at West elevation. Wood framed windows and doors.			D				\$ -	
			E				\$ -	
			F				\$ -	
			G				\$ -	
				Total	\$ -	\$ -	\$ -	
Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Stone and concrete foundation with openings for air circulation.	Poor	Spalling.	Continue monitoring for changes.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Wood rafters.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	2x4 wood joists at 24" o/c with 1x8 strapping.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood horizontal cladding. 2x4 wood framing at 16" o/c.	Poor	Previous temporary patches with mesh and some rotted boards.	Upgrade patches to metal or repair cladding.	3E	See Cladding Program.
		B2020 Exterior Windows	Mix of hung and fixed windows. Wood frame.	Poor	Poor seals and aged trim.	Repair and paint.	4D	See Window and Door Program.
		B2030 Exterior Doors	Painted wood doors and wood trim. Some glass panes.	Poor	Some organic growth on trims and paint peeling.	Repair and paint.	4D	See Window and Door Program.
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs and downspouts and wood fascia.	Poor	Organic growth.	Replace roof.	4C	See Roof Replacement and Maintenance Programs.
B3020 Roof Openings		Brick chimney and metal exhaust ventilation.	Fair	New metal flashing on chimney. Some efflorescence.	No Recommendation.	N/A	N/A	
C Interiors	C10 Interior Construction	C1010 Partitions	Wood framed.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C1020 Interior Doors	Wood door and frame	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	C30 Interior Finishes	C3010 Wall Finishes	Mix of rough cedar planks and drywall.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	Wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3030 Ceiling Finishes	1" wood planks of random width covered by drywall.	Good	No comment on condition.	No Recommendation.	N/A	N/A
D Services	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood ramp to north-east door and wood steps with awning to south-east door.	Fair	Awning leaning North.	No Recommendation.	N/A	N/A
		G2040 Site Development	Horse tie-up.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		G2050 Landscaping	Flower beds at south-east entrance.	Good	No comment on condition.	No Recommendation.	N/A	N/A

Bird Pens

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	9	History	n/a	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 	
Other Names	Construction date unknown		A				\$ -			
n/a			B				\$ -			
Description	Embedded wood post structure and chicken wire fence with tin roof.		C				\$ -			
			D				\$ -			
			E				\$ -			
			F				\$ -			
			G				\$ -			
			Total	\$ -	\$ -	\$ -				

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1020 Special Foundations	Buried wood posts.	Good	Posts at high risk for rot. Water staining at base.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Soil.		No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	2x6 rafters. Post and beam construction.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Wire mesh over wood frame and wood plank half wall at south.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		B2030 Exterior Doors	Wood frame and wire mesh.	Good	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	B30 Roofing	B3010 Roof Coverings	Sheet metal roof.	Good	Overhang is appropriate.	No Recommendation.	N/A	N/A
	G20 Site Improvements	G2040 Site Development	5-rail fence surrounding.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		G2050 Landscaping	Grass and animal pens surrounding.			No comment on condition.	No Recommendation.	N/A

Windmill #1

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	10	History		Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names		1896 constructed.	n/a	A				\$ -		
n/a				B				\$ -		
Description				C				\$ -		
Galvanized metal frame wind mill installed on a wood platform. Appears to be connected to a decommissioned well.				D				\$ -		
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3		Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1020 Special Foundations	Wood platform sleeper.	Fair	Wood is in direct contact with soil.	Monitor and repair foundations as required.	N/A	N/A		
B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	Galvanized steel frame with bolted connections.	Good	Connections show minor sings of corrosion.	No Recommendation.	N/A	N/A		

Log Barn

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	11	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1890 constructed circa. 1989 rebuilt.	A			\$ 25,000		\$ 25,000			
n/a		B			\$ 10,000		\$ 10,000			
Notes	Log cabin with attic accessed from exterior. Stone pedestal foundation. Lean-tos on either side for livestock or storage. Wood framed cedar shake roof. Loft used for hay storage.	C					\$ -			
		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ 35,000	\$ -	\$ 35,000			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1020 Special Foundations	Stone pedestals and grade beams. Buried post for West elevation lean-to.	Good	Foundations are in good condition.	No Recommendation.	N/A	N/A		
		A1030 Slab on Grade	Concrete slab on grade for East elevation lean-to.	Fair	No fill under the slab at South end.	Add fill to support slab. See A1010 at buildings 4A, 20 & 34.	3D	\$ 25,000		
B Shell	B10 Superstructure	B1010 Floor Construction	2x8 wood stringers on center beam.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Rough cut 2x4 trusses w collar ties and 1"x6" strapping. Approximately 8-10 inch diameter pole beams. Some 2x4 posts. Lean-tos are post and beam construction. West elevation lean-to has diagonal bracing.	Fair	Water staining on underside of wood plank sheathing. Floor in hay loft deflects under human load.	B1020. 1 Roof replacement.		3C	See Roof Replacement and Maintenance Program.	
						B1020.2 Structural assessment of hay loft. See B1010 at building 4A, B1020 at building 35.		3C	\$ 10,000	
	B20 Exterior Enclosure	B2010 Exterior Walls	Broad axed log with chinking. Vertical and horizontal 1" wood planks on gable ends. Mesh on east lean-to.	Fair	Some planks are loose. Chinking is dry and cracking.	Replace loose boards and repair chinking.	2D	See Cladding Program.		
		B2020 Exterior Windows	Wood fame with wire mesh.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		B2030 Exterior Doors	Wood doors and frames. Barn door at South elevation.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingles roof with eavestroughs, downspouts and wood fascia.	Poor	Cedar shake roof is aged and has organic growth and some broken shingles. Corrugated metal roofs have localized surface corrosion.	See B2010.	N/A	N/A		
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame and wire mesh.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3020 Floor Finishes	Shiplap floors.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		C3030 Ceiling Finishes	1" planking.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
D Services	D50 Electrical	D5010 Electrical Service & Distribution	60A single phase panel sub-fed underground from another building	Fair	Service is adequate.	Maintain circuit breakers (maintenance).	2D	N/A		
		D5020 Lighting and Branch Wiring	Lighting is generally screw based lamp holders. Wiring is NMWU cable.	Fair	A lot of extension cords have been used in a semi-permanent style.	Ensure LED lamps are utilized. Replace extension cords with permanent wiring where required (maintenance).	2D	N/A		
G Sitework	G20 Site Improvements	G2040 Site Development	Concrete retaining wall at North.	Fair	Wood portion of retaining wall heaving out at top.	Continue to monitor for changes.	N/A	N/A		
		G2050 Landscaping	Animal pens surrounding.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		

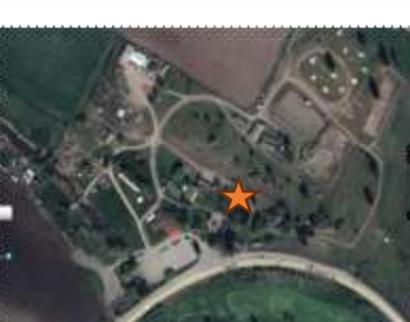
Hay Shed

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	12	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Construction date unknown.	A					\$ -			
Description	Concrete structure with tin roof. Used for hay storage.	B		\$ 25,000			\$ 25,000			
		C					\$ -			
		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total	\$ 25,000	\$ -	\$ -	\$ 25,000				
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation and wall with concrete buttresses.	Fair	Condition was not visible.	Refer to B2010	3A			
B Shell	B10 Superstructure	B1010 Floor Construction	Soil		No comment on condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Stick built trusses with collar ties.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	Reinforced buttressed concrete. Tire retaining wall at North.	Poor	Spalled concrete due to freeze/thaw at front and sides. Concrete buttresses spalled. Exposed rebar at buttresses with surface corrosion.	Structural review and concrete repair or decommission.	3A	\$ 25,000		
	B30 Roofing	B3010 Roof Coverings	Sheet metal roof.	Fair	Minor surface corrosion.	Roof replacement.	1C	See Roof Replacement and Maintenance Programs.		
G Sitework	G20 Site Improvements	G2040 Site Development	3-rail wood fence surrounding with metal gate.	Good	Fence and gate are in generally good condition.	No Recommendation.	N/A	N/A		
		G2050 Landscaping	Built into hill. Grade sloped along East and West walls.		No comment on condition.	No Recommendation.	N/A	N/A		

Ye Ol' Feed Shed

Building Info		Notes		Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	13	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 
Other Names		Construction date unknown.		A				\$ -	
	n/a			B				\$ -	
Description				C				\$ -	
				D				\$ -	
				E				\$ -	
				F				\$ -	
				G				\$ -	
			Total	\$ -	\$ -	\$ -	\$ -		
Level 1	Level 2	Level 3	Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1020 Special Foundations	Wood skid foundation.	Fair	Foundation is in generally good condition.	No Recommendation.	N/A	N/A	
B Shell	B10 Superstructure	B1010 Floor Construction	Wood frame.	Fair	No access to review.	No Recommendation.	N/A	N/A	
		B1020 Roof Construction	Wood frame. With 2x4 trusses.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood frame. Vertical wood plank cladding.	Poor	Some boards are loose or broken at the base.	Replace the loose or broken boards.	3E	See Cladding Program.	
		B2020 Exterior Windows	Wood frame with no glass. Sliding wood shutter.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		B2030 Exterior Doors	Wood door and trim.	Poor	Wood is splitting, some ad hoc repairs.	Restain and replace door.	2E	See Window and Door Program.	
B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Fair	Debris from tree. Fascia deteriorated from woodpeckers and rot. Has been previously replaced.	Remove debris and replace fascia.	1C	See Roof Maintenance Program.		
G Sitework	G20 Site Improvements	G2040 Site Development	Decommissioned light pole adjacent.		No comment on condition.	No Recommendation.	N/A	N/A	
		G2050 Landscaping	Tree adjacent.		Debris on roof from tree.	Clear debris.	N/A	See Roof Maintenance Program.	

Meat and Dairy Building

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	14	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1890 constructed.	A		\$ 20,000			\$ 20,000			
n/a	1920s addition.	B		\$ 7,000			\$ 7,000			
Notes	1987 CMU support wall added.	C					\$ -			
Composed of three buildings. From East to West: B1 = Dairy Building, B2 = Meat Addition, B3 = Garage Addition. Mostly wood frame, some CMU and masonry. Some sloped cedar shake roof and some flat roof. Wood windows and doors.	1989 re-roofed.	D				\$ 2,000	\$ 2,000			
	1960s garage added.	E					\$ -			
	Total			\$ 27,000	\$ -	\$ 2,000	\$ 29,000			
	Level 1	Level 2		Level 3	Assessment					
	Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1010 Standard Foundations	<u>B1:</u> Clay brick foundation wall at South and West and CMU wall at North and East. New CMU wall at West. <u>B2:</u> Stone foundation with no mortar. <u>B3:</u> Slab on grade with footings.	Poor	<u>B1:</u> At the West the clay masonry wall mortar failing: step cracking, spalling, and heaved in. At the South spalled bricks and paint peeling were noted. At the East concrete is missing at rotted floor joist above. Parging has spalling at the East. At the North a portion of the wall is missing.	Support and repair B1 North and East wall and associated areas in B2.	5B	\$ 20,000		
B Shell	B10 Superstructure	B1010 Floor Construction	<u>B1:</u> Concrete slab on grade (not original). <u>B2:</u> Wood joists. <u>B3:</u> Concrete slab on grade.	Poor	<u>B2:</u> Wood joists rotted on main floor.	Replace deteriorated joists. See A1010.	5B	See A1010.		
		B1020 Roof Construction	<u>B1:</u> 2x8 joists on center beam. New post and beam in the center of the room. <u>B2:</u> Wood frame joists. <u>B3:</u> 1 3/4"x6" joists at 16" o/c span 19'6". New steel post in the center of the room.	Poor	<u>B1:</u> Beam and joists sagging. <u>B2:</u> Joists cut during install of the cooler room are now cantilevered. <u>B3:</u> Deflection at midspan of joists held up by post is causing wave deflection pattern.	<u>B1/B3:</u> Load review and provide additional support. <u>B2:</u> Add blocking to end of cantilevered joists.	4B	\$ 7,000		
	B20 Exterior Enclosure	B2010 Exterior Walls	<u>B1:</u> White painted horizontal wood siding. 2x4 wood studs at 2' o/c. <u>B2:</u> Tin cladding on double layer of 1" plank. Wood frame. <u>B3:</u> CMU walls with board and batten cladding.	Fair	North wall mostly buried. <u>B1:</u> Paint chipping. <u>B2:</u> Tin cladding missing at bottom of North wall.	Repair and paint cladding.	3D	See Cladding Program.		
		B2020 Exterior Windows	<u>B1:</u> Fixed wood frame windows at South. Openings just below grade at North. <u>B3:</u> Fixed wood frame.	Fair	Paint chipping at trims.	Repair and paint.	3D	See Window and Door Program.		
		B2030 Exterior Doors	<u>B1/B2:</u> Wood door. <u>B3:</u> Plywood barn door.	Fair	<u>B1:</u> Door trim deteriorating.	Repair and paint.	3D	See Window and Door Program.		
	B30 Roofing	B3010 Roof Coverings	B1/B2: Cedar shake single roof with wood fascia.	Fair	B1/B2: Some loose shingles.	Replace B1/B2 roof.	3C	See Roof Replacement and Maintenance Program.		
			<u>B3:</u> Built up roof with one scupper and downspout.	Fair	<u>B3:</u> Organic growth and ponding.	Replace B3 roof and improve drainage.	4C	See Roof Replacement and Maintenance Program.		

Meat and Dairy Building

C Interiors	C10 Interior Construction	C1010 Partitions	B2: Wood frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C1020 Interior Doors	B2: Wood door and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	C30 Interior Finishes	C3010 Wall Finishes	B1: N/A B2: Wood plank. B3: Plywood at West, else none.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	B2: Wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3030 Ceiling Finishes	B1: White painted 1x12 planks. B2: White painted 1x8 tongue and groove. B3: Wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
D Services	D50 Electrical	D5010 Electrical Service & Distribution	Circuit fed from mansion overhead.	Poor	Disconnect switch is very old.	Replace disconnect switches.	3D	\$ 2,000
		D5020 Lighting and Branch Wiring	Interior lighting.	Fair	Fluorescent and screw base lamp holders.	Ensure LED lamps are utilized. Replace missing lamps (maintenance).	2D	N/A
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Concrete pavers along front. Concrete steps to B1 and B2 front entrances. Steel rail and caps at stair to B2.	Fair	Previous patch repairs at pavers. Stairs to B1 significantly eroded.	Repair concrete stairs to B1.	3B	See A1010.
		G2040 Site Development	Decommissioned light pole adjacent.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		G2050 Landscaping	Tree adjacent.		No comment on condition.	No Recommendation.	N/A	N/A

Chinese Cook's House

Building Info		Notes		Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	15	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 
Other Names	Chinese Bunkhouse	1910s constructed.		A				\$ -	
Description	Small wood framed single-storey, single-room building with cedar shake roof and cladding. Wood framed windows and doors. Rock faced concrete foundation.			B				\$ -	
				C				\$ -	
				D				\$ -	
				E				\$ -	
				F				\$ -	
				G				\$ -	
				Total		\$ -	\$ -	\$ -	

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Rock faced concrete footing.	Fair	Foundation is in fair condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Wood frame.	Fair	Floor is overhung of the foundation.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	2x6 rafters at 2' o/c.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood shake siding painted white on three sides. 2"x2" horizontal strapping.	Poor	Shingles split, curling, and missing.	Repair deteriorated cladding.	4C	See Cladding Programs.
		B2020 Exterior Windows	Wood frame hung windows.	Poor	No seals. Sills and trim deteriorating.	Repair and paint. Add seals.	4D	See Window and Door Program.
		B2030 Exterior Doors	Wood door and frame with glass panes.	Poor	Seals and trim deteriorating.	Repair and paint trim.	4D	See Window and Door Program.
B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Shingles curling. Fascia paint chipping.	Roof replacement and maintenance.	4C	See Roof Replacement and Maintenance Programs.	
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	Painted 1"x3" tongue and groove.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	Painted 1"x3" tongue and groove.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3030 Ceiling Finishes	1"x3" tongue and groove.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2040 Site Development	Wood stairs with steel stringer and handrail.	Fair	Paint on treads is chipping and surface corrosion on stringer. Nailed into cladding at top of stairs.	Provide support at top of stairs.	3B	See Cladding Program.

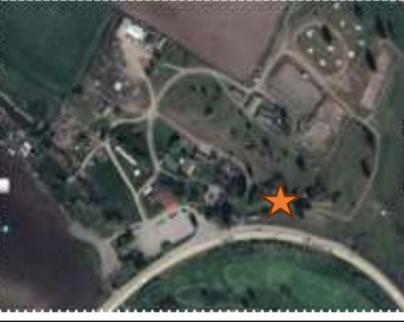
Log House

Building Info		History	Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	16	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1875 constructed.	A					\$ -			
Log Cabin, Original O'Keefe House	1898 moved to current location.	B			\$ 5,000		\$ 5,000			
Notes	1965-1967 restored: new concrete footing, replace sashes and doors, fireplace constructed.	C					\$ -			
Two-storey wood framed building with stone foundation and wood siding. Cedar shake shingle roof. Tin-roofed lean-to off kitchen entrance. Wood frame windows and doors.	1978 re-roofed, new stairs.	D					\$ -			
	1989 lean-to re-roofed.	E					\$ -			
	F						\$ -			
	G						\$ -			
	Total			\$ -	\$ 5,000	\$ -	\$ 5,000			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Stone foundation.	Fair	No signs of distress where visible.	No Recommendation.	N/A	N/A		
	B10 Superstructure	B1010 Floor Construction	Wood joists.	Fair	Stained where buried	Landscape to provide 4" clearance between cladding and vegetation. Monitor for leaking.	3D	See Landscaping Program.		
		B1020 Roof Construction	Wood joists.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	Split log construction (whip-sawn ponderosa pine). Horizontal wood siding and wood cap on corners.	Poor	Aged cladding with localized metal patches. Corner trim is pulling away in at the south east corner. Water staining at base of cladding.	Repair corner trim. See B1010.	3E	See Cladding Program.		
		B2020 Exterior Windows	Hung and fixed wood frame windows. Metal bars over some windows.	Poor	Poor seals. Water staining around dorm windows with new flashing.	Repair and paint trim and replace seals.	5D	See Window and Door Program.		
		B2030 Exterior Doors	Wood door and frame. Metal sill at South door.	Fair	No comment on condition.	Repair and paint trim.	4D	See Window and Door Program.		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Organic growth. Fascia paint is chipping. Water staining below dormer windows.	Paint fascia.	4D	See Roof Replacement and Maintenance Programs.		
		B3020 Roof Openings	One brick chimney and one stone chimney.	Fair	Spalling at top of brick chimney.	Roof replacement.	3C	See Roof Replacement and Maintenance Programs.		
					Repair chimney. See B3020 at building 34.	2B	\$ 5,000			
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1020 Interior Doors	Wood doors and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C20 Stairs	C2010 Stair Construction	Wood construction.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3010 Wall Finishes	Mix of painted wood plank and wallpaper.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C3020 Floor Finishes	Mix of wood plank and linoleum.	Poor	Some linoleum peeling or missing.	No Recommendation.	N/A	N/A		
	C3030 Ceiling Finishes	Painted wood plank.	Good	No comment on condition.	No Recommendation.	N/A	N/A			
D Services	D50 Electrical	D5010 Electrical Service & Distribution	100A single phase service from BC Hydro which also sub-feeds the General Store (2P-30) and Blacksmith (2P-60).	Good	Service is adequate.	Maintain breakers (maintenance).	N/A	N/A		
		D5020 Lighting and Branch Wiring	Interior lighting.	Fair	Minimal indoor lighting.	Ensure LED lamps are used (maintenance).	N/A	N/A		
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood boardwalk from Log House to St. Anne's Church. Stone steps with retrofit steel rail. Gravel porch at back entrance.	Fair	Pedestrian paving is in fair condition.	No Recommendation.	N/A	N/A		
		G2040 Site Development	Wood frame lean-to at back with sheet metal roof. White painted picket fence to west.	Poor	Roof is a hazard to pedestrians.	Re-detail to remove sharp edges.	5B	See Roof Maintenance Program.		
		G2050 Landscaping	Garden beds at East and South. Grade sloped from back to front.	Fair	Vegetation touches cladding.	See B1010.	N/A	See B1010.		

General Store

Building Info		Notes		Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	17	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 
Other Names	Candy Store, Okanagon Post Office	1965 constructed.		A				\$ -	
Description	Wood framed single-storey building with board and batten siding, stone foundations, and cedar shake single roof. Exposed wood structure inside. Wood front awning over boardwalk and wood steps.			B				\$ -	
				C				\$ -	
				D				\$ -	
				E				\$ -	
				F				\$ -	
				G				\$ -	
						Total	\$ -	\$ -	\$ -
Level 1	Level 2	Level 3	Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1010 Standard Foundations	Stone foundation and grade beam. Concrete slab on grade. Deck post has concrete footing.	Good	Foundation is in generally good condition.	No Recommendation.	N/A	N/A	
B Shell	B10 Superstructure	B1010 Floor Construction	2-ply 3x8 North-South spanning beam. 5 1/4"x5 1/4" beam in center of room.	Good	No comment on condition.	No Recommendation.	N/A	N/A	
		B1020 Roof Construction	2x6 wood rafters at 16" o/c with 1"x6" strapping.	Fair	Water staining on soffit.	Clean and paint soffit. Repair roof leaks.	3D	See Roof Maintenance Program.	
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood frame. 1" board and batten cladding.	Good	Aged siding with water staining at base. Some loose battens.	Landscape to provide 4" clearance between cladding and vegetation. Repair or replace loose battens.	3D	See Landscaping and Cladding Programs.	
		B2020 Exterior Windows	Wood frame fixed windows with metal bars over exterior and some stained glass.	Fair	Trim paint peeling.	Repair and paint trim.	2D	See Window and Door Program.	
		B2030 Exterior Doors	Wood door and trim with glass panes.	Fair	Trim paint peeling.	Repair and paint trim.	2D	See Window and Door Program.	
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Shingles curling and some organic growth.	Repair and paint fascia.	3D	See Roof Replacement and Maintenance Programs.	
						Roof replacement.	4C	See Roof Replacement and Maintenance Programs.	
	B3020 Roof Openings	New metal chimney.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	Painted wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		C3020 Floor Finishes	1x6 tongue and groove at 16" o/c.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		C3030 Ceiling Finishes	Painted wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
D Services	D50 Electrical	D5010 Electrical Service & Distribution	30A sub fed from log house underground.	Good	Load centre panel located under counter is adequate.	Maintain circuit breakers (maintenance).	2D	N/A	
		D5020 Lighting and Branch Wiring	Interior lighting.	Fair	Screw base lamp holders and older decorative fixtures.	Ensure LED lamps are utilized (maintenance).	2E	N/A	
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood boardwalk from Log House to St. Anne's Church. Wood frame front porch with wood steps and guardrail.	Fair	Pedestrian paving is in fair condition.	No Recommendation.	N/A	N/A	
		G2040 Site Development	White painted picket fence on either side.	Fair	Fence is in fair condition.	No Recommendation.	N/A	N/A	
		G2050 Landscaping	Garden beds on three sides.	Fair	Vegetation touches cladding.	See B2010.	N/A	See B2010.	

Blacksmith Shop

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	18	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1965 constructed.	A					\$ -			
n/a		B		\$ 5,000			\$ 5,000			
Description	Wood framed single-storey with board and batten siding. Stone foundation and cedar shake shingle roof. Active forges inside. Wood doors.	C					\$ -			
		D		\$ 18,000			\$ 18,000			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ 23,000	\$ -	\$ -	\$ -			

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Stone foundation wall 10" high by 12" wide with 5" concrete footing and parging on interior.	Good	No comment on condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Reported 2" concrete slab.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	2x6 rough cut wood rafters. Center beam bearing on column and exterior walls.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Board and batten siding with 1x8-12" board and 1x4 battens. 2x4 rough cut wood stud at 16" o/c, cross braced with 2x4 blocking. 2x6 bottom plate and 2x4 top plate.	Poor	Wood pecker holes and water staining at base. Some previous metal patches.	Landscape to provide 4" clearance between cladding and vegetation. Repair woodpecker holes.	3D	See Landscaping and Cladding Program.
		B2020 Exterior Windows	Wood frame with metal mesh covering. One fixed glass panel window.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B2030 Exterior Doors	Wood doors and trim. Glass panel in back door.	Fair	Surface corrosion on hardware. Front door is touching vegetation and rotting at base. Back door is in poor condition and has no handle.	See B2010. repair doors as required.	3E	See Window and Door Program.
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle with wood fascia.	Fair	Lots of organic growth and debris from tree. Some missing shingles.	Roof replacement.	4C	See Roof Replacement and Maintenance Programs.
B3020 Roof Openings		Metal chimney.	Good	Potential fire hazard with no flashing at base of chimney.	Add flue flashing at base of chimney. See B3020 at building 4A.	4B	\$ 5,000	
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	Painted plywood	Good	No comment on condition.	No Recommendation.	N/A	N/A
	D30 HVAC	D3040 Distribution Systems	Forge Venting System	Poor	Except for one system, the forge venting system will need to be replaced.	The systems should be replaced, and appropriate thimbles are needed for the penetrations through the roof.	5C	\$ 18,000
D Services	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	D50 Electrical	D5010 Electrical Service & Distribution	60A sub feed underground from Log House.	Good	60A load centre panel is adequate for the current use.	Maintain circuit breakers (maintenance).	2D	N/A
		D5020 Lighting and Branch Wiring	Interior fluorescent lighting.	Fair	Minimal lighting.	Replace lighting with LED as fixtures fail.	2D	N/A
E Equipment & Furnishings	E10 Equipment	E1010 Commercial Equipment	Blacksmithing forges.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood boardwalk from Log House to St. Anne's Church.	Fair	Boardwalk is in fair condition.	No Recommendation.	N/A	N/A
		G2050 Landscaping	Evergreen tree adjacent.	Fair	No comment on condition.	No Recommendation.	N/A	N/A

Red Shed

Building Info		Notes		Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	19	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 
Other Names	Pottery Studio	1870 original construction. 1915 garage addition.		A				\$ -	
Description	Single-storey wood framed building. Original building was 20' x 30' with a 22' x 20' addition. Cedar shingle roof. Concrete foundation wall. Attic with access by ladder from main floor.			B				\$ -	
				C				\$ -	
				D				\$ -	
				E				\$ -	
				F				\$ -	
				G				\$ -	
				Total	\$ -	\$ -	\$ -		
Level 1	Level 2	Level 3	Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation wall.	Poor	North-West corner concrete has eroded. Cracked in some locations (pre-existing condition). Deflected outwards at South elevation.	Continue monitoring for changes.	N/A	N/A	
	A20 Basement Construction	A2010 Basement Excavation	Vented crawlspace.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
B Shell	B10 Superstructure	B1010 Floor Construction	Addition is concrete slab on grade and grease pit. Original room is wood joist.	Fair	Minor cracking.	Continue monitoring for changes.	N/A	N/A	
		B1020 Roof Construction	Wood joists.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
	B20 Exterior Enclosure	B2010 Exterior Walls	Horizontal red wood siding and white painted wood corner caps.	Fair	Some loose planks.	Replace or repair loose planks.	2E	See Cladding Program.	
		B2020 Exterior Windows	Wood frame awning windows.	Fair	South windows are insulated over.	No Recommendation.	N/A	N/A	
		B2030 Exterior Doors	Wood door and frame.	Fair	Addition door has water staining at base. Back door is insulated over. Barn door has loose boards.	Repair doors.	3D	See Window and Door Program.	
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with eavestroughs and downspouts and wood fascia.	Fair	Some organic growth.	Roof replacement.	1C	See Roof Replacement and Maintenance Programs.	
B3020 Roof Openings		Box vents and two metal chimneys.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
C Interiors	C10 Interior Construction	C1010 Partitions	Exterior wall of original room. Wood frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		C1020 Interior Doors	Wood door and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
	C30 Interior Finishes	C3010 Wall Finishes	Wood plank.	Fair	Water staining in Addition South-West corner at top of wall.	Patch planks.	3D	See Cladding Program.	
		C3020 Floor Finishes	Plank floor in loft. N/A in addition.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		C3030 Ceiling Finishes	Plywood in original room. Wood plank in addition.	Fair	Water staining near addition door. Ceiling is deflecting in original room.	Re-fasten ceiling to roof structure (maintenance). Patch repair plywood.	3D	See Cladding Program.	
D Services	D50 Electrical	D5010 Electrical Service & Distribution	Overhead BC Hydro service to a load centre panel.	Fair	Service is in fair condition.	Maintain breakers (maintenance).	2D	N/A	
		D5020 Lighting and Branch Wiring	Interior lighting.	Fair	Fluorescent and screw base lamp holders.	Replace lighting with LED as existing fixtures fail (maintenance).	2D	N/A	
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Extended slab patio.	Fair	Minor cracking.	Continue monitoring for changes.	N/A	N/A	
		G2040 Site Development	Lamppost and metal gate adjacent.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
		G2050 Landscaping	Vegetation on lattice.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	

Carriage Shed

Building Info		History	Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	20	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Circa 1890. 1965 renovation. 1981 renovation: (add garage doors, close in some doorways and chimney).	A					\$ -			
Description	Single-storey wood frame building with concrete foundation wall and cedar shake shingle roof. Wood framed fibreglass doors. Two individual bathrooms. Red painted wood siding.	B					\$ -			
		C					\$ -			
		D		\$ 5,000			\$ 5,000			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total	\$ -	\$ 5,000	\$ -	\$ -				
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation wall. Floor joists on rocks or concrete piles.	Fair	Minor cracking. Undermined at South elevation.	Provide soil infill where undermined.	3C	See O'Keefe House A1010.		
	A20 Basement Construction	A2010 Basement Excavation	Vented crawlspace.	Fair	No vent covers.	Install vent covers (maintenance).	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Wood joists.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Wood joists.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	Mix of 1x6 vertical wood siding and cedar shake shingles. Wood frame.	Fair	Some loose of broken shingles and woodpecker holes.	Patch or replace damaged shingles.	3E	See Cladding Program.		
		B2030 Exterior Doors	Wood frame fibreglass doors.	Fair	Aged but functional.	No Recommendation.	N/A	N/A		
B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with eavestroughs and downspouts and wood fascia.	Fair	Some organic growth. Eavestroughs are dirty.	Clean eavestroughs.	1C	See Roof Maintenance Program.			
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C3010 Wall Finishes	Wood planks.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3020 Floor Finishes	2x6 tongue and groove.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C3030 Ceiling Finishes	Drywall.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
D Services	D20 Plumbing	D2010 Plumbing Fixtures	Lavatories and water closets appear to be relatively new.	Good	The existing fixtures should provide good service for the near future.	Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene.	3D	\$ 2,500		
		D2020 Domestic Water Distribution	Original piping systems are not visible.	Fair	The systems are not likely to be very old as the washrooms seem to be a recent renovation to the building.	No Recommendation.	2E	N/A		
		D2030 Sanitary Waste	Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.	Fair	The sanitary drainage piping should provide good service for the near future.	No Recommendation.	2E	N/A		
		D2090 Other Plumbing Systems	Domestic Water Heater	Fair	The electric domestic hot water heater is nearing the end of its service life.	The domestic water heater should be replaced relatively soon.	3D	\$ 2,500		
	D50 Electrical	D5010 Electrical Service & Distribution	Circuits sub fed from adjacent building.	Fair	Service is in fair condition.	No Recommendation.	N/A	N/A		
		D5020 Lighting and Branch Wiring	Interior Lighting	Fair	Fluorescent wraparound and incandescent.	Replace light with LED as fixtures fail or funding becomes available (maintenance).	2D	N/A		
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood platform outside of washrooms. Extended slab patio.	Fair	Wood platform is wet. Minor cracking in slab.	Replace wood platform at failure. Continue monitoring slab for changes.	N/A	N/A		
		G2040 Site Development	Metal fence with barbed wire.	Fair	Fence is in fair condition.	No Recommendation.	N/A	N/A		

St. Anne's Church

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	21	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1889 constructed.	A					\$ -			
St. Ann's Church	1965 interior restored, repainted.	B					\$ -			
Description	1989 sacristy rehabilitation (linseed preservative oil).	C					\$ -			
Wood framed single-storey building with attic above sacristy. Vaulted ceiling in main room. Cedar shake roof with metal shingles on steeple. New white painted wood cladding. Wood doors and windows.	2015-2017 exterior restoration and foundation.	D			\$ 10,000	\$ 13,000	\$ 23,000			
	E					\$ -				
	F					\$ -				
	G					\$ -				
Total		Total	\$ -	\$ 10,000	\$ 13,000					

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Cast-in-place concrete foundation.	Good	Foundation new in 2006.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	2x8 joists at 24" o/c on 6x6 beam.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Attic above back room. 1x10-12" strapping.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B2010 Exterior Walls	Wood horizontal cladding. Wood balloon framing at 24" o/c.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2020 Exterior Windows	Exterior glazed single pane swing windows with wood trim. Some stained glass. Hung windows at back.	Poor	Paint chipping on sills. Glass is dirty.	Repair and paint trims.	2D	See Window and Door Program.
		B2030 Exterior Doors	Original wood doors and trim.	Fair	Front door has astragal.	Adjust astragal to clear the door handle.	2B	See Window and Door Program.
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with eavestroughs and downspouts and wood fascia.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
B3020 Roof Openings		Metal chimney.	Fair	Chimney leaking.	Review and repair (maintenance).	N/A	N/A	
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C1020 Interior Doors	Wood door and frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	C30 Interior Finishes	C3010 Wall Finishes	Generally 1"x2.5" tongue and groove. 1"x3.5" tongue and groove in sacristy.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	Generally 1"x5" tongue and groove. 1"x5-9" tongue and groove in sacristy.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		C3030 Ceiling Finishes	1x4 tongue and groove.	Fair	Some water staining in back room.	Assess chimney and repair flashing.	4E	See Roof Maintenance Program.

St. Anne's Church

D Services	D30 HVAC	D3010 Energy Supply	The only building that is heated but not connected to Natural gas is the St Annes Church, that has a dedicated propane tank.	Good	Gas piping where visible appears to be in good condition.	No upgrades to the system are anticipated unless significant upgrades to the existing systems is initiated.	N/A	N/A
		D3020 Heat Generating Systems	Assumed there is a propane fired furnace in the ceiling space above the back entry to the church. Likely the unit is fairly old as the venting is an older style. Wood stove is not in use. Chimney has been reconfigured to serve the furnace mentioned above.	Poor	This gas fired appliances have been installed in a room that is not fire rated.	D3020.1 Update the propane furnace to a sealed combustion condensing furnace considering the cost of propane.	2D	\$ 12,500
						D3020.2 Fire rate the room that the furnaces are installed.	2B	\$ 10,000
	D3040 Distribution Systems	Supply duct system.	Fair	The supply duct systems are in good shape considering the age of the system.	At most, an internal inspection of the duct and a duct cleaning every 5 years or so.	3E	\$ 500	
	D50 Electrical	D5010 Electrical Service & Distribution	Circuits sub fed from Blacksmith Shop.	Fair	Two circuits for lighting and receptacles.	No Recommendation.	N/A	N/A
		D5020 Lighting and Branch Wiring	Interior lighting and accent lighting surrounding.	Fair	Single incandescent up light, in ground accent lightings around building.	Some inground lights have been replaced with LED. Upgrade interior lighting to LED when fixture fails or if funding is available (maintenance).	2D	N/A
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood steps to front door. Wood ramp to back door on concrete pedestals. Wood boardwalk from Log House to St. Anne's Church.	Fair	Wood handrail at ramp is rotting.	Replace handrail (maintenance).	N/A	N/A
		G2040 Site Development	White picket fence surrounding. Mini stone retaining wall at south-east corner. Streetlamps along boardwalk.	Fair	Fence paint is chipping. Streetlamps in fair to poor condition.	Paint fence.	2E	See Fence Program.

Smoke House

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	22	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1900 constructed circa. 2006 re-roofed "recently".	A					\$ -			
n/a		B					\$ -			
Description		C					\$ -			
Small wood framed structure, interior charred from smoke, pedestal foundation, and cedar shake roof.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -				

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1020 Special Foundations	Stone pedestal foundation.	Good	Foundation is in generally good condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Wood joists.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Wood joists.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Vertical wood cladding. 2x4 wood frame walls with 2-ply 2x4 posts at corners.	Fair	Hole in cladding at North-East corner.	Patch cladding where required.	2D	See Cladding Program.
		B2030 Exterior Doors	Wood door and trim with holes for ventilation.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Fair	No comment on condition.	No Recommendation.	N/A
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	Wood plank.	Fair	Finish is charred from use.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	Wood plank.	Fair	Finish is charred from use.	No Recommendation.	N/A	N/A
		C3030 Ceiling Finishes	Wood plank.	Fair	Finish is charred from use.	No Recommendation.	N/A	N/A

Pump House

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo		Location	
Building No.	23	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total				
Other Names	Construction date unknown.	A					\$ -					
n/a		B					\$ -					
Description		C					\$ -					
Water main for the site. Wood framed building with plywood interior sheathing and sheet metal roof. Board and batten siding. Concrete slab on grade foundation.		D			\$ 4,000		\$ 4,000					
		E					\$ -					
		F					\$ -					
		G					\$ -					
		Total		\$ -	\$ 4,000	\$ -	\$ 4,000					
Level 1	Level 2	Level 3	Assessment									
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost				
A Substructure	A10 Foundation	A1030 Slab on Grade	Standard concrete slab on grade.	Good	Foundation is in generally good condition.	No Recommendation.	N/A	N/A				
B Shell	B10 Superstructure	B1010 Floor Construction	See A1030.	Good	See A1030.	See A1030.	N/A	N/A				
		B1020 Roof Construction	Wood joists.	Fair	Potential repairs required due to roof leak. Potential stud deterioration from leak.	Review and repair with roof and cladding repairs.	N/A	See Roof Maintenance Program.				
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood frame. Board and batten cladding.	Fair	Cladding is aged and touching grade.	Landscape to provide 4" clearance between cladding and vegetation. Repair or replace damaged cladding.	3E	See Landscaping and Cladding Programs.				
		B2030 Exterior Doors	Wood door and frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A				
		B30 Roofing	B3010 Roof Coverings	Sheet metal roof.	Good	No comment on condition.	No Recommendation.	N/A	N/A			
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	Plywood.	Poor	Staining at North-East corner.	Replace plywood and repair roof leaks.	4D	See Cladding Program.				
		C3020 Floor Finishes	See A1030.	Good	See A1030.	See A1030.	N/A	N/A				
		C3030 Ceiling Finishes	Plywood.	Poor	Staining at North-East corner.	See C3010.	N/A	See C3010.				
D Services	D20 Plumbing	D2020 Domestic Water Distribution	The piping systems use galvanized, copper, and plastic piping.		Galvanized piping is no longer approved on domestic water systems. The tanks and recent piping system appear to be functional.	The next time the system needs work, we recommended replacing the galvanized piping with approved domestic water systems.	3D	\$ 2,500				
	D50 Electrical	D5010 Electrical Service & Distribution	Electrical sub-fed from Implement Shed.	Fair	Older style ITE panel replacement breakers will be difficult to obtain.	Replace panel.	3D	\$ 1,500				
		D5020 Lighting and Branch Wiring	Lighting.	Fair	Fluorescent.	Replace with LED when fixture fails (maintenance).	2D	N/A				
		D5090 Other Electrical Systems	Generator input.	Fair	Manual transfer switch for connection of portable generator.	No Recommendation.	N/A	N/A				

Windmill #2

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	24	History		Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names		1900 constructed circa. 1990 relocated to O'Keefe Ranch.	A				\$ -			
n/a			B				\$ -			
Description			C				\$ -			
Galvanized metal frame wind mill installed on a wood platform.		D				\$ -				
		E				\$ -				
		F				\$ -				
		G				\$ -				
			Total	\$ -	\$ -	\$ -				
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1020 Special Foundations	Wood platform sleeper.	Fair	Wood is in direct contact with soil.	Monitor and repair foundations as required.	N/A	N/A		
B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	Galvanized steel frame with bolted connections.	Good	Connections show minor sings of corrosion.	No Recommendation.	N/A	N/A		

Water Cisterns

Building Info		Notes		Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	25	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 
Other Names	1901 constructed.			A				\$ -	
n/a				B				\$ -	
Description	Two cisterns - West covered and East uncovered. Cistern cover is wood frame with cedar shake roof and rock pedestal foundation.			C				\$ -	
				D				\$ -	
				E				\$ -	
				F				\$ -	
				G				\$ -	
				Total		\$ -	\$ -	\$ -	
Level 1	Level 2	Level 3	Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
A Substructure	A10 Foundation	A1020 Special Foundations	Rock pedestal foundation at cover.	Good	Foundation is in generally good condition.	No Recommendation.	N/A	N/A	
	A20 Basement Construction	A2020 Basement Walls	Concrete cistern.	Fair	At East cistern: crack through wall near west side, pour joint at half height is cracked. Concrete cap is in fair condition.	Remove vegetation and clean (maintenance).	N/A	N/A	
B Shell	B10 Superstructure	B1020 Roof Construction	Collar tied wood trusses at cover.	Fair	Minor staining	Roof replacement.	2D	See Roof Replacement and Maintenance Programs.	
	B20 Exterior Enclosure	B2010 Exterior Walls	Approximately 2x4 wood frame with double layer of horizontal wood cladding on cover.	Fair	Cladding near grade has minor deterioration and is buried at north elevation.	Repair and paint cladding.	3E	See Cladding Program.	
		B2020 Exterior Windows	Wood framed opening with wood shutter.	Fair	Shutters are aged.	Repair shutters.	3E	See Window and Door Program.	
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Fair	Sheathing is water damaged and splitting in some locations. Some organic growth.	See B1020.	N/A	See B1020.	
C Interiors	C30 Interior Finishes	C3010 Wall Finishes	Parging layer.	Fair	Shrinkage cracking in both cisterns. East cistern has spalling, efflorescence, delaminations, and vegetation growth. No mortar joint deterioration.	See A2020.	N/A	See A2020.	
G Sitework	G20 Site Improvements	G2050 Landscaping	Trees near West cistern.		No comment on condition.	No Recommendation.	N/A	N/A	

SPALLUMCHEEN PIONEER POWER CLUB DISPLAY #1

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location	
Building No.	26	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total			
Other Names	Antique Farming Equipment Display	History		Construction date unknown.	A						\$ -
Description	Pressure-treated post and beam on concrete slab on grade. Sheet metal roof on engineered trusses. Houses antique farming equipment.	B						\$ -			
				C				\$ -			
				D		\$ 2,000		\$ 2,000			
				E				\$ -			
				F				\$ -			
				G				\$ -			
				Total	\$ -	\$ 2,000	\$ -	\$ 2,000			

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Pressure-treated embedded posts.	Fair	Posts are in fair condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Concrete slab on grade.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Engineered trusses at 4' o/c.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B30 Roofing	B3010 Roof Coverings	Sheet metal roof with wood fascia. Sheet metal cladding on gable ends.	Good	No comment on condition.	No Recommendation.	N/A	N/A
C Interiors	C10 Interior Construction	C1030 Fittings	Steel fence surrounding.	Fair	Surface corrosion on steel fence.	Clean fence (maintenance)	N/A	N/A
D Services	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	D50 Electrical	D5010 Electrical Service & Distribution	Circuits fed from panel in SPPC #2.	Poor	Circuits are in poor condition.	Non-weatherproof disconnect switch is exposed to weather and is rusting. Replace.	3D	\$ 2,000
		D5020 Lighting and Branch Wiring	Lighting.	Lighting.	Fair	Screw based style lamp holders.	Utilize LED lamps (maintenance).	2D

SPALLUMCHEEN PIONEER POWER CLUB DISPLAY #2

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	27	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Construction date unknown.	A					\$ -			
n/a		B			\$ 6,000		\$ 6,000			
Description	Pressure-treated pole barn. Cedar shake roof on engineered trusses. Houses tractor collection.	C					\$ -			
		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total			\$ -	\$ 6,000	\$ -	\$ 6,000		

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Pressure-treated embedded posts.	Fair	Water staining at base.	No Recommendation.	N/A	N/A
		B1010 Floor Construction	Soil.		No comment on condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1020 Roof Construction	Engineered trusses with steel tie downs. Pole barn construction with poles at 15' o/c.	Fair	Notched poles in bearing. Some cracking in beams and some poles checking.	Add new strap anchors. Continue monitoring for changes. See A1010 at buildings 28 & 29, B1020 at building 30, G2040 at building 36.	2B	\$ 6,000
		B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia and horizontal wood cladding at gable ends.	Poor	Shingles in fair to poor condition with some organic growth. Sheathing stained.	Roof replacement.	3C
D Services	D50 Electrical	D5010 Electrical Service & Distribution	100A single phase panel.	Good	Panel is located in weather protective wooden cabinet	No Recommendation.	N/A	N/A
		D5020 Lighting and Branch Wiring	Lighting.	Fair	Residential style chandelier fixtures.	Utilize LED lamps (maintenance).	2D	N/A

Implement Shed #1

Building Info		History	Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	28	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1981 constructed.	A				\$ 6,000	\$ 6,000			
West Implement Shed		B					\$ -			
Description		C					\$ -			
Wood post and beam barn with concrete footings and cedar shake roof. Open on the South side and livestock lean-to on North side. Board and batten siding on enclosed elevations.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total			\$ -	\$ -	\$ 6,000	\$ 6,000		

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Sono tube concrete footings with steel saddle connection to columns.	Good	Surface corrosion on steel connections.	Clean steel connection. See A1010 at building 29, B1020 at buildings 27 & 30, G2040 at building 36.	2D	\$ 6,000
		B10 Superstructure	B1010 Floor Construction	Soil.		No comment on condition.	No Recommendation.	N/A
B Shell	B20 Exterior Enclosure	B1020 Roof Construction	Engineered trusses.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		B2010 Exterior Walls	Post and beam construction. Board and batten cladding.	Fair	Water staining around mid-height.	Landscape to provide 4" clearance between cladding and vegetation.	3E	See Landscaping Program.
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Shingles curling and organic growth on North side. Fascia is in fair to poor condition.	Roof replacement.	3C	See Roof Replacement and Maintenance Programs.
D Services	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	N/A	N/A	N/A
	D50 Electrical	D5010 Electrical Service & Distribution	Local centre sub fed from SPPC #2.	Fair	Event receptacle load centre fed with cab-tire cable/cord cap OK on temporary basis.	No Recommendation.	N/A	N/A
		D5020 Lighting and Branch Wiring	Lighting.		Switches but no lighting observed.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2040 Site Development	Post and beam shelter at back with concrete footing with steel saddle connection and sheet metal roof.	Fair	Some posts buried	Landscape to expose buried posts.	3D	See A1010.

Implement Shed #2

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	29	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1950 constructed circa. Mid 1950s addition.	A				\$ 6,000	\$ 6,000			
Description	Wood post and beam barn with concrete foundation and cedar shake roof. Open on the South side and livestock holding lean-to on the North. Board and batten cladding on enclosed sides.	B				\$ -	\$ -			
				C			\$ -	\$ -		
				D			\$ -	\$ -		
				E			\$ -	\$ -		
				F			\$ -	\$ -		
				G			\$ -	\$ -		
				Total	\$ -	\$ -	\$ 6,000	\$ 6,000		

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1020 Special Foundations	18 concrete blocks with mix of posts bearing on concrete in some locations and steel saddle connection.	Good	Surface corrosion on steel connections.	Clean steel connection. See A1010 at building 28, B1020 at buildings 27 & 30, G2040 at building 36.	2D	\$ 6,000
B Shell	B10 Superstructure	B1010 Floor Construction	Soil.		No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Engineered trusses and 1x6 strapping.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	8x8 post and beam construction with mix of board and batten and vertical wood plank cladding.	Fair	Cladding is aged.	No Recommendation.	N/A	N/A
		B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Substantial organic growth on North elevation. Sheathing stained. Fascia in very poor condition.	Roof replacement.	4C
G Sitework	G20 Site Improvements	G2040 Site Development	Post and beam lean-to at back for animals with concrete footings and steel saddle connection. Plywood cladding and sheet metal roof.	Poor	Plywood is aged.	No Recommendation under current use.	N/A	N/A
		G2050 Landscaping	Plantings at back corner.		Vegetation touches grade.	Landscape to provide clearance.	2E	See Landscaping Program.

Tack Shed

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo		Location	
Building No.	30	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total				
Other Names	Construction date unknown.	A					\$ -					
n/a		B			\$ 6,000		\$ 6,000					
Description	Wood pole barn on concrete footings and sheet metal roof. Enclosed room on West end with sheet metal cladding and skylight.	C					\$ -					
		D					\$ -					
		E					\$ -					
		F					\$ -					
		G					\$ -					
		Total		\$ -	\$ 6,000	\$ -	\$ 6,000					

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1020 Special Foundations	Retrofit concrete piles with collar tie connection between post and pile and decorative rope.	Good	The connection is unconventional but appears to be sufficient.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Slab on grade in tack room, else soil.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Pole barn construction with notched pole in bearing acting as "beam" and some straps toe-nailed in at ends. Engineered wood trusses at 4'6" o/c in barn and wood rafters in tack room.	Fair	Normal weathering of poles.	Add new strap anchors. See A1010 at buildings 28 & , B1020 at building 27, G2040 at building 36.	2B	\$ 6,000
	B20 Exterior Enclosure	B2010 Exterior Walls	Sheet metal cladding on tack room.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		B2030 Exterior Doors	Wood frame OSB doors.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	B30 Roofing	B3010 Roof Coverings	Sheet metal roof. Horizontal wood plank cladding on gable ends.	Fair	Debris on roof.	Clear roof.	1D	See Roof Maintenance Program.
		B3020 Roof Openings	Wood frame skylight in tack room.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
C Interiors	C10 Interior Construction	C1030 Fittings	2-rail wood fence around perimeter.	Good	No comment on condition.	No Recommendation.	N/A	N/A
	C30 Interior Finishes	C3010 Wall Finishes	Painted plywood.	Good	No comment on condition.	No Recommendation.	N/A	N/A
		C3020 Floor Finishes	Painted plywood.	Good	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2050 Landscaping	Coniferous tree adjacent.		No comment on condition.	No Recommendation.	N/A	N/A

Corral

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	31	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Optional item to replace grandstand is \$50,000.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Construction date unknown.	A					\$ -			
n/a		B					\$ -			
Description		C					\$ -			
5-rail pressure-treated wood fence, announcer, and decommissioned grandstand.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G			\$ 10,000		\$ 10,000			
		Total		\$ -	\$ -	\$ -	\$ 10,000			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
G Sitework	G20 Site Improvements	G2040.1 Site Development	Five rail fenced corral	Good	Rails are in good condition.	Maintain the rails under the fencing program	N/A	See Fence Program.		
		G2040.2 Site Development	Grandstand platform	Poor	Platform structure has signs of rotting. Seating has been removed.	Decommission or repair Platform and seating.	3B	\$ 10,000		
		G2040.3 Site Development	Announcer boot with PA System	Good	Announcer booth is in good condition. PA system is exposed to the elements.	Maintain and replace PA equipment (maintenance).	N/A	N/A		

Glamping

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	32	History		Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names		Circa 2022	A				\$ -			
n/a			B				\$ -			
Description			C				\$ -			
Newly installed glamping area. Includes nine glamping tents on wood platforms. Four compost toilettes are located in the center of the area. The area is enclosed by a post and rail fence.			D				\$ -			
		E				\$ -				
		F				\$ -				
		G				\$ -				
			Total	\$ -	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Pre-cast concrete pedestals.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Pressure treated wood platforms.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	Tents were not reviewed.		No comment on condition.	No Recommendation.	N/A	N/A		
D Services	D20 Plumbing	D2010 Plumbing Fixtures	The water closets are a purpose-built composting type unit.	Fair	The system appears to be functional. Composting toilets are generally not considered a "high volume" system.	As the glamping site becomes more popular, the operator may need to add more toilet systems to keep up with demand.	N/A	N/A		
G Sitework	G20 Site Improvements	G2040 Site Development	Wood Gazebo and rail fence.	Good	No comment on condition.	No Recommendation.	N/A	N/A		

Balmoral School House

Building Info		Notes		Opinion of Probable Cost Summary				Overview Photo	Location	
Building No.	33	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1912 constructed. 1989 relocated.			A				\$ -		
n/a				B				\$ -		
Description				C				\$ -		
Single-storey log cabin with wood framed addition on front (West). Sloped cedar shake roof and concrete foundation wall. Wood doors and windows.				D				\$ -		
				E				\$ -		
				F				\$ -		
				G				\$ -		
				Total	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation wall at main room.	Good	Foundation is in generally good condition.	No Recommendation.	N/A	N/A		
		A1020 Special Foundations	Permanent wood foundation at addition.	Good	Foundation is in generally good condition.	No Recommendation.	N/A	N/A		
	A20 Basement Construction	A2010 Basement Excavation	Crawlspace.		No comment on condition.	No Recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	See A1010.	Good	See A1010.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	2x4 roof trusses.		Roof structure is in fair condition.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	V-notched split log and chinking in main room and 2x4 wood frame in addition. Horizontal drop wood siding at addition with wood corner cap.	Poor	Siding touches grade and is dirty. Some previous repairs and new rot at the main room. New chinking with insulation. Loose boards at addition.	Repair logs and chinking at rotted locations.	5D	See Cladding Program.		
		B2020 Exterior Windows	Wood frame hung and fixed windows.	Fair	Poor seals.	Repair seals.	3D	See Window and Door Program.		
		B2030 Exterior Doors	Wood door and frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Organic growth on roof and fascia. Some previous metal patch repairs.	Roof replacement.	1C	See Roof Replacement and Maintenance Programs.		
B3020 Roof Openings		OSB and metal chimney.	Fair	No comment on condition.	No Recommendation.	N/A	N/A			
C Interiors	C10 Interior Construction	C1010 Partitions	Former exterior wall.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3010 Wall Finishes	1x6 wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		C3020 Floor Finishes	Wood plank.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		C3030 Ceiling Finishes	1x6 tongue and groove with center bead.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		

Schubert House

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	34	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1890/1892 constructed.	A			\$ 25,000		\$ 25,000			
n/a	1989/1991 relocated to O'Keefe Ranch.	B			\$ 5,000		\$ 5,000			
Notes	2003 exterior walls painted.	C				\$ 14,000	\$ 14,000			
Two-storey wood framed building with painted wood siding, concrete foundation wall, and cedar shake roof. Wood doors and windows. Crawlspace below.		D				\$ 1,000	\$ 1,000			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	CMU foundation wall and 2x4 furring wall in crawlspace.	Poor	Water staining at North-East hose. North-West elevation is tilted in below sink room. North-East pony wall is tilted in. Some damaged CMU blocks. No vent covers. Soil deposits.	Repair foundation wall. Add vent covers (maintenance). See A1010 at buildings 4A & 20, A1030 at building 11.	3C	\$ 25,000		
		B10 Superstructure	B1010 Floor Construction	2x8 wood joists at 16-18" o/c and beam down center of building. 1" thick sheathing.	Fair	No comment on condition.	No Recommendation.	N/A	N/A	
B Shell	B10 Superstructure	B1020 Roof Construction	Wood frame 2x6 at 16" o/c with skip sheathing.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		B20 Exterior Enclosure	B2010 Exterior Walls	Split log construction. Horizontal drop cladding with strapping at 24" o/c and wood corner caps.	Fair	Paint is chipping and boards broken at base of wall. Some contact between siding and grade.	Landscape to provide 4" clearance between cladding and vegetation. Repair and paint cladding.	3D	See Landscaping and Cladding Programs.	
	B20 Exterior Enclosure	B2020 Exterior Windows	Wood frame single glazed hung windows with linseed oil glazing putty.	Poor	Uppers drooping and paint on sills chipping.	Repair and paint.	4D	See Window and Door Program.		
		B2030 Exterior Doors	Wood door and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia. Decorative truss ends. Some insulation.	Fair	Truss tips missing in two locations. Paint on fascia is chipping. Shingles in fair condition.	Repair and paint fascia and replace truss tips.	3E	See Roof Replacement and Maintenance Programs.		
		B3020 Roof Openings	Two brick chimneys and box vents.	Fair	Mortar is starting to deteriorate and crack.	Roof replacement.	3C	See Roof Replacement and Maintenance Programs.		
C Interiors	C10 Interior Construction	C1010 Partitions	Woof frame.	Fair	No comment on condition.	Repoint mortar. See B3020 at building 11.	2C	\$ 5,000		
		C1020 Interior Doors	Wood doors and trim.	Poor	Trim in kitchen is damaged.	Repair trim (maintenance).	N/A	N/A		
	C20 Stairs	C2010 Stair Construction	Wood stair and rail.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3010 Wall Finishes	Plaster and lath.	Poor	Some cracking and a hole in wall at north corner.	Repair or replace cladding and provide heating during winter. See C3010 at building 4A.	3E	\$ 14,000		
		C3020 Floor Finishes	Hardwood.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C3030 Ceiling Finishes	Generally lath and plaster except upstairs ceiling which is drywall	Poor	Cracking is extensive upstairs with a large section missing in the kitchen.	See C3010.	3E	See C3010.			
D Services	D40 Fire Protection	D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	D50 Electrical	D5010 Electrical Service & Distribution	60A single phase load centre fed from overhead BC Hydro service.	Fair	Service is adequate.	Maintain breakers (maintenance).	2D	N/A		
		D5020 Lighting and Branch Wiring	Interior lighting.	Fair	Older style residential screw base fixtures.	Utilized LED lamps (maintenance).	2D	N/A		
		D5090 Other Electrical Systems	Branch circuit wiring.	Fair	NMD cable.	Messy wiring in crawlspace should be cleaned up.	2D	\$ 1,000		
G Sitework	G20 Site Improvements	G2030 Pedestrian Paving	Wood steps to front door.	Fair	Steps are in fair condition.	No Recommendation.	N/A	N/A		

Schubert Barn

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	35	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1920 constructed circa. 1989 relocated.	A					\$ -			
Description	Single-storey wood framed building. Wood door and windows. Leaning towards Deep Creek.	B			\$ 8,000		\$ 8,000			
		C					\$ -			
		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ 8,000	\$ -	\$ 8,000			

Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1010 Standard Foundations	Concrete foundation wall with vapour barrier and crawlspace.	Fair	Vapour barrier extends 4' above grade.	No Recommendation.	N/A	N/A
		A1030 Slab on Grade	Concrete slab foundation.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Wood frame.	Fair	No access to interior.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Wood frame.	Poor	Leaning North-East towards Deep Creek.	Structural Assessment. See B1010 at building 11, B1020 at building 4A.	4C	\$ 8,000
	B20 Exterior Enclosure	B2010 Exterior Walls	2x6 studs at 24" o/c. 1x9 drop siding, mostly horizontal and some vertical with wood corner caps.	Fair	Some broken siding boards and missing siding cap at some corners.	Repair cladding.	3D	See Program.
		B2020 Exterior Windows	Wood framed windows with plexiglass panels.	Fair	Sills deteriorated at edges.	Repair trims.	1E	See Program.
		B2030 Exterior Doors	Wood door and frame.	Fair	Stained at base.	Patch repair door.	1E	See Program.
B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia.	Poor	Some missing shingles and organic growth. Some fascia missing.	Roof replacement.	3C	See Program.	
D Services	D50 Electrical	D5010 Electrical Service & Distribution	Circuit fed from house.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2040 Site Development	2-rail wood fence	Good	No comment on condition.	No Recommendation.	N/A	N/A
		G2050 Landscaping	Vegetation on three sides and garden bed at front.	Fair	Vegetation touches grade.	No Recommendation.	N/A	N/A

Spallumcheen Pioneer Power Club Clubhouse

Building Info		Notes		Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	36	History	Where projects have scope occurring at multiple buildings the full project cost has been included in each sheet and has not been split by building. Numbers affected by these "duplicate" costs are in red. Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report. Where scopes have been summarized into one project in the report OPC, numbers are reported in green.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	1981 constructed.	A					\$ -			
Maintenance Building		B					\$ -			
Description	Single-storey wood frame building. West portion is Spallumcheen Pioneer Power Club Clubhouse and East portion is used by Ranch maintenance.	C					\$ -			
		D			\$ 29,600	\$ 500	\$ 30,100			
		E					\$ -			
		F					\$ -			
		G			\$ 6,000		\$ 6,000			
		Total			\$ -	\$ 35,600	\$ 500	\$ 36,100		
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1030 Slab on Grade	Standard slab on grade.	Fair	Cracking in concrete floor in SPPC bathroom.	Continue monitoring for changes.	N/A	N/A		
	B10 Superstructure	B1010 Floor Construction	See A1030.	Fair	See A1030.	See A1030.	N/A	See A1030.		
B Shell		B1020 Roof Construction	Wood frame.		No comment on condition.	No Recommendation.	N/A	N/A		
	B20 Exterior Enclosure	B2010 Exterior Walls	Wood frame. Board and batten cladding.	Fair	Some battens missing and water staining at base.	Replace missing battens.	3E	See Cladding Program.		
		B2020 Exterior Windows	Wood frame and metal slider windows.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		B2030 Exterior Doors	5 garage doors (two with electric openers). Mix of wood and fiberglass doors, all wood frame.	Fair	Some garage doors not fully sealed and weather stripping weathered. Minor damage to garage doors.	No Recommendation.	N/A	N/A		
B30 Roofing	B3010 Roof Coverings	Sheet metal roof with wood fascia.	Fair	From various eras, previous patch on maintenance side. Vegetation on fascia.	No Recommendation.	N/A	N/A			
C Interiors	C10 Interior Construction	C1010 Partitions	Wood frame.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
		C1020 Interior Doors	Wood door and frame.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
		C3010 Wall Finishes	Mix of painted plywood and drywall.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	C30 Interior Finishes	C3030 Ceiling Finishes	Drywall.	Good	Failing at joints in SPPC garage.	Retape joints and repaint (maintenance).	N/A	N/A		
D Services	D20 Plumbing	D2010 Plumbing Fixtures	Lavatories and water closets.	Fair	Lavatories and water closets are in fair condition but are still serviceable. The existing fixtures should provide good service for the near future.	No Recommendation.	N/A	N/A		
		D2020 Domestic Water Distribution	Original piping systems are copper.	Fair	D2020.1 The insulation is in poor condition or missing in certain locations. The domestic water piping should provide good service for the near future.	D2020.1 The operators should look for pinhole leaks from time to time.	3C	\$ 100		
					D2020.2 Consideration should be made for upgrades to the existing insulation to save energy.	D2020.2 Consideration should be made for upgrades to the existing insulation to save energy.	1E	\$ 500		
D2030 Sanitary Waste	Sanitary waste systems are not visible.	Fair	Based on the age of the building, sanitary drainage piping should provide good service for the near future.	The system is at an age where blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future.	3D	\$ 300				

Spallumcheen Pioneer Power Club Clubhouse

D Services	D20 Plumbing	D2090 Other Plumbing Systems	Domestic Water Heater	Poor	The Domestic hot water heater is nearing the end of its service life and is need of replacement. This gas fired appliances has not been installed in a room that is fire rated. The Water heater has not been provided with a drain pan.	D2090.1 The domestic water heater should be replaced soon.	4C	\$	5,500			
					D2090.2 Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank.	4C	\$	500				
					D2090.3 Consideration should be made to build a fire rated room that would house the domestic water heater.	2B	\$	10,000				
	D30 HVAC	D3020 Heat Generating Systems	Furnace	Poor	The facility has a natural gas connection and pressure regulation station.	Fair	Gas piping does not appear to have the appropriate protective coatings.	The owner will want to engage a technician to ensure the systems are configured to code.	2C	\$	500	
					The furnace is at the end of its service life. This gas fired appliances have not been installed in a room that is fire rated.	D3020.1 The system should be upgraded soon.	5D	\$	12,500			
						D3020.2 Consideration should be made to build a fire rated room that would house the furnaces and domestic water heater.	2B		See D2090.3.			
D40 Fire Protection	D3040 Distribution Systems	Supply duct system.	Fair	The supply duct systems are in good shape considering the age of the system.		At most, an internal inspection of the duct and a duct cleaning every 5 years or so.	3E	\$	500			
				D4030 Fire Protection Specialties	Fire extinguisher.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
	D50 Electrical	D5010 Electrical Service & Distribution	200A single phase panel fed from overhead BC Hydro service.	Fair	Service is adequate.		Maintain circuit breakers (maintenance).	2D		N/A		
					D5020 Lighting and Branch Wiring	Exterior and interior lighting.	Fair	Lighting mix of fluorescent and incandescent lamp.	Utilize LED lamps and replace fixtures as they fail (maintenance).	2D		N/A
					D5090 Other Electrical Systems	Emergency lighting.	Fair	Minimal emergency lighting installed.	Test emergency lighting regularly.	2D		N/A
G Sitework	G20 Site Improvements	G2040 Site Development	Lean-tos around building of post and beam and pole barn construction with buried post footings and sheet metal roofs. Front shelter of pressure treated post and beam construction with engineered trusses at 4' o/c. Posts tied to main building.	Fair	One rotted pole at lean-tos. North lean-to roof failed at south corner.	Support and provide new pedestal at rotted poles. Patch roof. See A1010 at buildings 28 & 29, B1020 at buildings 27 & 30.	4D	\$	6,000			
		G2050 Landscaping	Vegetation on 3 sides and garden bed at front.	Fair	No comment on condition.	Landscape to provide clearance between cladding and vegetation.	N/A		See Program.			

Storage Building

Building Info		Notes	Opinion of Probable Cost Summary				Overview Photo	Location
Building No.	37	History Construction date unknown. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total	 
Other Names	n/a		A				\$ -	
Description	Wood framed building with concrete slab on grade foundation and cedar shake roof. Board and batten siding and wood doors.		B				\$ -	
			C				\$ -	
			D				\$ -	
			E				\$ -	
			F				\$ -	
			G				\$ -	
		Total	\$ -	\$ -	\$ -	\$ -		
Level 1	Level 2	Level 3	Assessment					
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost
A Substructure	A10 Foundation	A1030 Slab on Grade	Standard slab on grade.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
B Shell	B10 Superstructure	B1010 Floor Construction	Wood frame with plywood front covered deck.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
		B1020 Roof Construction	Engineered trusses at 4' o/c.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B20 Exterior Enclosure	B2010 Exterior Walls	Board and batten cladding and OSB sheathing.	Fair	Siding is wet and touches grade. Sheathing is exposed on South	Landscape to provide 4" clearance between vegetation and cladding.	5E	See Landscaping Program.
		B2030 Exterior Doors	Wood door and trim.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
	B30 Roofing	B3010 Roof Coverings	Sheet metal roof.	Fair	No comment on condition.	No Recommendation.	N/A	N/A
G Sitework	G20 Site Improvements	G2050 Landscaping	Vegetation surrounding.	Fair	Vegetation touches cladding.	See B2010.	N/A	See B2010.

Storage Shed

Building Info		History	Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	37	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Construction date unknown.	A					\$ -			
n/a		B					\$ -			
Notes		C					\$ -			
Pole barn style shed used as storage.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -				
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Buried posts.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Soil.		No comment on condition.	No Recommendation.	N/A	N/A		
		B1020 Roof Construction	Pole barn with notched poles in bearing for beams and engineered trusses at 2' o/c.	Fair	Condition commensurate of its age.	No Recommendation.	N/A	N/A		
	B30 Roofing	B3010 Roof Coverings	Cedar shake shingle roof with wood fascia. Plywood sheathing on gable ends.	Poor	Staining underside of soffit. Sheathing missing on South elevation. Shingles missing loose and curled. Fascia missing in some locations.	Roof replacement.	5D	See Roof Replacement and Maintenance Programs.		
C Interiors	C10 Interior Construction	C1030 Fittings	Wood racks for storage.	Fair	No comment on condition.	No recommendation.	N/A	N/A		
G Sitework	G20 Site Improvements	G2050 Landscaping	Vegetation surrounding.	Fair	No comment on condition.	No Recommendation.	N/A	N/A		

Foot Bridge

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	A	History		Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names		Unknown	n/a	A				\$ -		
n/a				B				\$ -		
Description				C				\$ -		
Single span steel girder bridge with a wood deck supported on concrete lock block abutments				D				\$ -		
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total			\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3		Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1020 Special Foundations	Concrete lock block abutments.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Wood Deck.	Good	No comment on condition.	No Recommendation.	N/A	N/A		
F Special Construction & Demolition	F10 Special Construction	F1010 Special Structures	Steel girders.	Good	No comment on condition.	No Recommendation.	N/A	N/A		

Decommissioned Vehicle Bridge

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location	
Building No.	B	History		Level 1 Group	High Priority	Moderate Priority	Low Priority	Total			
Other Names		Unknown	n/a	A				\$ -			
n/a				B	\$ 125,000						\$ 125,000
Description				C							\$ -
Single span timber bridge. Log stringers bear on log sills and gabion abutments.				D							\$ -
		E						\$ -			
		F						\$ -			
		G						\$ -			
		Total		\$ 125,000	\$ -	\$ -					
Level 1	Level 2	Level 3		Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost			
A Substructure	A10 Foundation	A1010 Standard Foundations	Stone Gabion abutments.	Fair	No comment on condition.	No Recommendation.	N/A	N/A			
B Shell	B10 Superstructure	B1010 Floor Construction	Log stringers. And wood deck.	Poor	Deflected at midspan. Rotted beams and deck.	Decommission and dispose of bridge.	4B	\$ 125,000			
F Special Construction & Demolition	F10 Special Construction	F1010 Special Structures	Guard logs	Poor	Signs of impact damage and not marked.	See B1010.		See B1010.			

Log Foot Bridge

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	F	History		Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names		Uknown	n/a	A				\$ -		
n/a				B				\$ -		
Description				C				\$ -		
Single span timber bridge. Log stringers bear on log sills and no visible abutments.				D				\$ -		
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3		Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Log Sills	Fair	No comment on condition.	No Recommendation.	N/A	N/A		
B Shell	B10 Superstructure	B1010 Floor Construction	Log stringers. And wood deck.	Poor	Deflected at midspan. Rotted beams and deck.	Decommission Bridge	N/A	N/A		
F Special Constnution & Demolition	F10 Special Construction	F1010 Special Structures	Guard logs	Poor	Signs of impact damage and not marked.	Decommission Bridge	N/A	N/A		

Small Buildings

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	n/a	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Unknown	A					\$ -			
Animal Feed Buildings		B					\$ -			
Description	Small Buildings consist of feed buildings, wood storage wayfinding buildings and small shed coverings.	C					\$ -			
		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
A Substructure	A10 Foundation	A1010 Standard Foundations	Wood foundations	Good	Foundation types vary by building but are in generally good condition.	Monitor and repair foundations as required.	3E	See Cladding Program.		
B Shell	B30 Roofing	B3010 Roof Coverings	Varied Roofs	Good	Roof types vary by building but are in generally good condition.	Monitor and repair roofs as required.	3E	See Roof Maintenance Program.		
G Sitework	G20 Site Improvements	G2050 Landscaping	Some buildings surrounded by vegetation.	Fair	Where vegetation touches wood building elements they are at risk of rot.	Landscape to provide 4" clearance between wood members and vegetation.	N/A	See Landscaping Program.		

Parking Lot and Roads

Building Info		Notes	Opinion of Probable Cost Summary				Overview Photo	Location	
Building No.	n/a	History	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names		Unknown Refer to Program Summary page at beginning of the report.	A				\$ -		
n/a			B				\$ -		
Description			C				\$ -		
Asphalt parking lot in front of the Visitor Center and O'Keefe Mansion. Dirt Roads are found throughout the site.			D				\$ -		
			E				\$ -		
			F				\$ -		
			G				\$ -		
			Total	\$ -	\$ -	\$ -			
Level 1	Level 2	Level 3	Assessment						
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost	
G Sitework	G20 Site Improvements	G2010 Roads	Dirt Roads	Good	No comment on condition.	No Recommendation.	N/A	N/A	
		G2020 Parking Lots	Asphalt Parking Lot in front of the Visitor Center	Fair	Lateral and alligator cracking found throughout. Pot holes developing. Parking line paint has worn off.	Repair potholes and slope surface to drainage.		See Road Maintenance Program.	

Fences

Building Info			Notes	Opinion of Probable Cost Summary					Overview Photo	Location
Building No.	n/a	History	Programs have not been included in OPC Summary. Refer to Program Summary page at beginning of the report.	Level 1 Group	High Priority	Moderate Priority	Low Priority	Total		
Other Names	Unknown	A					\$ -			
n/a		B					\$ -			
Description		C					\$ -			
Wood rail, barbed wire, smooth wire, chicken wire, picket and metal rail fences can be found through out the complex.		D					\$ -			
		E					\$ -			
		F					\$ -			
		G					\$ -			
		Total		\$ -	\$ -	\$ -				
Level 1	Level 2	Level 3	Assessment							
Major Group Elements	Group Elements	Individual Elements	Building Component	Condition	Comments	Recommended Action	Priority Ranking	Probable Cost		
G Sitework	G20 Site Improvements	G2040 Site Development	Fencing	Fair	The fencing is an a functioning state but requires a continued maintenance program to continue to operate.	Fence Maintenance Program	5D	See Fence Maintenance Program.		



Engineers

Appendix D

Overview, Structure, and Building Envelope Photos

PHOTOS

Comment	Photograph
1: Visitor Center: General view of South (front) elevation.	 <p>Photo 1</p>
1: Visitor Center: Restaurant patio.	 <p>Photo 2</p>

1: Visitor Center:
Porch post not connected to the ground.



Photo 3

1: Visitor Center:
Typical water staining on cladding near garden beds.



Photo 4

2: Greenhow Museum:
General view of East elevation.



Photo 5

2: Greenhow Museum:
General view of North-East corner.



Photo 6

2: Greenhow Museum:
Decommissioned back emergency exit stair.



Photo 7

2: Greenhow Museum:
Water staining and efflorescence on interior
of stone foundation wall.



Photo 8

2: Greenhow Museum:
Stairs to basement.

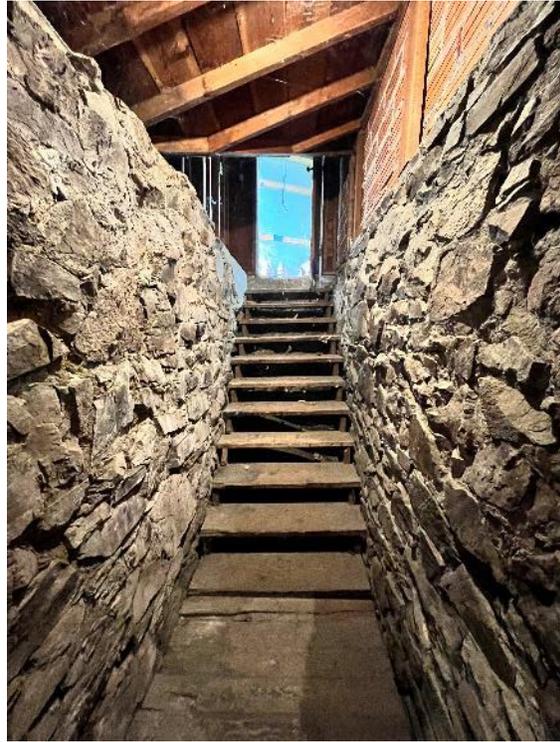


Photo 9

2: Greenhow Museum:
Water staining on vapour barrier in
basement.



Photo 10

3: Stagecoach Depot:
General View of the East elevation.



Photo 11

3: Stagecoach Depot:
General view of the North elevation.



Photo 12

3: Stagecoach Depot:
Typical roof condition from South view.

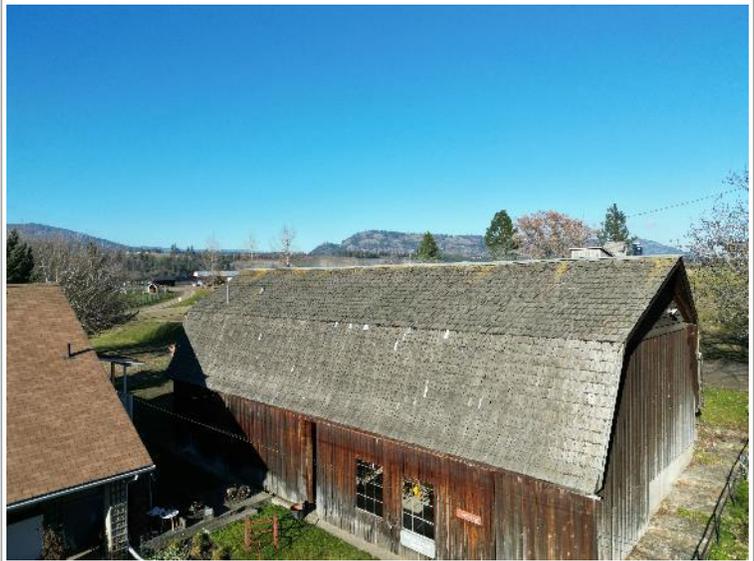


Photo 13

3: Stagecoach Depot:
Typical water-stained cladding at base of wall.



Photo 14

4A: O'Keefe House:
General view from South-West corner.



Photo 15

4A: O'Keefe House:
Cracked plaster and lathe in the sewing room.



Photo 16

4A: O'Keefe House:
Water damage in the attic above the
bathroom.



Photo 17

4A: O'Keefe House:
Rotting edges of front porch.

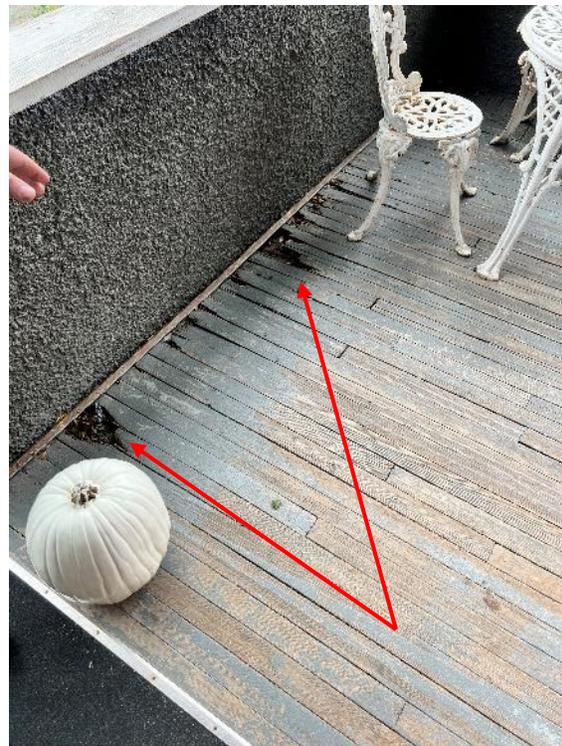


Photo 18

4A: O'Keefe House:
Typical brick foundation column spalling.



Photo 19

4A: O'Keefe House:
Typical condition of windows and shutters.



Photo 20

4B: Caretaker's House:
General view of North-East corner.



Photo 21

4B: Caretaker's House:
General view of East elevation.



Photo 22

4B: Caretaker's House:
Wood retaining wall at driveway.



Photo 23

4B: Caretaker's House:
Wood retaining wall and steps at back porch.



Photo 24

5: Pavilion:
General view of South elevation.



Photo 25

6: Gazebo:
General view.



Photo 26

6: Gazebo:
Checked post.



Photo 27

6: Gazebo:
Deteriorated fascia at cupola.



Photo 28

7: Pioneer Cabin:
General view of South elevation.

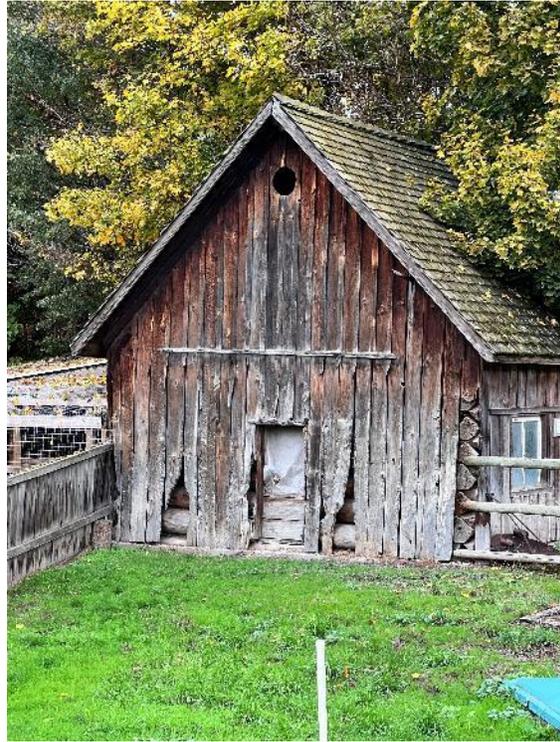


Photo 29

8: Cowboy Bunkhouse:
General view of East elevation.



Photo 30

8: Cowboy Bunkhouse:
General view of North and West elevations.



Photo 31

8: Cowboy Bunkhouse:
Spalled foundation at South elevation.



Photo 32

8: Cowboy Bunkhouse:
Mesh cladding patch.

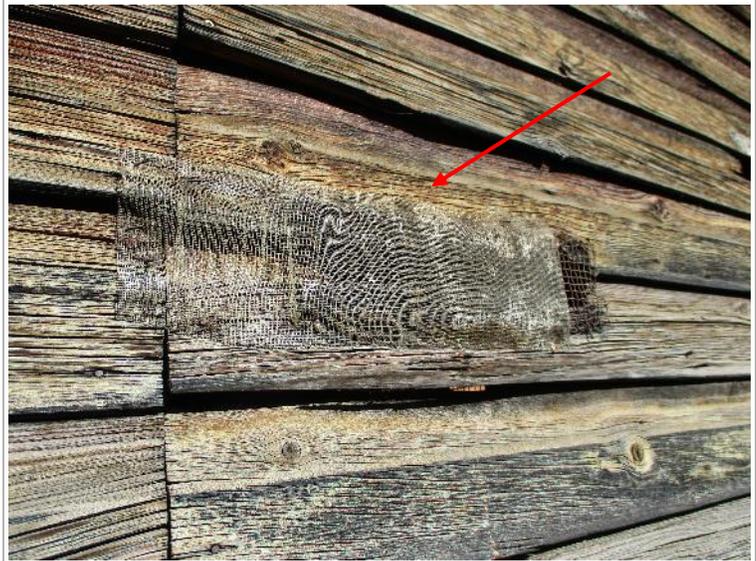


Photo 33

9: Bird Pens:
General view of North elevation.



Photo 34

10: Windmill #1:
General view.



Photo 35

11: Log Barn:
General View of South corner.



Photo 36

11: Log Barn:
Stained roof sheathing.



Photo 37

11: Log Barn:
Heaved out wood retaining wall.



Photo 38

11: Log Barn:
Concrete slab at East lean-to.



Photo 39

12: Hay Shed:
General view of South elevation.



Photo 40

12: Hay Shed:
Eroded concrete and exposed rebar.



Photo 41

13: Ye Ol' Feed Shed:
General view of South corner.



Photo 42

14: Meat & Dairy:
General view of West elevation.



Photo 43

14: Meat & Dairy:
General view of North elevation.



Photo 44

14: Meat & Dairy:
General view of East elevation.



Photo 45

14: Meat & Dairy:
Organic growth and ponding on flat roof.



Photo 46

14: Meat & Dairy:
Corroded cladding and rotten structure at
North elevation.



Photo 47

15: Chinese Cook's House:
General view of South elevation.



Photo 48

15: Chinese Cook's House:
General view of North-West corner.



Photo 49

15: Chinese Cook's House:
Stair is nailed to cladding at top.



Photo 50

16: Log House:
General view of South-East corner.



Photo 51

16: Log House:
General View of North elevation and roofs.

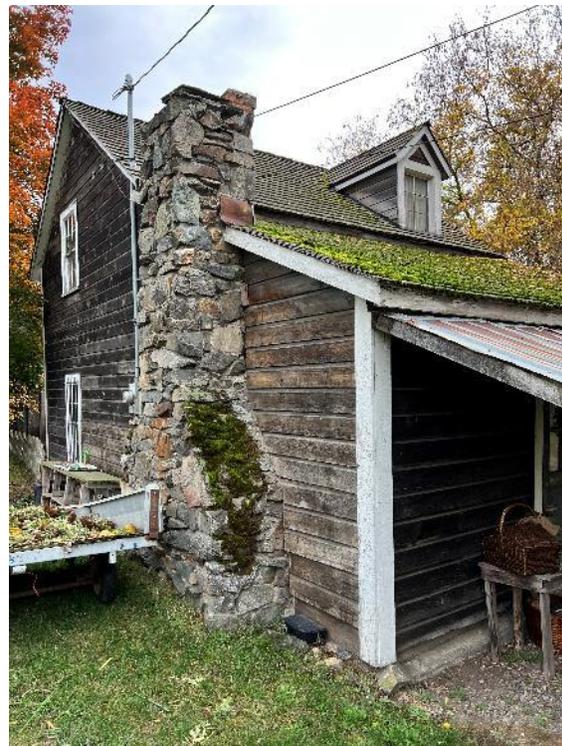


Photo 52

16: Log House:
Low edge of sheet metal lean-to roof.



Photo 53

17: General Store:
General view of South elevation.



Photo 54

17: General Store:
General view of North-East corner.



Photo 55

17: General Store:
Interior exposed structure.

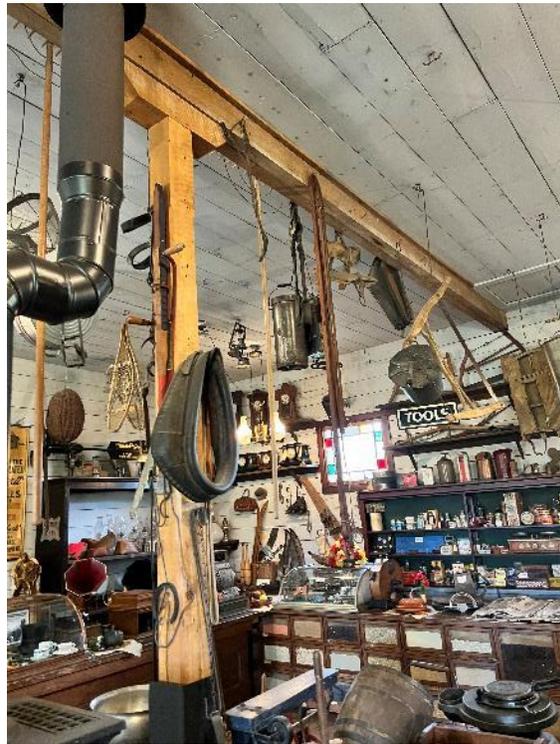


Photo 56

17: General Store:
Water-stained soffit.



Photo 57

18: Blacksmith Shop:
General view of South-East corner.



Photo 58

18: Blacksmith Shop:
General view of North elevation and roof.



Photo 59

18: Blacksmith Shop:
Woodpecker hole and previous metal patches.



Photo 60

19: Red Shed:
General view of North elevation.



Photo 61

19: Red Shed:
Foundation bowed out at South elevation.



Photo 62

19: Red Shed:
Deflected ceiling in East room.



Photo 63

20: Carriage Shed:
General view of North elevation.



Photo 64

20: Carriage Shed:
Undermined foundation at South elevation.



Photo 65

21: St. Anne's Church:
General view of South and East elevations.



Photo 66

21: St. Anne's Church:
General view of North and West elevations.



Photo 67

21: St. Anne's Church:
Typical condition of windows.



Photo 68

22: Smoke House:
General view of South elevation.



Photo 69

22: Smoke House:
General view of North elevation.



Photo 70

23: Pump House:
General view of South elevation.

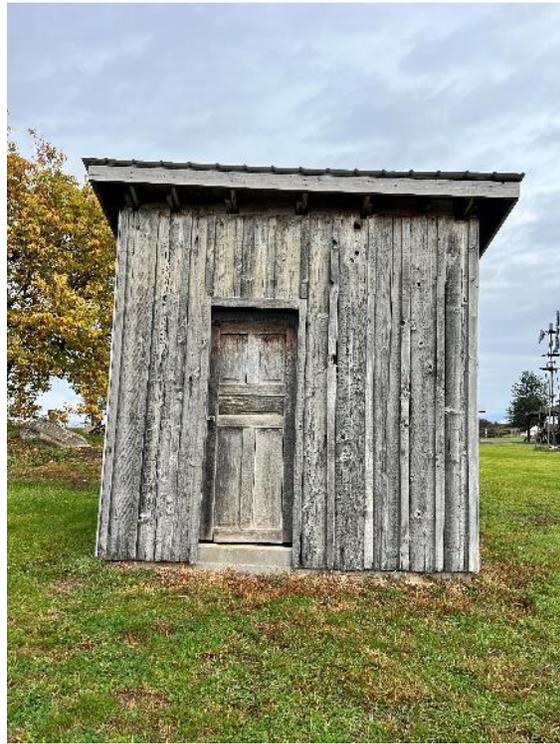


Photo 71

23: Pump House:
General view of North elevation and roof.



Photo 72

23: Pump House:
Interior water staining.



Photo 73

24: Windmill #2:
General View.



Photo 74

25: Water Cisterns:
General view of East uncovered cistern.



Photo 75

25: Water Cisterns:
Spalled parking at East uncovered cistern.



Photo 76

25: Water Cisterns:
General view of West covered cistern South
elevation of cover.



Photo 77

25: Water Cisterns:
Water staining on underside of West cover
roof sheathing.



Photo 78

26: Spallumcheen Pioneer Power Club
Display #1:
General view from South-East corner.



Photo 79

27: Spallumcheen Pioneer Power Club
Display #2:
General view from South elevation.



Photo 80

27: Spallumcheen Pioneer Power Club
Display #2:
Toe-nailed steel tie.



Photo 81

28: Implement Shed #1:
General view of South elevation.



Photo 82

28: Implement Shed #1:
General view of North elevation.



Photo 83

29: Implement Shed #2:
General view of South and East elevations.



Photo 84

29: Implement Shed #2:
General view of North elevation.



Photo 85

29: Implement Shed #2:
General view of roof.



Photo 86

30: Tack Shed:
General view of East elevation.



Photo 87

30: Tack Shed:
General view of North elevation.



Photo 88

31: Corral:
General view from North.



Photo 89

32: Glamping:
Typical glamping site.



Photo 90

33: Balmoral School House:
General view from South-East corner.



Photo 91

33: Balmoral School House:
Rotted logs at South elevation.



Photo 92

33: Balmoral School House:
Previous patch repair at south elevation.



Photo 93

34: Schubert House:
General view of South and West elevations.



Photo 94

34: Schubert House:
Typical condition of windows.



Photo 95

34: Schubert House:
Missing plaster and lathe in kitchen and
typical cracking.



Photo 96

34: Schubert House:
Deteriorated cladding.



Photo 97

34: Schubert House:
Foundation wall



Photo 98

35: Schubert Barn:
General view of South and East elevations.



Photo 99

35: Schubert Barn:
Deteriorated cladding and vapour barrier at
North-West corner.

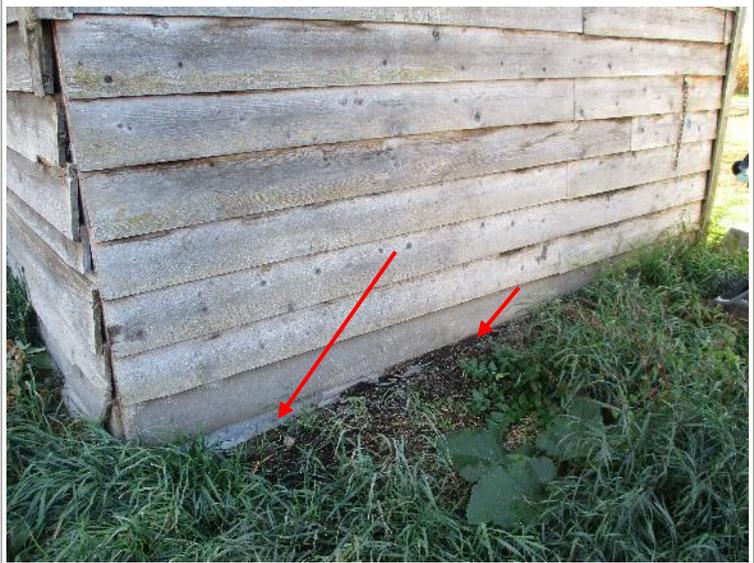


Photo 100

36: Spallumcheen Pioneer Power Club
Clubhouse:
General view of the South elevation.



Photo 101

36: Spallumcheen Pioneer Power Club
Clubhouse:
Rotted buried post at North lean-to.



Photo 102

36: Spallumcheen Pioneer Power Club
Clubhouse:
Typical condition of cladding and windows.



Photo 103

37: Storage Building:
General view of East elevation.



Photo 104

38: Storage Shed:
General view of South elevation.



Photo 105

38: Storage Shed:
Missing shingles and sheathing at South end
of roof.



Photo 106

A: Foot Bridge:
General view from North



Photo 107

A: Foot Bridge:
Supporting beam and structure.



Photo 108

B: Decommissioned Bridge
General view showing deflection at midspan.



Photo 109



Engineers

Appendix E

Mechanical Report



210-1715 Dickson Avenue, Kelowna, BC V1Y 9G6
250 762 9993 www.falcon.ca



O'Keefe Ranch
Near Vernon, B.C
City of Vernon
Building Condition Assessment Report
Mechanical

Revision 1
8 January 2024
PERMIT TO PRACTICE NO. 1001295

1.0 Executive Summary

Overall, the HVAC equipment at the O’Keefe Ranch has been well maintained and kept up to date where possible. Some of the plumbing fixtures and piping systems have been upgraded over the years where the piping is accessible.

Some of the inaccessible piping systems are getting close to the end of their service lives and could become increasingly unreliable. Consideration should be made to internally clean and inspect some of these systems from time to time as they still may have utility left in them despite their age.

A few installations do not comply with current standards regarding fire rated enclosures around gas fired appliances. Those instances are mentioned in the text of the report.

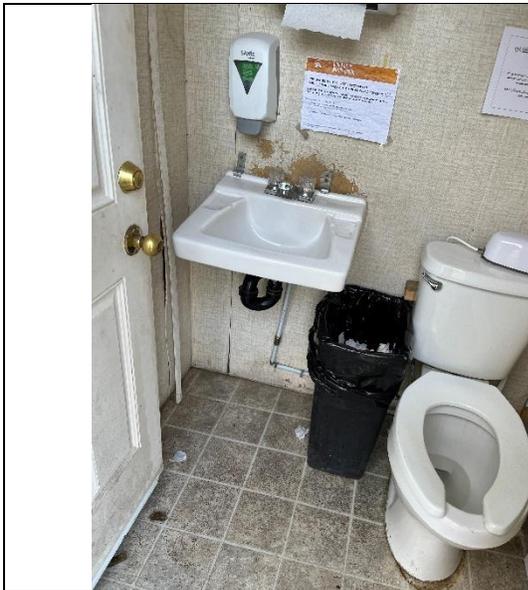
The Log House, General Store, Red Shed, Schubert House, Balmoral School, Cowboy Bunkhouse, Chinese Cooks House, Carriage Shed, St., Annes Church (accompanied with a furnace) have wood fired stoves in them. For many of these buildings, the wood fired appliances are the only source of heating. It may be that these buildings are not heated in the winter, rendering the appliance as authentic decoration. However, if the wood fired appliance is intended to be used for heating, then we recommend that a fully trained technician annually inspect the system and set up a program for regularly cleaning the flue. Unattended fireplaces are known sources of building fires and excessive soot in a flue can be the source of chimney fires. The buildings that these systems are in, are built with old and dry wood in them and would likely be very quick to burn in the event of an inadvertent fire.

2.0 Discussion of Mechanical Systems

1 Visitor Centre and Washroom Hut



D2010 - Plumbing Fixtures



Observations:

- Lavatories and water closets are in good condition and seem to have been recently upgraded.
- The lavatory is only served with cold water. Hot water has not been provided.

Recommendations:

- The existing fixtures should provide good service for the near future. Risk Rank 2E.
- Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. Risk Rank 3D.



Observations:

- Kitchen equipment is in good shape but has been abandoned in place, as the restaurant is no longer in use.

Recommendations:

- No Recommendations.

D2020 - Domestic Water Distribution



Observations:

- Original piping systems are copper systems. Recent upgrades have used approved plastic piping systems.
- The insulation is in poor condition or missing in certain locations.
- Some elbows witnessed look suspiciously to be made with asbestos.

Recommendations:

- The domestic water piping should provide good service for the near future. Nonetheless, the operators should look for pinhole leaks from time to time. Risk Rank 3C.
- Consideration should be made for upgrades to the existing insulation to save energy. Risk Rank 1E.
- The piping system should be assessed by a hazardous materials professional to determine if there is asbestos on these systems. Risk Rank 3B

D2030 – Sanitary Waste



Observations:

- Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.

Recommendations:

- The sanitary drainage piping should provide good service for the near future. However, the system is at an age where blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future. Risk Rank 3D.

D2090 - Domestic Water Heater

	<p>Observations:</p> <ul style="list-style-type: none"> Domestic hot water has been recently upgraded with a 3 kW electric domestic water heater. <p>Recommendations:</p> <ul style="list-style-type: none"> The domestic water heater should provide good service for the near future. Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank. Risk Rank 2C.
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D3010 – Energy Supply

	<p>Observations:</p> <ul style="list-style-type: none"> The bulk of the facilities that are heated are served through the natural gas meter and pressure regulation systems. These systems are owned and operated by the utility supplier. The only building that is heated but not connected to natural gas is the St. Annes Church, that has a dedicated propane tank. Gas piping where visible appears to be in good condition. <p>Recommendations:</p> <ul style="list-style-type: none"> No upgrades to the system are anticipated unless significant upgrades to the existing systems is initiated.
--	--

D3020 – Heat Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none"> Three furnaces have been recently upgraded with sealed combustion energy efficient units. These gas fired appliances have been installed in a room that is not fire rated. <p>Recommendations:</p> <ul style="list-style-type: none"> No upgrades to the system are anticipated in the near future. Risk Rank 1D. Consideration should be made to fire rate the room that the furnaces are installed. Risk Rank 2B. If the outdoor cooling unit is replaced, the indoor cooling coil will need to be replaced to match the outdoor unit. Risk Rank 5D
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D3030 – Cooling Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none"> • Cooling is provided by a single Lennox ten-ton cooling capacity condensing unit. • The unit was manufactured in 1999.
	<p>Recommendations:</p> <ul style="list-style-type: none"> • The unit is nearing the end of its service life and should be replaced in the near future. Due to the change in refrigerants, the cooling coil on the furnaces will need to be replaced as well. Risk Rank 5D

D3030 – Walk in Freezer Cooling System

	<p>Observations:</p> <ul style="list-style-type: none"> • The cooling equipment is near the end of its service life, but has effectively been abandoned in place, as the restaurant is no longer in use.
	<p>Recommendations:</p> <ul style="list-style-type: none"> • No recommendation.

D3040 – Air Distribution Systems

	<p>Observations:</p> <ul style="list-style-type: none"> • The supply duct systems are in good shape considering the age of the system.
	<p>Recommendations:</p> <ul style="list-style-type: none"> • At most, an internal inspection of the duct and a duct cleaning every 5 years or so. Risk Rank 3E.

2 Greenhow Museum



D2010 - Plumbing Fixtures



Observations:

- Sink is in good condition.

Recommendations:

- The existing fixtures should provide good service for the near future. Risk Rank 2E.
- Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. Risk Rank 3D.

D2020 - Domestic Water Distribution and Sanitary Waste

	<p>Observations:</p> <ul style="list-style-type: none">• Original piping systems are copper systems. Recent upgrades have used approved plastic piping systems.• The insulation is in poor condition or missing in certain locations.• Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water piping should provide good service for the near future. Nonetheless, the operators should look for pinhole leaks from time to time. Risk Rank 3C.• Consideration should be made for upgrades to the existing insulation to save energy. Risk Rank 1E.• The sanitary drainage piping should provide good service for the near future. However, the system is at an age where blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future. Risk Rank 3D.

D2090 - Domestic Water Heater

	<p>Observations:</p> <ul style="list-style-type: none">• The domestic hot water heater is old (approx. 40 years since manufactured) and is in need of replacement.• The water heater has not been provided with a drain pan.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water heater should be replaced soon. Risk Rank 4C.• Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank. Risk Rank 4C.

D3010 – Energy Supply

	<p>Observations:</p> <ul style="list-style-type: none">• The facility has a natural gas connection and pressure regulation station.• Gas piping does not appear to have the appropriate protective coatings.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The Owner will want to engage a technician to ensure the systems are configured to Code. Risk Rank 2C.

D3020 – Heat Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none">• The furnace was upgraded with sealed combustion energy efficient unit about 12 years ago.• The gas fired appliances have not been installed in a room that is fire rated.
	<p>Recommendations:</p> <ul style="list-style-type: none">• No upgrades to the system are anticipated in the near future. Risk Rank 2D.• Consideration should be made to build a fire rated room that would house the furnaces and domestic water heater. Risk Rank 2B.

D3030 – Cooling Generation Systems



Observations:

- Cooling is provided by a single window mounted air conditioning unit.

Recommendations:

- If the unit fails, replacement units are readily available and relatively inexpensive. Risk Rank 3E

D3040 – Air Distribution Systems



Observations:

- The supply duct systems are in good shape considering the age of the system.

Recommendations:

- At most, an internal inspection of the duct and a duct cleaning every 5 years or so. Risk Rank 3E.

3 Stagecoach Depot



D2010 - Plumbing Fixtures



Observations:

- Lavatories, urinal, shower and water closets are new and well appointed.

Recommendations:

- The existing fixtures should provide good service for the near future. Risk Rank 2E.
- Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. Risk Rank 3D.

D2020 - Domestic Water Distribution and Sanitary Waste



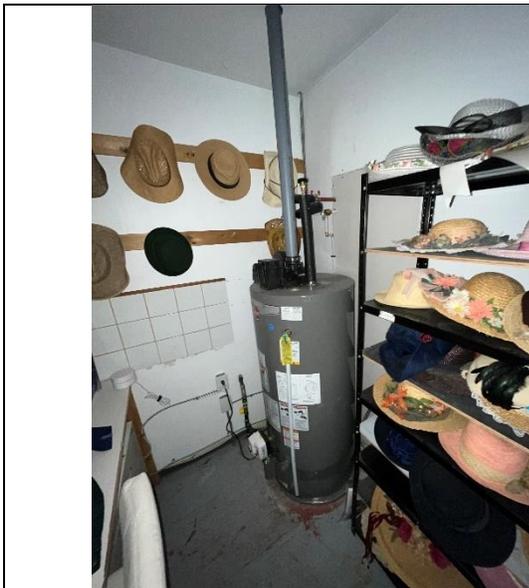
Observations:

- Original piping systems are copper systems. Recent upgrades have used approved plastic piping systems.
- The insulation is in poor condition or missing in certain locations.
- Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.

Recommendations:

- The domestic water piping should provide good service for the near future. Nonetheless, the operators should look for pinhole leaks from time to time. Risk Rank 3C.
- Consideration should be made for upgrades to the existing insulation to save energy. Risk Rank 1E.
- The sanitary drainage piping should provide good service for the near future. However, the system is at an age where blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future. Risk Rank 3D.

D2090 - Domestic Water Heater



Observations:

- The domestic hot water heater was manufactured in 2006. The hot water tank is approximately $\frac{3}{4}$ through the service life.
- The gas fired appliances have not been installed in a room that is fire rated.

Recommendations:

- The domestic water heater should be replaced relatively soon. Risk Rank 4C.
- Consideration should be made to build a fire rated room that would house the domestic water heater. Risk Rank 2B.

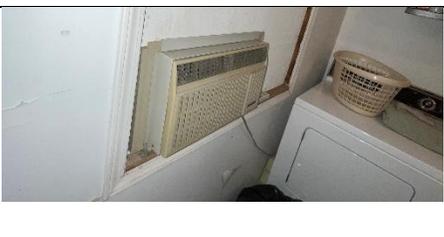
D3010 – Energy Supply

	<p>Observations:</p> <ul style="list-style-type: none"> The facility has a natural gas connection and pressure regulation station.
	<p>Recommendations:</p> <ul style="list-style-type: none"> The system should provide good service for the near future. Risk Rank 1D.

D3020 – Heat Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none"> Most areas are unheated. Occupied areas use baseboard electric heaters.
	<p>Recommendations:</p> <ul style="list-style-type: none"> No recommendations

D3030 – Cooling Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none"> Cooling is provided by a single window mounted air conditioning unit.
	<p>Recommendations:</p> <ul style="list-style-type: none"> If the unit fails, replacement units are readily available and relatively inexpensive. Risk Rank 3E

4 O'Keefe House



D2010 - Plumbing Fixtures



Observations:

- Lavatories, urinal, shower and water closets for the residence appear to be recently installed.
- The plumbing fixtures for the historic part of the mansion are of course old.

Recommendations:

- The existing fixtures should provide good service for the near future. Risk Rank 2E.

D2020 - Domestic Water Distribution and Sanitary Waste

	<p>Observations:</p> <ul style="list-style-type: none">• The residence appears to have relatively recent upgrades that have used approved plastic piping systems.• Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.• The piping systems in the historic part of the mansion are not in use.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water piping should provide good service for the near future. Nonetheless, the operators should look for pinhole leaks from time to time. Risk Rank 3C.• Consideration should be made for upgrades to the existing insulation to save energy. Risk Rank 1E.• The sanitary drainage piping should provide good service for the near future.

D2090 - Domestic Water Heater

	<p>Observations:</p> <ul style="list-style-type: none">• The domestic hot water heater was installed in 2008. The hot water tank is approximately $\frac{3}{4}$ through the service life.• This gas fired appliances has not been installed in a room that is fire rated.• The water heater has not been provided with a drain pan.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water heater should be replaced relatively soon. Risk Rank 4C.• Consideration should be made to build a fire rated room that would house the domestic water heater. Risk Rank 2B.• Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank. Risk Rank 4C.

D3010 – Energy Supply

	<p>Observations:</p> <ul style="list-style-type: none"> The facility has a natural gas connection and pressure regulation station.
	<p>Recommendations:</p> <ul style="list-style-type: none"> The system should provide good service for the near future. Risk Rank 1D.

D3020 – Heat Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none"> The hot water heating systems for the historical portion of the building is served by a modern sealed combustion condensing boiler manufactured in 2013. The boiler is approximately ½ through its service life. This gas fired appliances have not been installed in a room that is fire rated.
	<p>Recommendations:</p> <ul style="list-style-type: none"> No upgrades to the system are anticipated in the near future. Risk Rank 2D. Consideration should be made to build a fire rated room that would house the boiler. Risk Rank 2B.

D3030 – Cooling Generation Systems

	<p>Observations:</p> <ul style="list-style-type: none"> Cooling is provided by a single Rheem five-ton cooling capacity condensing unit. The unit was manufactured in 2016.
	<p>Recommendations:</p> <ul style="list-style-type: none"> The unit is 1/3 through its service life and should provide good service for the near future. Risk Rank 2D

D3040 – Cooling Distribution Systems

	<p>Observations:</p> <ul style="list-style-type: none"> • The fan and cooling coil are in fair shape considering the age of the system. • The condensate is intentionally plugged and is showing signs of degradation and rust. <p>Recommendations:</p> <ul style="list-style-type: none"> • Consideration should be made to provide a condensate pump. Risk Rank 3D • If the outdoor cooling unit is replaced, the indoor cooling coil will need to be replaced to match the outdoor unit. Risk Rank 2D
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D3040 – Heat Distribution Systems

	<p>Observations:</p> <ul style="list-style-type: none"> • Steel uninsulated piping is used for the hydronic heating systems. If the hot water heating system gets above 140°F, the bare pipe can scald bare skin in seconds. It appears that these systems are well barricaded from the public, to avoid an inadvertent incident. <p>Recommendations:</p> <ul style="list-style-type: none"> • The system should provide good service for the near future. Risk Rank 1D. • Care should continue to be made to keep the public from touching the heating piping and terminal units while the systems are hot.
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D3050 – Terminal Heating

	<p>Observations:</p> <ul style="list-style-type: none"> • The heating systems are original and are still in use. It is hard to determine the life expectancy of these older systems, but they seem to be built to last as there are many facilities that utilize them. <p>Recommendations:</p> <ul style="list-style-type: none"> • Deal with failing systems as they occur. Risk Rank 1C.
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18 Blacksmith Shop



D3040 – Forge Venting Systems



Observations:

- Except for one system, the forge venting system will need to be replaced.

Recommendations:

- The systems should be replaced, and appropriate thimbles are needed for the penetrations through the roof. Risk Rank 5C.

20 Carriage Shed



D2010 - Plumbing Fixtures



Observations:

- Lavatories and water closets appear to be relatively new.

Recommendations:

- The existing fixtures should provide good service for the near future. Risk Rank 2E.
- Consideration should be made to provide hot water to both public washrooms for improved hand washing hygiene. Risk Rank 3D.

D2020 - Domestic Water Distribution and Sanitary Waste

	<p>Observations:</p> <ul style="list-style-type: none">• Original piping systems are not visible. The systems are not likely to be very old as the washrooms seem to be a recent renovation to the building.• Sanitary waste systems utilize ABS piping systems where visible. Buried piping and piping within the walls were not reviewed.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water piping should provide good service for the near future. Risk Rank 2E.• The sanitary drainage piping should provide good service for the near future. Risk Rank 2E.

D2090 - Domestic Water Heater

	<p>Observations:</p> <ul style="list-style-type: none">• The electric domestic hot water heater is nearing the end of its service life.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water heater should be replaced relatively soon. Risk Rank 3D.

21 St Annes Church



D3010 – Energy Supply



Observations:

- The bulk of the facilities that are heated are served through the natural gas meter and pressure regulation systems. These systems are owned and operated by the utility supplier. The only building that is heated but not connected to natural gas is the St. Annes Church, that has a dedicated propane tank.
- Gas piping where visible appears to be in good condition.

Recommendations:

- No upgrades to the system are anticipated unless significant upgrades to the existing systems is initiated.

D3020 – Heat Generation Systems

<p>Photo not available</p>	<p>Observations:</p> <ul style="list-style-type: none"> We assume there is a propane fired furnace in the ceiling space above the back entry to the church. Our sense is the unit is fairly old as the venting is an older style. Modern furnaces use plastic pipe for combustion air and venting. The gas fired appliances have been installed in a room that is not fire rated.
	<p>Recommendations:</p> <ul style="list-style-type: none"> Consideration should be made to update the propane furnace to a sealed combustion condensing furnace considering the cost of propane. Risk Rank 2D. Consideration should be made to fire rate the room that the furnaces are installed. Risk Rank 2B.

	<p>Observations:</p> <ul style="list-style-type: none"> The wood fired pot belly stove is not in use. The chimney for this unit has been reconfigured to serve the furnace mentioned above.
	<p>Recommendations:</p> <ul style="list-style-type: none"> Refer to discussion in Executive Summary.

D3040 – Air Distribution Systems

	<p>Observations:</p> <ul style="list-style-type: none"> The supply duct systems are in good shape considering the age of the system.
	<p>Recommendations:</p> <ul style="list-style-type: none"> At most, an internal inspection of the duct and a duct cleaning every 5 years or so. Risk Rank 3E.

23 Pump House



D2020 - Domestic Water Distribution



Observations:

- The piping systems use galvanized, copper, and plastic piping. Galvanized piping is no longer approved on domestic water systems.
- The tanks and recent piping system appear to be functional.

Recommendations:

- The next time the system needs work, we recommended replacing the galvanized piping with approved domestic water system piping. Risk Rank 3D.

32 Glamping Washroom Facilities



D2010 - Plumbing Fixtures



Observations:

- The water closets are a purpose-built composting type unit.
- The system appears to be functional. Composting toilets are generally not considered a “high volume” system.

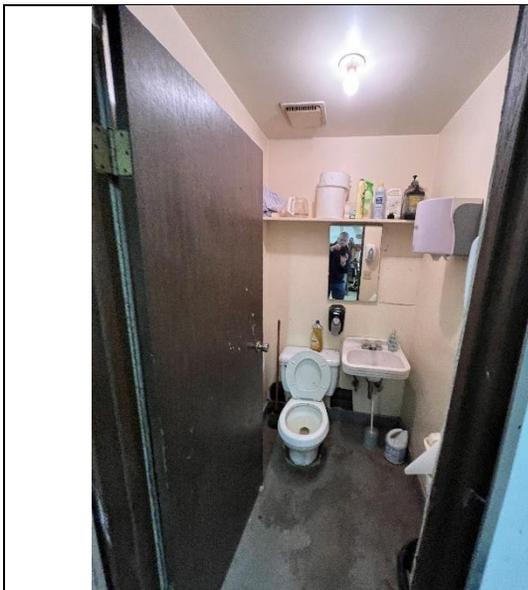
Recommendations:

- As the glamping site becomes more popular, the operator may need to add more toilet systems to keep up with demand.

36 SPPC Clubhouse



D2010 - Plumbing Fixtures



Observations:

- Lavatories and water closets are in fair condition but are still serviceable.

Recommendations:

- The existing fixtures should provide good service for the near future. Risk Rank 2E.

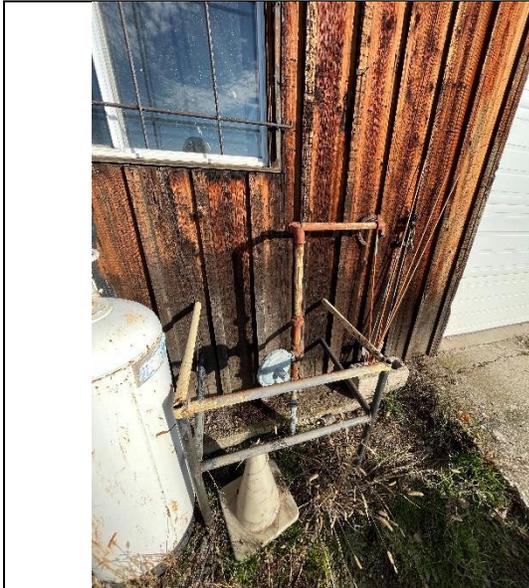
D2020 - Domestic Water Distribution and Sanitary Waste

	<p>Observations:</p> <ul style="list-style-type: none">• Original piping systems are copper.• The insulation is in poor condition or missing in certain locations.• Sanitary waste systems are not visible.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water piping should provide good service for the near future. Non the less, the operators should look for pinhole leaks from time to time. Risk Rank 3C.• Consideration should be made for upgrades to the existing insulation to save energy. Risk Rank 1E.• Based on the age of the building, sanitary drainage piping should provide good service for the near future. However, the system is at an age where blockages could occur, so should be inspected and cleaned from time to time. Repairs if needed could be completed for the location at hand. There is no need for wholesale piping upgrades in the near future. Risk Rank 3D.

D2090 - Domestic Water Heater

	<p>Observations:</p> <ul style="list-style-type: none">• The domestic hot water heater is nearing the end of its service life and is need of replacement.• This gas fired appliances has not been installed in a room that is fire rated.• The water heater has not been provided with a drain pan.
	<p>Recommendations:</p> <ul style="list-style-type: none">• The domestic water heater should be replaced soon. Risk Rank 4C.• Consideration should be made to provide the water heater with a drain pan to catch and direct the water to a drainage system, in the event of a leak in the tank. Risk Rank 4C.• Consideration should be made to build a fire rated room that would house the domestic water heater. Risk Rank 2B.

D3010 – Energy Supply



Observations:

- The facility has a natural gas connection and pressure regulation station.
- Gas piping does not appear to have the appropriate protective coatings.

Recommendations:

- The Owner will want to engage a technician to ensure the systems are configured to Code. Risk Rank 2C.

D3020 – Heat Generation Systems



Observations:

- The furnace is at the end of its service life.
- The gas fired appliances have not been installed in a room that is fire rated.

Recommendations:

- The system should be upgraded soon. Risk Rank 5D.
- Consideration should be made to build a fire rated room that would house the furnaces and domestic water heater. Risk Rank 2B.

D3040 – Air Distribution Systems



Observations:

- The supply duct systems are in good shape considering the age of the system.

Recommendations:

- At most, an internal inspection of the duct and a duct cleaning every 5 years or so. Risk Rank 3E.

3.0 Considerations for Mechanical System Upgrade

Caveat. This review is intended to provide an external review of the conditions and configuration of the existing mechanical systems where they are apparent. The inside condition of many systems (hydronic, gas heating, or refrigerant systems for example) will affect the longevity of the equipment, and that assessment can only be achieved by qualified technicians performing an invasive inspection of the equipment. If there is reason to consider this sort of review, then those recommendations are listed in the text of the report. The main purpose of the report is to develop budgets for systems that need to be substantially upgraded. Individual equipment that needs to be replaced, under what would be considered a maintenance function, are generally not included in the report.

The budgetary guidance is provided under separate cover and is summarized with other recommendations.

An upgrade to the existing mechanical system will improve the operation, comfort, energy consumption, Code compliance, and maintenance of the facility. The specific recommendations are listed in the text of the report. The recommendations provided are based on successful implementation of similar systems in previous upgrades.

Don Poole P. Eng.



Engineers

Appendix F

Electrical Report



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O'Keefe Ranch

Near Vernon, B.C

City of Vernon

**Building Condition Assessment Report
ELECTRICAL**

**Revision 1
8 January 2024
PERMIT TO PRACTICE NO. 1001295**



1.0 Introduction

O’Keefe Ranch receives power from a three phase BC Hydro power line that enters the property at the northwest corner. Three phase and single phase overhead BC Hydro owned and maintained power lines run through the property with pole mounted transformers (also BC Hydro owned and maintained) delivering secondary voltage (120/240V single phase and 120/208V three phase) services to several buildings, with other buildings sub-fed from those services.

	<p>Observations:</p> <ul style="list-style-type: none"> BC Hydro overhead power line and 3 phase transformer bank with secondary DIP feeding the visitor’s centre.
	<p>Recommendations:</p> <ul style="list-style-type: none"> N/A. Equipment owned and maintained by BC Hydro.

	<p>Observations:</p> <ul style="list-style-type: none"> BC Hydro overhead power line near where it enters the site by the Schubert Barn. Three phase line continues on to the Visitor’s Centre and single phase tap continues on to the rest of the site. Single phase overhead secondary service to Schubert House.
	<p>Recommendations:</p> <ul style="list-style-type: none"> N/A. Equipment owned and maintained by BC Hydro.

Interior lighting throughout the facility consists of a mixture of screw base incandescent style lampholders (mostly with LED lamps), older fluorescent fixtures, and residential style incandescent fixtures. As lamps and light fixtures fail it is recommended they be replaced with integral LED fixtures or at least with LED lamps.

Exterior lighting consists of some incandescent wall sconces on buildings, some older high intensity discharge (HID) davit lights mounted on wood poles, incandescent post top coach lights, and some in ground up lights at the church. This lighting is generally of poor quality, provides poor illumination levels, and is inefficient. It is recommended that all lighting be upgraded to LED fixtures as budgets permit.

	<p>Observations:</p> <ul style="list-style-type: none"> • Examples of exterior lighting.
	<p>Recommendations:</p> <ul style="list-style-type: none"> • Upgrade lighting to LED fixtures as budgets permit.





Generally speaking, electrical equipment installed is of residential quality and is quite old. Because the equipment is lightly loaded there are no major issues with the quality and age of the equipment, but in some cases replacement parts like circuit breakers may be difficult to obtain.

General maintenance of distribution equipment should include periodic testing of circuit breakers to ensure proper operation and checking wire connections to circuit breakers for loose connections. Most electrical equipment that is lightly loaded and not subject to vibration or weather should continue to operate without major issues.

2.0 Discussion of Electrical Systems

1 Visitor Centre and Washroom Hut



D5010 – Electrical Service

	<p>Observations:</p> <ul style="list-style-type: none">• 400A-120/208V three phase secondary underground DIP BC Hydro service
	<p>Recommendations:</p> <ul style="list-style-type: none">• n/a

	<p>Observations:</p> <ul style="list-style-type: none">• Main switch and sub-switches feeding several panel in the building.
	<p>Recommendations:</p> <ul style="list-style-type: none">• Maintain switches

D5020 – Lighting and Branch Circuit Wiring

	<p>Observations:</p> <ul style="list-style-type: none">• Emergency lighting is minimal but has been maintained. Lighting is generally fluorescent in fair condition.
	<p>Recommendations:</p> <ul style="list-style-type: none">• Continue annual checks of EM lighting. Upgrade general lighting to LED as fixtures fail or when funding is available.

D5030 – Communications and Security

	<p>Observations:</p> <ul style="list-style-type: none">• Building has a fire alarm system with minimal fire detectors.
	<p>Recommendations:</p> <ul style="list-style-type: none">• Continue annual verification and testing of fire alarm system.• Adding fire alarm devices could improve early detection of fires but not required by code.

2 Greenhow Museum



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• 100A-120/240V BC Hydro service is adequate.
	<p>Recommendations:</p> <ul style="list-style-type: none">• Maintain circuit breakers

D5020 – Lighting and Branch Wiring

	<p>Observations:</p> <ul style="list-style-type: none">• Mixture of fluorescent and screw base track lighting•
	<p>Recommendations:</p> <ul style="list-style-type: none">• Upgrade general lighting to LED as fixtures fail or funding becomes available

D5030 – Communications and Security

	<p>Observations:</p> <ul style="list-style-type: none">• Minimal but acceptable level of emergency lighting and exit signage. No fire alarm system.
	<p>Recommendations:</p> <ul style="list-style-type: none">• Continue annual checks of EM lighting.

3 Stagecoach Depot



D5010 – Electrical Service and Distribution



Observations:

- Newer 200A-120/240V single phase BC Hydro service and panel

Recommendations:

- Continue to maintain.

	<p>Observations:</p> <ul style="list-style-type: none"> • Old decommissioned meter base on west side of building. •
	<p>Recommendations:</p> <ul style="list-style-type: none"> • Remove.

D5020 - Lighting and Branch Wiring

	<p>Observations:</p> <ul style="list-style-type: none"> • Newer LED lighting in washrooms, fluorescent and screw base track in other areas.
	<p>Recommendations:</p> <ul style="list-style-type: none"> • Upgrade general lighting to LED as fixtures fail or funding becomes available.

4 O'Keefe House



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• 200A single phase BC Hydro service is adequate. 60A sub panel adjacent.• <p>Recommendations:</p> <ul style="list-style-type: none">• N/A
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D5020 - Lighting and Branch Wiring



Observations:

- Communications wiring and branch circuit wiring in basement is very messy.

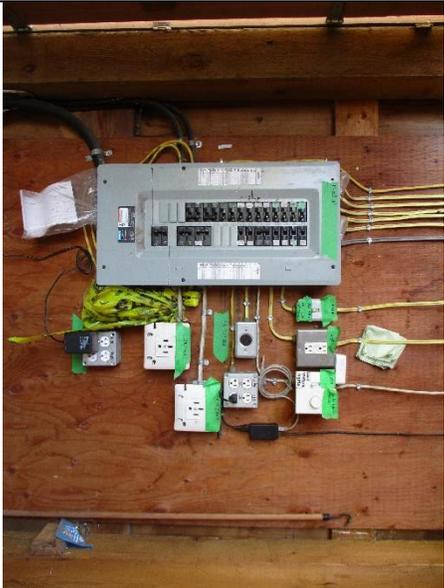
Recommendations:

- Clean up and support wiring in basement.

5 Pavilion



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• 100A-120/240V single phase service is sub-fed from the adjacent building. Special event receptacles installed adjacent.
	<p>Recommendations:</p> <ul style="list-style-type: none">• Maintain devices as required.

D5020 – Lighting and Branch Wiring

	<p>Observations:</p> <ul style="list-style-type: none">• Screw base residential fixtures and string light suitable for location as long as no water spraying is done
	<p>Recommendations:</p> <ul style="list-style-type: none">• Ensure LED lamps are utilized. Weatherproof outdoor rated lights could be considered as an upgrade.• Continue to maintain emergency lighting battery packs.

6 Gazebo



DD5010 Electrical Service & Distribution



Observations:

- Single lighting circuit fed from Pavilion

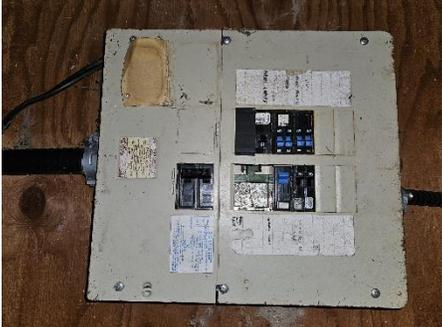
Recommendations:

- N/A

11 Log Barn



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• 60A-120/240V single phase panel sub-fed from another building is adequate <p>Recommendations:</p> <ul style="list-style-type: none">• The systems should be replaced, and appropriate thimbles are needed for the penetrations through the roof. Risk Rank 5C.
---	---

14 Meat and Dairy



D5010 – Electrical Service and Distribution



Observations:
<ul style="list-style-type: none">• Circuit fed overhead from mansion. Disconnect is very old and may fail when operated.
Recommendations:
<ul style="list-style-type: none">• Replace disconnect switch.

16 Log House



D5010 – Electrical Service and Distribution

A photograph of an electrical panel installed in a utility room. The panel is white and has several circuit breakers. Wires are visible entering and exiting the panel. There are some boxes and other items in the background.	<p>Observations:</p> <ul style="list-style-type: none">• 100A-120/240V single phase BC Hydro service is adequate. <p>Recommendations:</p> <ul style="list-style-type: none">• N/A
---	---

17 General Store



D5010 – Electrical Service and Distribution



Observations:

- 30A-120/240V single phase load centre located under the counter is sub-fed from the Log House service and is adequate for the usage.

Recommendations:

- N/A

18 Blacksmith Shop



D5010 – Electrical Service and Distribution



Observations:

- Panel is sub-fed from the Log House at 60A-120/240V single phase and appears adequate for the useage.

Recommendations:

- N/A

19 Red Shed



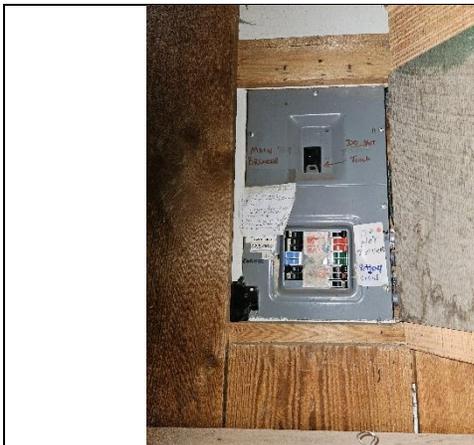
D5010 – Electrical Service and Distribution

	Observations: <ul style="list-style-type: none">• 120/240V load centre panel is fed from the Carriage Shed service.
	Recommendations: <ul style="list-style-type: none">• N/A

20 Carriage Shed



D5010 – Electrical Service and Distribution



Observations:

- 120/240V load centre panel is fed from a BC Hydro pole on the highway.
-

Recommendations:

- N/A

21 St Annes Church



D5010 – Electrical Service and Distribution

A photograph of the interior of St Annes Church. The view is from the back of the sanctuary looking towards the front. The walls and ceiling are finished with light-colored wood paneling. The floor is covered with a red carpet. Rows of wooden pews are visible, some with red cushions. At the front, there is an altar area with a white cloth and a small statue or religious figure. Stained glass windows are visible on the left side.	<p>Observations:</p> <ul style="list-style-type: none">• Two circuits for interior and exterior lighting and a receptacle are sub-fed from the Blacksmith Shop panel. <p>Recommendations:</p> <ul style="list-style-type: none">• N/A
--	---

D5020 – Lighting and Branch Wiring

	<p>Observations:</p> <ul style="list-style-type: none">• Exterior in ground lights are proud of the ground. <p>Recommendations:</p> <ul style="list-style-type: none">• Check that these lights are properly installed and protected from equipment damage.
---	---

23 Pump House



D5010 – Electrical Service and Distribution



Observations:

- Electrical panel is sub-fed from Implement Shed.

Recommendations:

- Older style ITE panel breakers will be difficult to obtain. Panel should be scheduled for replacement.

	<p>Observations:</p> <ul style="list-style-type: none">• Pumphouse has a manual transfer switch for connection of a portable generator. <p>Recommendations:</p> <ul style="list-style-type: none">• N/A
---	---

23 SPPC#1



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• Circuits fed from panel in SPPC#2. Non-weatherproof disconnect switch is exposed to weather and is rusting. <p>Recommendations:</p> <ul style="list-style-type: none">• Replace disconnect switch with weatherproof.
---	---

27 SPPC#2



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• Newer 100A-120/240V single phase panel is located in weather protective wooden cabinet. <p>Recommendations:</p> <ul style="list-style-type: none">• N/A
---	--

28 Implement Sheds



D5010 – Electrical Service and Distribution



Observations:

- Newer 100A-120/240V single phase panel is located in weather protective wooden cabinet.

Recommendations:

- N/A

34 Schubert House



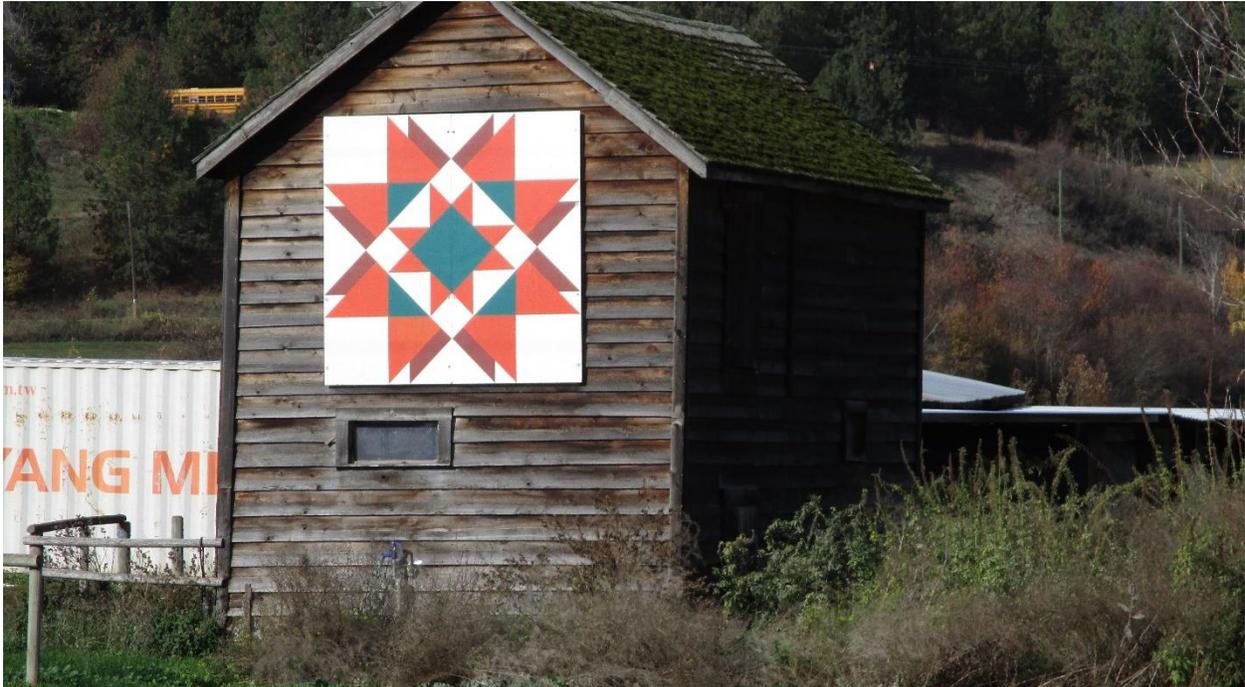
D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• 600A-120/240V single phase service BC Hydro overhead service is sufficient for the use <p>Recommendations:</p> <ul style="list-style-type: none">• Provide missing breaker fillers.
--	--

D5020 – Lighting and Branch Wiring

	<p>Observations:</p> <ul style="list-style-type: none">• Wiring appears to be standard NMD-90 cable throughout. <p>Recommendations:</p> <ul style="list-style-type: none">• Wiring in crawlspace should be cleaned up.
---	--

35 Schubert Barn



D5010 – Electrical Service and Distribution

	<p>Observations:</p> <ul style="list-style-type: none">• Single lighting circuit is fed from the house. <p>Recommendations:</p> <ul style="list-style-type: none">• N/A
---	---

36 SPPC Clubhouse



D5010 – Electrical Service and Distribution



Observations:

- 200A 120/240V single phase panel is fed overhead from BC Hydro system.

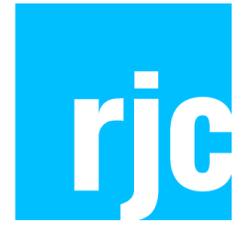
Recommendations:

- Maintain circuit breakers.



D5090 Other Electrical Systems

	<p>Observations:</p> <ul style="list-style-type: none">• Minimal emergency lighting is installed
	<p>Recommendations:</p> <ul style="list-style-type: none">• Continue to test emergency lighting regularly.



Engineers

Appendix G

Roof Maintenance Guide and Replacement Prioritization



General Roof Maintenance

A basic preventative maintenance program is the simplest method for prolonging the service life of roof assemblies. This program should include visual review of the roof and its associated components to identify minor items which, if neglected, can accelerate the deterioration of the roof assembly. The tables below provides a basic preventative maintenance programs for flat and sloped roof assemblies that could be adopted as required based on the Client's needs. Any items which are identified during these reviews should be addressed in the short term as deferral typically results in the item being dismissed or forgotten.

TABLE G1: GENERAL MAINTENANCE PROGRAM – SLOPED ROOM	
General Care Item	Frequency
General visual review of roof and associated flashings and drains: <ul style="list-style-type: none"> ▪ Clean debris from gutters ▪ Ensure gutters and downspouts ▪ Check for loose flashings ▪ Check roof penetrations to ensure they are still sealed ▪ Check underside of sheathing for staining or organic growth 	Twice per year (Fall and Spring) / After significant weather even
Repair observable defects as soon as possible to limit potential water ingress into the roof assembly: <ul style="list-style-type: none"> ○ Blisters, loose seams, scouring, etc. ○ Missing shingles, shakes, or tiles; warping; etc. ○ Dented or damaged metal panels, corrosion, etc. 	Once a year / as required

Component-specific Maintenance items

The maintenance of the roof assembly is not limited to the shingles, shakes, membrane and associated flashings. Roofs typically incorporate various mechanical and electrical assemblies, all of which can have detrimental effects on the roof assembly if neglected. These assemblies include items such as roof vents, drains, HVAC units, and roof penetrations. Table 2 provides a general description of items which should be reviewed, their maintenance requirement, as well as their anticipated frequency.

TABLE G2: COMPONENT SPECIFIC MAINTENANCE SUMMARY		
Component	Maintenance	Frequency
Drains, Gutters, and Downspouts	<ul style="list-style-type: none"> ▪ Clean debris obstructing drainage ▪ Ensure drain screens are functional 	Twice a year (Spring and Fall)



TABLE G2: COMPONENT SPECIFIC MAINTENANCE SUMMARY

Component	Maintenance	Frequency
Ballast	<ul style="list-style-type: none"> ▪ Re-distribute aggregate to ensure membrane is protected. Typical problem areas: <ul style="list-style-type: none"> - Roof corners - Foot traffic areas - Ventilators and mechanical units 	Twice a year (Spring and Fall)
Reglets and Caulking	<ul style="list-style-type: none"> ▪ Ensure sealant/mortar joint is in good condition 	Every five years
Flashing	<ul style="list-style-type: none"> ▪ Ensure sealant is in good condition ▪ Ensure flashings are firmly attached 	Every five years
Gum Pans and Pitch Pockets	<ul style="list-style-type: none"> ▪ Ensure item is "crowned" to ensure drainage ▪ Check for cracks in the seal 	Every five years
Plumbing Caps	<ul style="list-style-type: none"> ▪ Ensure clamp rings and caps are firmly fastened ▪ Ensure that seals are in good condition 	Every year
Mechanical Units	<ul style="list-style-type: none"> ▪ Ensure vents are not damaging membrane ▪ Ensure drainage is not damaging membrane 	Every year



Recommendation of Roof Replacement Prioritization

The following list provides context on the relative condition of the roofs at Historic O'Keefe Ranch to guide decision making when planning the recommended Roof Replacement Program. Level 5 roofs should be considered first for replacement, and Level 1 roofs should be considered last for replacement unless conditions change. Level 0 roofs are not recommended for replacement in the next ten years.

Level 5

- Stagecoach Depot
- Chinese Cook's House
- Storage Shed

Level 2

- Caretaker's House
- Log Barn Lean-Tos
- Water Cistern Cover

Level 4

- Cowboy Bunkhouse
- Meat and Dairy Low-Slope Roof
- General Store
- Blacksmith Shop
- Implement Shed #2
- SPPC Clubhouse Lean-To Roof

Level 1

- Hay Shed
- Red Shed
- Carriage Shed
- Balmoral School House

Level 3

- Greenhow Museum
- O'Keefe House
- Pioneer Cabin
- Log Barn
- Meat and Dairy Sloped Roof
- Log House
- SPPC Display #2
- Implement Shed #1
- Schubert House
- Schubert Barn

Level 0

- Visitor Center
- Pavilion
- Gazebo
- Bird Pens
- Ye Ol' Feed Shed
- St. Anne's Church
- Smoke House
- Pump House
- SPPC Display #1
- Tack Shed
- SPPC Clubhouse
- Storage Building



Engineers

Appendix H

Limits of Liability



Limits of Liability

This report is intended to provide The City of Vernon with a general description of the systems employed in the buildings and to comment on their general condition which was apparent at the time of our review. We did not perform any calculations to confirm the adequacy of the elements. The scope of services did not include an evaluation of the original building design or a detailed engineering investigation. A structural loading or seismic review was not performed.

The review undertaken was of a visual nature only. No testing or dismantling of any coverings was performed. Reviews were made on a random basis with no attempt to review every element or portion of the building(s). Comments are not a guarantee or warranty of the condition of the building or that the building has been built in accordance with the drawings and specifications. Given the limitations of a visual review, defects hidden from view or under-designed components may not have been detected.

Drawings and information relating to the building were used solely to supplement the visual review and to obtain design information on elements hidden from view so that a more accurate building description could be provided.

Opinions of probable cost provided by RJC may be based on incomplete or preliminary information, and may also be based on factors over which RJC has no control. RJC does not guarantee the accuracy of these cost estimates and shall have no liability where cost estimates are exceeded or are less.

RJC prepared this report for the use of The City of Vernon. The material in it reflects RJC's judgement in light of information available to RJC at the time of preparation. Any use that a third party makes of this report, or any reliance or decisions to be based on it, is the responsibility of such third parties. RJC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The work in this report does not include any assessment or costing of hazardous materials that may be present at the building. Assessment and inventory of hazardous materials should be made by consultants specializing in that field of work. Neither RJC, nor any company with which it is affiliated, nor any of their respective directors, employees, agents, servants or representatives shall in any way be liable for any claim, whether in contract or in tort including negligence, arising of or relating in any way to hazardous materials such as asbestos, lead, mould, mildew or other fungus, including the actual, alleged or threatened existence, effects, ingestion, inhalation, abatement, testing, monitoring, remediation, enclosure, decontamination, repair, or removal of the actual or alleged failure to detect hazardous materials.

Heritage Conservation Plan

for the Historic O'Keefe Ranch :: April 2024



Image from Beautiful BC Magazine - Summer 1967. Article tilted: O'Keefe Ranch
Source: Greater Vernon Museum and Archives O'Keefe Ranch clippings file

Prepared by Elana Zysblat, CAHP - Ance Building Services

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Introduction

"Conservation is about the care and continuing development of a place in such a way that its significance is retained or revealed and its future is made secure. The objective of the conservation plan is to set out how that aim may best be achieved. In doing so it seeks to relate the proposed conservation action to the procurable resources.¹"

This Heritage Conservation Plan (HCP) explains how the City of Vernon and/or the O'Keefe Ranch and Interior Heritage Society, will sustain the significance identified in the Statement of Significance (the heritage values and character defining elements), and to guide alterations, repair and management. It utilizes a simple thinking process which starts with describing what the site comprises of, the condition of each feature, what is proposed (if and where known) to happen to the historic place and its components, and the conservation principles by which they will be managed (following the Standards and Guidelines for the Conservation of Historic Places in Canada).

This plan goes hand in hand with RJC Engineers' January 10, 2024 Historic O'Keefe Ranch Facility Condition Assessment, and April 12, 2024 Capital and Operations Management Plan, which outline the detailed condition as well as a repair and maintenance plan for each component of the site. The FCA document is referred to in several places in this plan. The reports are intended to fill-in and supplement each other.

Note regarding the Sqilx^w/Syilx Peoples in general and the Okanagan Indian Band in particular

This Heritage Conservation Plan ("HCP") for the Historic O'Keefe Ranch does not include any consideration of or information relating directly to the heritage and traditional values of these Indigenous neighbours to the site. An assessment of Indigenous heritage and traditional values in and around the Historic O'Keefe Ranch should be undertaken through an independent process.

¹ Objectives and Resources, in *Conservation Plan* by Kerr, James Semple. Seventh Edition (2013). ICOMOS Australia. page 2

Heritage Conservation Plan Goals

The overall goals for the Heritage Conservation Plan are to:

1. Identify and define the site's heritage values and character-defining elements
2. Triage the conservation approach and conservation degree of heritage structures or features based not only on their heritage value, but also on the role they play in current uses on the site — an approach which strategizes prudent investment and targeted management of the site
3. Outline conservation treatments and approaches for the site's heritage values as identified in the Statement of Significance, and as prioritized based on ongoing & potential use, as per best practices in the Standards & Guidelines for the Conservation of Historic Places in Canada

Identify and define the site's heritage values and character-defining elements

A Statement of Significance (SOS) was completed for the O'Keefe Ranch in December 2023.

The SOS was created by the federal Historic Places Initiative (HPI) as a succinct and consistent format to express the heritage values of places that matter to Canadian communities. A SOS, in its simple, non-technical language, is "a declaration of value that briefly explains what a historic place is and why it is important". It is both a starting point and a guide for communities, property owners, architects, developers, planners and anyone who may be planning the future of a historic place. Completed SOSs are submitted by the local government to the Province of BC, and from there to the Canadian Register of Historic Places (historicplaces.ca).

Although this is a site with long-established heritage significance, an SOS was never written for the O'Keefe Ranch until now. The SOS captures the many layers of heritage value embedded in the O'Keefe Ranch site, from its Indigenous connections and ongoing meaning which need to be further explored and directly articulated by its Indigenous neighbours, the Nk'mapłqs band (Okanagan Band), through its settlement by the O'Keefe family, its use as a ranch, as a small commercial and transportation depot, the diversity of people who worked and lived here over the decades, its transformation into a historic site by second generation O'Keefe family members and its role in the Okanagan Valley community and cultural tourism sphere today.

An SOS and a Condition Assessment are both requirements for conservation grant applications with the provincial Heritage Legacy Fund, administered by Heritage BC, and which provide hundreds of thousands of dollars towards heritage awareness, planning and conservation work each year.

Statement of Significance

Description of Historic Place

The Historic O'Keefe Ranch is a 51-acre rural property owned by the City of Vernon and is operated as a cultural historic site by the Historic O'Keefe Ranch & Interior Heritage Society. It is located in the jurisdiction of the Township of Spallumcheen, in the North Okanagan Valley, about 3 km north of the head of Okanagan Lake, and about 8 km north of Vernon, British Columbia. The place includes over two dozen rural utilitarian structures, as well as a few wood-frame residences and institutional buildings, a cemetery, farm animal enclosures and other farm-related elements such as wood fencing and farm machinery. The site has primary heritage significance and heritage status through the Township of Spallumcheen's Heritage Register and Official Community Plan.

Heritage Values

This historic place is known to the Sqilx"/Syilx (Okanagan) Peoples as Nk'mapłq̓s, which means 'head of the lake' in their Indigenous language, ᑎ̓s̓yilxč̓ñ̓. It is part of the homelands of the Syilx Peoples, which extend well beyond the nearby six Okanagan Indian Band reserve boundaries. It is important as a place of Syilx ancestral and contemporary uses including but not limited to hunting, fishing, gathering, hide tanning, the construction of tule-mat lodges and pit houses as well as ranching and farming. A specific Syilx connection to the O'Keefe Ranch is remembered through the early relationships between two Syilx women of the Nk'mapłq̓s band and the O'Keefe Ranch founders - Alapetsa (Rosie) with Cornelius O'Keefe and Marianne with Thomas Greenhow - which helped orient the European men to these lands through age-old, local Indigenous knowledge, establish a relationship with their Syilx neighbours and which bore children whose descendants live in the Okanagan Valley today.

Founded in 1867, the O'Keefe Ranch is important as a representation of the earliest European settlement in the Okanagan Valley. Its establishment was enabled by Crown land pre-emptions, which today are perceived both as part of the pivotal and positive establishment of the province's colonial economy and settlements in the Interior, and as testament to the practically 'cost free', now controversial policies which authorized the appropriation of unceded native lands.

The ranch is further valued for its association with the Cornelius O'Keefe and Thomas Greenhow families and their descendants. O'Keefe and Greenhow first came to know this place as it was on the former fur trade Brigade Trail, a route on which they were driving close to two hundred head of cattle from Oregon to the Cariboo gold mines during the Cariboo Gold Rush. O'Keefe and Greenhow are remembered as two of the earliest settlers of European heritage in the Okanagan Valley, each first pre-empting the maximum allowed plot of 160 acres near the

head of Okanagan Lake, and as early establishers of the cattle and ranching industry in British Columbia. O'Keefe especially went on to become one of the most prominent residents of the region, notwithstanding the controversy surrounding his early attempts to acquire land already claimed by the Okanagan Indian Band. O'Keefe conducted massive real estate sales in the early 1900s, developed theatres in both Kamloops and Vernon, served as a justice of the peace, as director of the British Columbia Cattle Association, of the Okanagan and Spallumcheen Agricultural Society, and as president of the Vernon Jockey Club. Members of the O'Keefe family lived on this site for 110 continuous years (1867 to 1977). The descendants of these families, Indigenous and non, are intertwined in the stories, communities, homes, businesses, organizations and institutions of the North Okanagan Valley to this day.

The O'Keefe Ranch is remembered as an early business centre for what was a remote region in the 19th century. The first post office in the valley was established here in 1872, the first year that the postal service was available in this part of the Okanagan, reflecting the ranch's early perception as a place of permanence and authority. Its importance as a place for business and services is also evident in the historical establishment of a general store, which served both the Indigenous and small settler community of the area, a blacksmith shop, a grist mill, and even its own church and cemetery. This place is important to regional and provincial history, as it is one of the Okanagan's most successful 19th century agricultural and real estate endeavours. As one of the three largest ranching empires in the Okanagan Valley at the the turn of the 19th century, with a holding of 12,000 acres of prime Okanagan bottomland which also produced significant quantities of grain, O'Keefe Ranch is an important reminder of the agricultural development that supported economic and demographic growth in the Interior of the province at that time. Prestigious guests throughout the decades confirm this importance, including the Marquis of Lorne, then Governor General of Canada, (son-in-law to Queen Victoria), who stayed with O'Keefe for a few days in 1881; and BC Premier W.A.C. Bennett who inaugurated the official opening of the historic site in 1967.

Through its strategic location on early transportation routes and systems, the O'Keefe Ranch is associated with other key BC economies beyond cattle ranching, including the fur trade, mining, farming, and later fruit growing and cultural tourism. In its earliest days, the O'Keefe Ranch's regional importance was further solidified as the Okanagan Valley terminus and a stagecoach depot for F. J. Barnard & Company (BX Co.). The construction of the Canadian Pacific Railway beginning in 1881 through the area, an 1892 extension of which ran just a few kilometres east, connecting Sicamous, Vernon and Okanagan Lake and making ranch products now shippable via sternwheeler, is further evidence that 25 years after the establishment of the ranch, this geographic area was well established as an economic agricultural centre thanks to early and successful businesses such as the O'Keefe Ranch. The Ranch's latest economic endeavour, which has itself celebrated over 50 years, positions the O'Keefe Ranch as a pioneering 'open-air museum' of provincial significance as it rebranded itself as a cultural tourism destination in time for the Canadian Centennial and its own 100th anniversary - both occurring in 1967.

The O'Keefe Ranch's historic demographic of residents, employees and managers stands testament to the diversity of BC's agricultural settlement history. While O'Keefe and Greenhow were of British heritage, the largest groups of workers on the ranch tended to be Chinese and Indigenous Sqilxw/Syilx (Okanagan). Chinese workers held positions as cooks, labourers and gardeners, while the Syilx men worked as cowboys, ranch hands and field workers, and the women as cooks and housekeepers. Women also played a very important part in the resilient story of the O'Keefe Ranch - from Greenhow's resourceful and courageous wife Elizabeth, who after her husband's sudden death not only successfully managed the Greenhow lands in a male-dominated era where women were all but shunned from business and real estate dealings, but led the growth of the estate through lucrative land deals. Also, the ranch's legacy as a cultural heritage site is bound to the skill, vision and leadership of Betty O'Keefe who conceived, created and managed the historic site from 1965 to 1977 and whose powerful marketing, communications and awareness skills put it on the provincial destinations map quickly and effectively.

Valued as a provincially important historic site since 1967, the O'Keefe Ranch Historic Site was created as part of a wave of interest and investment in historic sites and heritage awareness around Canada's centennial, and it stands testament to the mid-20th century rise in cultural tourism, the creation of historical societies and community museums in BC. The O'Keefe Ranch is unique, however, in comparison to sites such as Barkerville and Fort Steele that had significant provincial assistance; the conversion of the O'Keefe site was privately initiated, planned and financed by Tierney & Betty O'Keefe, Cornelius O'Keefe's youngest son and his wife. Furthermore, while other sites had been ghost towns for half a century before opening to the public, this site transformed directly from a functioning ranch to an open-air-museum run by the ranchers themselves, giving it perhaps a more relatable, tangible appeal. The O'Keefe collection of family buildings, furniture, artefacts, clothing and documents is perhaps the most comprehensive in Western Canada. The innovative rebranding and transformation of the site into a public historic site and the well-executed educational and marketing plan that supported the project since the 1960s is responsible for its now well-established provincial heritage value.

An additional important association of this place is with the non-profit O'Keefe Ranch & Interior Heritage Society, set up in 1977 not only to maintain the historic on which the buildings are located, but also the history and development of the North Okanagan. Under the Society's leadership, the historic place was revitalized after two years of closure and then solidified as one of the most popular cultural tourism destinations in the Okanagan. Additional initiatives of the society which have brought great added value to the site were to 'adopt', through relocation, historic buildings at risk including the Schubert House, an O'Keefe barn that was on the other side of the highway, and the Balmoral Schoolhouse building. Additional grass-roots community engagement and support for the site has come from the Society's partnerships on site with local organizations such as the North Okanagan Model Railroaders Association, the North Okanagan Therapeutic Riding Association, and the Spallumcheen Pioneer Power Club that bring additional economic, educational and tourism value to the historic place through their rentals and programming on the site.

The O'Keefe Ranch has aesthetic, cultural and environmental value as a cultural landscape that exhibits the unique topography of the North Okanagan Valley with its low rolling plains and lush grasslands, the rich fauna and flora of Deep Creek, as well as its many structures and infrastructure associated with the long history of former and current seasonal uses, settlement, ranching, agriculture, tourism, education and entertainment on site. It is a place that offers locals and visitors alike immersive experiences and education around the history of ranching, farming, settlement, and community in the Okanagan Valley while also offering unique rental opportunities for contemporary programs and events, including weddings and glamping. The O'Keefe Ranch is an important platform for relevant, new connections, experiences, and transactions to be made in a place with very deep roots and stories, thus modelling the unique ability of historic places to engage the community with its inherited legacies.

Character Defining Elements

- Natural, open and low topography of the landscape
- Deep Creek that runs through the site
- The "viewshed" of the historic place - the area visible from the ranch and the view of the ranch from its highway approaches
- Continuous and ongoing residential, agricultural and commercial use since 1867
- Educational and cultural tourism use since 1967 - which has included innovative and engaging programs adapted to current times, topics and circumstances
- The rural/agricultural appearance of the site with its many utilitarian barn and shed-like structures
- Evidence of former ranch use through the presence of farm animal enclosures and farm animals and a fenced corral
- Wood or pipe post and rail fencing throughout the site
- **Buildings and infrastructure in their original/early locations associated with ranching era:**
 - Pioneer Log Cabin - later the Chicken House – ca. 1867
 - Log House – 1875 and moved to current location in 1896
 - O'Keefe House – constructed in 1886, 1896, and 1900 with its caretaker's wing, circular driveway, fountain, concrete gate posts and wrought iron gates
 - St. Ann's Church – 1889
 - St. Ann's Cemetery with 51 identified burials from 1883 to 2000

- Red Shed – East section 1870; West section garage (now the Pottery Studio) ca. 1915
 - Log Barn – ca. 1890; rebuilt in 1989
 - Meat and Dairy House – ca. 1890 and 1920 (Dairy House second storey)
 - Carriage Shed – ca. 1890
 - Cooks' Bunkhouse – ca. 1900
 - East Implement Shed – ca. 1950
 - Three concrete cisterns -1901. Two intact, one collapsed. Of the two intact, one is enclosed in a wood structure
 - Smoke House – ca. 1900
 - Greenhow House/Museum Building – 1941 on 1893 foundations
 - Ford House (aka Cowboy Bunk House) – 1941
 - Metal windmill #1 - 1896 - next to the original pioneer cabin marking the location of the first water well near a natural spring.
 - Bridges over deep creek
- Logs of log buildings whipsawn from trees on site; Other historic lumber and siding originates from historic Vernon sawmill.
 - **Buildings and infrastructure associated with historic site era:**
 - Blacksmith shop - 1965 - constructed from salvaged lumber
 - General Store - 1965 - constructed from salvaged lumber
 - Wood sidewalk and salvaged street lamps leading to St. Ann's Church- 1967
 - St. Ann's Cemetery picket fence - c. 1981
 - Firehall/Stagecoach Depot - 1978
 - West Implement Shed – 1981
 - Core Building – 1981
 - Maintenance Shed – 1981
 - Metal windmill #2 - c. 1900 - salvaged in 1990 from a different North Okanagan farm and restored by the Spallumcheen Pioneer Power Club. It is intentionally located near the corrals, farm buildings and former site of the grist mill where a second early windmill is documented to have been located in the early 1900s.
 - Gazebo - 1986, reconstructed 2008.
 - **Heritage Buildings saved through relocation to the O'Keefe Ranch:**
 - Schubert House – 1890 - Relocated from north of Otter Lake in 1989
 - Balmoral School – 1912 - Relocated from Balmoral crossing in 1989
 - Barn - c. 1920 – relocated from Lot B across highway to next to the Schubert House in 1989
 - O'Keefe Ranch Museum and Archives collections and artefacts, likely one of the most extensive in BC for the historic ranching era, with over 1,500 textual documents, 3000

photographs and 10,000 artifacts including a unique collection of Canadian stoves and heaters dating from early 1800s.

- Machinery and exhibits associated with the ranching era
- Machinery and exhibits associated with the historic site era
- **Historic signage and cairns:**
 - 1966 provincial Stop of Interest Sign
 - 1989 St. Ann's 100th year memorial cairn
 - 1990 O'Keefe Ranch & Interior Heritage Society Cairn
- Landscape elements such as the large 100+ year old Ponderosa Pine trees, the species that was used for most of the building materials; the creek reeds from which tule mats were and continue to be made by Sylx women; the O'Keefe House rose garden.

The Need for a Sustainable Use Plan

As the ownership and management of the site is a partnership between the City of Vernon (Owner) and the O'Keefe Ranch and Interior Heritage Society (manager/lessee), it is important to understand each of the two stakeholder's vision and mission with regards to the O'Keefe Ranch site when planning for its conservation.

The City of Vernon's commitment in taking over ownership of the site and its historical artefacts since 1977, as stated in the legal agreement prepared by Davidson & Company (*Devonian Foundation Gift to the Corporation of the City of Vernon*) of April 13, 1977 is to "... in perpetuity, maintain, operate and supervise or cause to be maintained, operated and supervised the Described Lands and the appurtenances thereto as an educational, historic, public park depicting the historic way of life in the district and, in conjunction therewith to use or display the O'Keefe Ranch Inventory..."

The O'Keefe Ranch and Interior Heritage Society, that runs the site since that same year, has the following stated purposes:

- a. *To advance the knowledge and appreciation of, and stimulate interest in, the historical and cultural background of Western Canada and in particular, the way of life in the North Okanagan area.*
- b. *To provide and operate facilities for the preservation, maintenance, display and development of matters of historical or cultural significance in Western Canada and in particular, the way of life in the North Okanagan area.*
- c. *To provide instruction to persons wishing to study matters or subjects of historical or cultural or interest.*
- d. *To exhibit to the general public, as a museum, those historical and cultural objects acquired by the Society from time to time.*
- e. *To acquire such sites, real property, chattels, as are required for the purposes of the Society*

Their mission in running the O'Keefe Ranch site is:

To bring ranching and farming heritage to life, and create vibrancy for our communities through interactive activities and events. Most importantly, to preserve and demonstrate the rich ranching and farming heritage of the North Okanagan.

Their vision is:

To create an attraction that is dynamic and entertaining, while maintaining our heritage, agricultural and farming character.

Their "Elevator Pitch" is:

The O'Keefe Ranch is an interactive and dynamic life sized museum in a beautiful setting with events and activities aimed at educating the general public and promoting the history and culture of the North Okanagan. On site there is a railway museum, historic buildings and town, farm animals, glamping, corn maze and museum. Visitors come to the O'Keefe Ranch from all over the world for community events, weddings, dinner theaters, live music, and to experience the rich history of the North Okanagan.

Although the operations of the O'Keefe Ranch unquestionably respond directly to the above purposes, mission and vision, the site does not currently sustain itself financially, and as a site it is underused. It is open for business for less than half the year plus for a few additional weekend or one-off seasonal events, and given the extent of its size and the diversity of its features, it certainly seems to not be achieving its optimal educational, experiential and financial potential.

The Society says that they struggles to maintain operations and expand profitable programming because of the constant need to divert operational funds to infrastructure maintenance, repairs and upgrades. They have organized successful fundraisers to finance major renovations and general upkeep of buildings on site, including for example the complete rehabilitation of St. Ann's Church between 2015 and 2017.

They were seriously exploring bringing in a commercial partner to the site when the Covid-19 Pandemic hit, which like in the case of other historic sites, significantly reduced operations, required staff cut backs, closed down the site for over 6 months and cancelled out future financial prospects that were being considered at the time.

Since the pandemic, new events have been explored and launched successfully, and new commercial agreements with a food provider and with local artisans are in the process of being finalized, however the compounded effects of the pandemic on top of a long history of unstable and unprofitable site management position the site at grave risk. The Society feels that the current/recent uncertainty of the lease renewal terms of the site with the City poses further obstacles to attracting and securing financial partnerships.

The experience of the historic site itself, the self-guided touring of the site and its buildings, represent the traditional, nostalgic and anchor experience for most visitors and is a great reason to visit the site once or a few times a year. However, the open-air museum concept augmented by the odd special or seasonal event has proven to not be a business model that can cover the costs of operations as well as infrastructure maintenance.

Relatively recent feasibility and land-use studies have been conducted about possible appropriate and profitable future uses at the O'Keefe Ranch including the 2018 Feasibility Studies by Dr. Linda McGrew, and the subsequent 2018 Historic O'Keefe Ranch Land Planning by Wood & Water Developments.

Several good ideas were suggested and one was even piloted (glamping), however the Ranch's financial independence is far from being reached. These reports stress the approach that only a combination of new business ventures would "...enhance the visitor experience, bringing people back again and again, and getting those that are there to spend more time and more money while they are there - will all lead to increased and long term financial success and freedom"².

Subsequent reports, the O'Keefe Ranch Business Plan (Greg Hurst April 17, 2023) and the O'Keefe Ranch and Interior Heritage Society's Strategic Plan (July 1, 2023- March 31, 2027) don't propose any new concrete initiatives for achieving financial sustainability or even increasing revenue. The business plan simply describes the current operations and future intents without proposing any service or business augmentation.

Becoming or remaining "a regional 'must visit' stop of interest"³ or "the foremost historic destination of the Okanagan"⁴ has proven to not be enough for financial sustainability because it is based on one-off or ad-hoc visits. For the site to self-sustain itself, McGrew's recommendation around changing the business model to attract regular and return visits and providing new and more reasons to spend more time and money on site at each of these visits, needs to be seriously explored.

An additional business plan for 2020-2024 was written for the Society by Tim Gibson.

The multitude of feasibility, strategic, land-use and business plans commissioned in the last 6 years, that recommend different priorities and strategies to achieve the Society's purposes in a financially sustainable or profitable manner, but that also overlap in other aspects, do not aid in offering a clear path forward. Some of these reports are no longer relevant because they were written in the pre-pandemic era, others are supposedly being partially followed. Compounding this lack of clarity are changes in the society's organizational chart since the pandemic. Positions such as Finance & Marketing Manager no longer exist and Guest Experience Coordinator has been created. The site has also been without a curator for over a year now, a position which played a central role in programming in the last few decades.

Amongst the ten Strategic Themes in the 2023 Strategic Plan, there are several initiatives that would begin to address the site's underuse and lack of financial sustainability, especially the below three:

² McGrew, Linda. 2018. O'Keefe Ranch Feasibility Studies. <https://okeeferanch.ca/uploads/files/Glamping-RFP-Supporting-Document-2-OKeefe-Ranch-Feasibility-Study-2018.pdf>

³ O'Keefe Ranch and Interior Heritage Society's Strategic Plan (July 1, 2023- March 31, 2027)

⁴ O'Keefe Ranch Business Plan (Greg Hurst April 17, 2023)

- Build corporate relationships and sponsorships
- Generate multiple reliable and growing revenue streams
- Develop on-site partnerships which increase the visitor experience and revenue potential for all partners

Providing the certainty for compatible businesses to consider the O'Keefe Ranch as an appealing partner and location, and exploring places on site to offer for their operations, should be top priorities in evolving the historic site's use into one that is more robust, resilient and self-sustaining.

An effective management structure and a relevant, sustainable use plan for the ranch need to be developed and implemented to finance the conservation efforts.

The below conservation strategies and conservation treatment sections are based on the current use of the site and identified underused buildings that could be adapted for reuse in a manner that would appropriately advance the site's revenue and partnership opportunities.

Heritage Conservation Strategies

Conservation criteria

With the thorough understanding of the O'Keefe Ranch as outlined in the above SOS, it is clear that practically every single structure, landscape element, artifact and view in some way embodies and contributes to the heritage value of the place. The question is, do they all need to be conserved? And if so, to what degree?

The following considerations⁵ help to determine the conservation strategies:

1. The requirements arising from the Statement of Significance

Determining the justification for each feature's conservation based on its level of heritage value and its role in the larger heritage narrative of the site. Also, determining whether the significance is retained if removed from their context or grouping with other features.

2. The City's/Society's requirements and resources and/or feasible uses

This is the realistic consideration of the owner's/users's needs, aspirations and resources, with the goal of striking an appropriate balance between proposed use and retention of heritage value.

3. The physical condition of the feature

Do we know enough about the condition of the feature to plan for its conservation? Is its heritage significance high enough to invest in it and to what degree?

4. Requirements imposed by external factors

Provincial and local regulations, policies and even safety & environmental considerations that may impact the decision to conserve a feature, if at all and how.

The following table lays out the list of heritage attributes and character-defining elements of the Historic O'Keefe Ranch along with their level of heritage importance, their (high-level) physical condition, the attribute's individual importance in contributing to the site's current use, and any proposed changes from its current use that may impact conservation.

⁵ adapted from Conservation Policy: *Conservation Plan* by Kerr, James Semple. Seventh Edition (2013). ICOMOS Australia.

Conservation Strategies Table

Map#	Character Defining Element or other site feature	Heritage Importance	Heritage Importance Explanation	Current General Condition*	Importance to Site Programming	Explanation and Notes
* see section 5.1 of RJC Facility Condition Assessment for detailed condition of each attribute. ** See 2011 Farm Machinery Assessment for detailed current state and recommendations						
	Natural, open and low topography of the landscape	High		n/a	Crucial	The natural context of the site, even with evidence of human settlement, is important to the states of how why and when people connected with this specific historic place.
	Deep Creek that runs through the site	High		n/a	Crucial	Possibly the most important site feature to the Indigenous connection to the site. Today the creek also irrigates the corn field which is important for the corn maze programming (middle of Aug to end of October)
	The "viewshed" of the historic place - the area visible from the ranch and the view of the ranch from its highway approaches	High		n/a	Crucial	The visibility of the ranch when accessing it from both directions is important to retain
	Continuous and ongoing residential, agricultural and commercial use since 1867	High		n/a	Crucial	Conserving and even augmenting these uses is crucial to the financial survival of the site
	Educational and cultural tourism use since 1967	High		n/a	Crucial	This use is the shared mandate of the City and Society and the purpose of the site since 1967
25, C, D	The rural/agricultural appearance of the site with its many utilitarian barn and shed-like structures	High		n/a	Crucial	Important to retaining the heritage value of the site
9,12, 13, 30, 31, purple and orange dots	Evidence of former ranch use through the presence of farm animal enclosures, farm animals and a fenced corral	High		n/a	Crucial	There could be flexibility and adaptation around retaining or changing the specific enclosures and infrastructure depending on the specific programming and operators
	Wood or pipe post and rail fencing throughout the site	High		Good	Crucial	Important to retaining the heritage value of the site

Map#	Character Defining Element or other site feature	Heritage Importance	Heritage Importance Explanation	Current General Condition*	Importance to Site Programming	Explanation and Notes
* see section 5.1 of RJC Facility Condition Assessment for detailed condition of each attribute. ** See 2011 Farm Machinery Assessment for detailed current state and recommendations						
2	Collections and Artefacts held at the O'Keefe Ranch Museum and Archives on site	Med	These resources are important to conserve and they continuously inform the site programming, however visitors do not access the archives or the collections in the basement. Retaining the entire collection <u>on site</u> is not required for conserving the heritage value of site. Theoretically the majority could be conserved off site, while continuing to inform the site programming effectively.	Fair to Good. Artifacts are currently at risk for being stored in Greenhow Museum basement with water ingress, organic growth and lack of temperature and moist controls.	Important to Neutral	Consideration to reduce the collection held on site and relocate the majority of it to the Vernon Museum & Archives (VMA) or an off-site facility with more stable security, moisture and temp controls. Collections feed the displays in the museum exhibit space, but travelling exhibits come from other sources as well.
2, 26, 27	Machinery and exhibits associated with the ranching era	High		Fair**	Important	These augment the visitor experience and are a reason for certain clientele to come to the ranch
2, 3	Machinery and exhibits associated with the historic site era	High		Fair**	Important	The stove exhibit for example is very popular, although its relevance to the site and the space it is located in could be re-examined.
	1966 provincial Stop of Interest Sign	High		Good	Crucial	
	1989 St. Ann's 100th year memorial cairn	High		Good	Important	
	1990 O'Keefe Ranch & Interior Heritage Society Cairn	High		Good	Important	
	100+ year old Ponderosa Pine trees	High		Poor	Important	
	Creek reeds	High		n/a	Crucial	Possibly one of the most important resources to Indigenous locals, interpretation of and programming around these reeds could be a stepping stone for building a meaningful working relationship with OKIB

Map#	Character Defining Element or other site feature	Heritage Importance	Heritage Importance Explanation	Current General Condition*	Importance to Site Programming	Explanation and Notes
* see section 5.1 of RJC Facility Condition Assessment for detailed condition of each attribute. ** See 2011 Farm Machinery Assessment for detailed current state and recommendations						
	O'Keefe House rose garden	Med	A value-added feature from the 1980s that has no direct association with the O'Keefe Ranch history or family traditions	unknown	Important	The rose garden is an iconic wedding photos backdrop, a popular shaded spot in the summer for visitors
1	1981 Visitor Center	Low	A utilitarian building from the 1980s that has no direct association with the O'Keefe Ranch history or family traditions	Fair to Good	Crucial	When the site is open you must enter and exit from here so this is a strategic location for engaging with visitors about programs, and selling items at gift shop. Main visitor bathrooms and food services are located here.
2	1941 Greenhow Museum (on 1893 foundations)	Med	The 1941 building itself is out of character with the building typology of the site. Its value comes from its programming as a museum, archives and model railway display upstairs and less from its form and features	Fair to Good	Important	The museum exhibit function and the model railway display are popular aspects of the visitor experience but is this the only/best/appropriate building for these programs? Is the building being used optimally to support staff, programming and revenue generation?
3	1978 Stagecoach Depot	Med	A utilitarian building from the 1980s which has had evolving roles in housing various exhibits and other functions, some of which are secondary in the ranch narrative	Fair to Good	uses are mixed in importance: Crucial to Neutral	The green room and guest showers are crucial to support general site programming and the glamping program. The stove, sleigh and wagon exhibits are popular aspects of the visitor experience but is this the only/best/appropriate building for these programs? Is the building being used optimally to support staff, programming and revenue generation?
4	1886, 1896, and 1900 O'Keefe House with its caretaker's wing, circular driveway, fountain, concrete gate posts and wrought iron gates	High		Good	Crucial	
4.1	Caretaker House (see #4)	High		Fair to Good	Crucial	The presence of a caretaker on site 12 months a year is crucial for the operations for the site
5	Pavilion	Low	A value-added feature from the 1980s that has no direct association with the O'Keefe Ranch history or family traditions	Good	Important	Important for weddings, murder mysteries, cowboy dinner show, cowboy festivals
6	Gazebo	Low	A value-added feature from the 1980s that has no direct association with the O'Keefe Ranch history or family traditions	Good	Important	Important for weddings, is a location in the x-mas carolling event, and people eat their lunch there
7	ca. 1867 Pioneer Cabin	High		Fair	Crucial	The earliest building on site
8	1941 Cowboy Bunkhouse	High		Good	Important	Visitors go in and interact with actors and interpretation inside. Interpretation tells important stories of of Indigenous and Chinese cowboys

Map#	Character Defining Element or other site feature	Heritage Importance	Heritage Importance Explanation	Current General Condition*	Importance to Site Programming	Explanation and Notes
* see section 5.1 of RJC Facility Condition Assessment for detailed condition of each attribute. ** See 2011 Farm Machinery Assessment for detailed current state and recommendations						
9	Bird Pens	Med	A secondary utilitarian building	Good	Important	Visitors love the birds
10	1896 Windmill #1	High		Good	Important	
11	ca. 1890 Log Barn (rebuilt in 1989)	High		Fair	Important	Lambs are born here. No current public access
12	Hay Shed	Med	A secondary utilitarian building	Poor	Neutral	
13	Ye Ol' Feed Shed	Med	A secondary utilitarian building	Fair	Neutral	
14	ca. 1890 and 1920 Meat & Dairy Building	High		Poor	Important	Due to the poor structural condition of this fascinating building, no public access is allowed. Door is left open and people poke their head in to see interior
15	ca. 1900 Chinese Cook's House	High		Good	Crucial	Very popular and impactful building for visitors, an original building that tells the story ion the diversity of workers and their working conditions on the ranch
16	1875 Log House, relocated 1896	High		Fair to Good	Crucial	Very important building to telling the story of the site
17	1965 General Store	High		Good	Crucial	Popular and revenue generating stop on site
18	1965 Blacksmith Shop	High		Fair to Good	Liability to	Building occupied by an independent business that not contribute to the general visitor experience, does not generate revenue nor pay rent to the ranch. Students and clients of this business walk onto site without payment
19	1870 and c. 1915 Red Shed	High		Good	Crucial	Artisan classes and shop, previously a pottery studio, that has been very popular with visitors. A new flowers, perfumery and soap making business is being brought in to this space
20	c.1890 Carriage Shed	High		Fair	Crucial	This space is used half and half by the the homemaking skills program, and by the children's area. Popular and revenue generating activities for the ranch
21	1889 St. Ann's Church	High		Good	Crucial	Hugely important to visitor experience and weddings, the overlap is not a problem but a win win
22	ca. 1900 Smoke House	High		Good	Important	
23	Pump House	Low		Fair	Crucial	Structure for water main on site
24	c. 1900 Windmill #2	Med	Not the original windmill of the site. Given the presence of the original windmill this additional one does not significantly contribute to the site's heritage value as a whole	Good	Neutral	

Map#	Character Defining Element or other site feature	Heritage Importance	Heritage Importance Explanation	Current General Condition*	Importance to Site Programming	Explanation and Notes
* see section 5.1 of RJC Facility Condition Assessment for detailed condition of each attribute. ** See 2011 Farm Machinery Assessment for detailed current state and recommendations						
25	1901 Water Cisterns	High		Good	Important	
26	SPPC Display #1	Med	utilitarian building that houses artefacts that are of heritage value to the site	Good	Neutral	Covers farming equipment collection of the Spallumcheen Pioneer Power Club, a partner to the ranch and help with the repair and maintenance of display artefacts. Their displays are of interest to visitors
27	SPPC Display #2	Med	utilitarian building that houses artefacts that are of heritage value to the site	Fair to Good	Neutral	Covers tractor collection of the Spallumcheen Pioneer Power Club, a partner to the ranch and help with the repair and maintenance of display artefacts. Their displays are of interest to visitors
28	1981 Implement Shed #1	High		Fair to Good	Neutral to Important	Storage for wagons, buggies and other items. Stores the one stage coach that comes out and can be used for rides
29	ca. 1950 Implement Shed #2	High		Good	Neutral to Important	Storage for wagons, buggies and other items. Stores the one stage coach that comes out and can be used for rides
30	Tack Shed	Med	A secondary utilitarian building	Good	Neutral	
31	Corral	Med	was built for the O'Keefe Rodeo	Good (but not grandstand platform which is poor/condemned)	Neutral	Past location of 3-day long O'Keefe Rodeo, sheep dog trials, and cattle-cutting demos during the cowboy festival- all events that are no longer part pop the ranch programming. Has no current use.
32	Glamping	Low	A value-added feature that has no direct association with the O'Keefe Ranch history or family traditions	Good	Neutral	A new overnight accommodation program on the site that broke even financially after the first pilot season. However, feedback was that the chosen site has no shade and can get extremely, uncomfortably hot. It is not clear if customers will return or if this program will depend on one-off clients.
33	1912 Balmoral School House (relocated here in 1989)	High		Good	Crucial	Very important to the school visit programs which has been one of the most consistent sources of revenue and for of educational programming. Together with Deep Creek and the Schubert House, this building has great potential for collaborative programming and interpretation with OKIB.
34	1890 Schubert House (relocated here in 1989)	High		Fair to Good	Crucial	Very popular stop on ranch tour, important for x-mas carols event, has been a film location for an Indigenous created and focused TV show called Bones of Crows. Together with Deep Creek and the Balmoral School House, this building has great potential for collaborative programming and interpretation with OKIB.
35	c. 1920 Schubert Barn (relocated here in 1989)	Med	A relocated building that is compatible with the character of the site of lower importance than the Schubert House or Balmoral School	Fair to Good	Neutral	This building has never been an important part of the visitor experience nor offered programming. It currently has no use, not even for storage.

Map#	Character Defining Element or other site feature	Heritage Importance	Heritage Importance Explanation	Current General Condition*	Importance to Site Programming	Explanation and Notes
* see section 5.1 of RJC Facility Condition Assessment for detailed condition of each attribute. ** See 2011 Farm Machinery Assessment for detailed current state and recommendations						
36	1981 SPPC Clubhouse	Low	A secondary utilitarian building	Good	Important	Workshop where all equipment is repaired and maintenance equipment is stored
37	Storage Building	Low	A secondary utilitarian building	Good	Important	Maintenance equipment is stored
38	Storage Shed	Low	A secondary utilitarian building	Poor	Important	Maintenance equipment is stored
A	Pedestrian Bridge	Med	The presence of a bridge across the creek and the connectivity between these two sides of the historic place needs to be maintained.	Good	Crucial	Programming and connectivity between both sides of the site is currently dependent on this single bridge
B	Decommissioned Bridge	Low	A secondary utilitarian structure	Poor/decommissioned	Neutral	Provided access between two sections of the site
C	1901 Cistern Ruin	High		Poor/decommissioned	Important	
D	Field	High		n/a	Crucial	The proximity of agricultural or grazing fields are important to retaining the heritage value of the site
E	Cemetery	High		Fair	Crucial	
F	Water pump access ramp	Low	utilitarian structure only	Poor/decommissioned	Important	Provided access to water pump
n/a	Outbuildings, Animal Feed Buildings	Med	secondary utilitarian structures	Good	Important	
n/a	Animal Feed Buildings	Med	secondary utilitarian structures	Good	Important	
n/a	Parking and Road Lots	Med	A value-added feature that has no direct association with the O'Keefe Ranch history or family traditions	Fair to Good	Important	
n/a	Irrigation and Water Lines	Med	utilitarian and low-visibility infrastructure	Good	Important	

Site Map (courtesy of RJC Engineers)



BUILDING MAP

Building Key

- 1. Visitor Center
 - 2. Greenhow Museum
 - 3. Stagecoach Depot
 - 4A. O'Keefe House
 - 4B. Caretaker's House
 - 5. Pavilion
 - 6. Gazebo
 - 7. Pioneer Cabin
 - 8. Cowboy Bunkhouse
 - 9. Bird Pens
 - 10. Windmill #1
 - 11. Log Barn
 - 12. Hay Shed
 - 13. Ye Ol' Feed Shed
 - 14. Meat & Dairy Building
 - 15. Chinese Cook's House
 - 16. Log House
 - 17. General Store
 - 18. Blacksmith Shop
 - 19. Red Shed
 - 20. Carriage Shed
 - 21. St. Anne's Church
 - 22. Smoke House
 - 23. Pump House
 - 24. Windmill #2
 - 25. Water Cisterns
 - 26. SPPC Display #1
 - 27. SPPC Display #2
 - 28. Implement Shed #1
 - 29. Implement Shed #2
 - 30. Tack Shed
 - 31. Corral
 - 32. Glamping
 - 33. Balmoral School House
 - 34. Schubert House
 - 35. Schubert Barn
 - 36. SPPC Clubhouse
 - 37. Storage Building
 - 38. Storage Shed
-
- A. Foot Bridge
 - B. Decommissioned Bridge
 - C. Cistern Ruin
 - D. Fields
 - E. Cemetery
 - F. Log Foot Bridge

Triaging the Conservation Approach and Degree

A varied approach to the conservation of the historic resources on site should be triaged based on the above tables which map out each component's heritage significance, and their role in the visitor experience, interpretive program and any possible Sustainable Use Plan (run by the ranch itself or a business/community partner). The triage exercise helps to determine whether a component is to be:

- **Removed or relocated** - deemed to not be of heritage value or to support the operations of the historic site
- **Preserved** - in some cases no interventions or actions are needed beyond stabilization and basic maintenance. In other cases preservation may include downgrading the use, or repairs for ongoing, current uses.
- **Rehabilitated** - for current or different uses, involving upgrades, changes and even additions.

Conservation of any heritage resources on the Historic O'Keefe Ranch site should follow Standards & Guidelines for the Conservation of Historic Places in Canada¹. These outline three approaches within the Conservation suite of treatments: Preservation, Rehabilitation and Restoration.

Key Definitions

Preservation: *the action or process of protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of an historic place, or of an individual component, while protecting its heritage value.*

Restoration: *the action or process of accurately revealing, recovering or representing the state of an historic place, or of an individual component, as it appeared at a particular period in its history, while protecting its heritage value.*

Rehabilitation: *the action or process of making possible a continuing or compatible contemporary use of an historic place, or an individual component, while protecting its heritage value.*

Most of the conservation treatments on the O'Keefe Historic Ranch site will involve Preservation.

¹ <https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf>

The following nine Standards relate to Preservation (these are not presented in a hierarchical order):

1. Conserve the heritage value of an historic place. Do not remove, replace or substantially alter its intact or repairable character-defining elements. Do not move a part of an historic place if its current location is a character-defining element.
2. Conserve changes to an historic place that, over time, have become character-defining elements in their own right.
3. Conserve heritage value by adopting an approach calling for minimal intervention.
4. Recognize each historic place as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other historic places or other properties, or by combining features of the same property that never coexisted.
5. Find a use for an historic place that requires minimal or no change to its character-defining elements.
6. Protect and, if necessary, stabilize an historic place until any subsequent intervention is undertaken.
7. Evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.
8. Maintain character-defining elements on an ongoing basis. Repair character-defining elements by reinforcing their materials using recognized conservation methods. Replace in-kind any extensively deteriorated or missing parts of character-defining elements, where there are surviving prototypes.
9. Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable on close inspection. Document any intervention for future reference.

Additional Standards Relating to Rehabilitation

10. Repair rather than replace character-defining elements. Where character-defining elements are too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements. Where there is insufficient physical evidence, make the form, material and detailing of the new elements compatible with the character of the historic place.

11. Conserve the heritage value and character-defining elements when creating any new additions to an historic place or any related new construction. Make the new work physically and visually compatible with, subordinate to and distinguishable from the historic place.

12. Create any new additions or related new construction so that the essential form and integrity of an historic place will not be impaired if the new work is removed in the future.

Additional Standards Relating to Restoration

13. Repair rather than replace character-defining elements from the restoration period. Where character-defining elements are too severely deteriorated to repair and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements.

14. Replace missing features from the restoration period with new features whose forms, materials and detailing are based on sufficient physical, documentary and/or oral evidence.

Triage Results Summary

A total of sixty six (66) attributes of the O'Keefe Historic Ranch were individually triaged in the above table, covering all aspects of the site's components whether they are of heritage value or not.

Heritage Value

38 attributes were deemed to be of 'high' heritage value (57.6% of all attributes)

18 attributes were deemed to be of 'medium' heritage value (27.3% of all attributes)

10 attributes were deemed to be of 'low' heritage value (15.1% of all attributes)

Importance to Site programming

26 attributes were deemed to be 'crucial' (39.4% of all attributes)

25 attributes were deemed to be 'important' (37.9% of all attributes)

1 had a mix of uses that varied from 'neutral to crucial' (1.5% of all attributes)

3 attributes were a mix of 'neutral to important' (4.5% of all attributes)

1 attribute was deemed a 'liability to' the use of the site in its current use (1.5% of all attributes)

Condition Assessment

7 attributes were deemed to be in general 'poor' condition (10.6% of all attributes)

8 attributes were deemed to be in general 'fair' condition (12.12% of all attributes)

12 attributes were deemed to be in general 'fair to good' condition (18.2% of all attributes)

29 attributes were deemed to be in general 'good' condition (44% of all attributes)

9 attributes are of non-applicable condition (13.6% of all attributes)

1 attribute is of unknown condition (1.5% of all attributes)

The fourth consideration, the **requirements imposed by external factors**, will be examined in the recommendations section below which outlines individual conservation treatments and considerations for each of the site components.

A Practical Approach to Conservation on The Historic O'Keefe Ranch

When assessing the condition of a historic place and planning its conservation, the expectation is not that it will look new or function like a new structure or component. The objective is simply to protect its heritage value through maintenance or stabilizing with an approach of minimal intervention. In the case of the Historic O'Keefe Ranch, much of its heritage value and character lie in the aged, rugged, rustic and authentic patina of its site and structures. A conservation approach that involves a makeover or renewal approach that would transform this character by obliterating its age, or the rural, working purpose of the majority of its buildings would be in direct conflict with the objectives of conservation.

The site and its buildings don't need to look pretty or to even be painted in most cases. They do however need to be valued, understood, documented and monitored so that regular repair and maintenance interventions can be carried out prudently and where necessary to protect the site from environmental hazards and to allow each component of the site to serve its function as part of the site programming.

As this site is open to and dependant on the public, safety is a high priority when making conservation decisions. Structures that are accessed by the public or by staff will need to be structurally sound and all other safety hazards addressed as well. However the comfort, temperature and moisture levels, as well as other typical functional considerations in commercial or residential buildings that are not part of a historic site, are mostly irrelevant to the majority of the O'Keefe's buildings and thus their performance levels in these aspects should not be considered inferior or in need of upgrades.

Some of the buildings, both very old ones and also newer ones built here in the last 50 years, do play a more functional role in the programming of the historic site and for this reason require heating, cooling, indoor plumbing, hot water, electrical service and other modern building technologies based on their use.

The criteria for interventions will be 'is the structure/material/component performing as intended'? If cladding on a building for example is warped, aged, unpainted, with minor cracks or even peeling paint - it is very possible that it will require no interventions. As long as the cladding is 'performing as intended' in other words, effectively cladding the building, then its condition will be considered 'good'. Where cladding boards are missing, loose or rotten, those individual boards merit replacement in-kind, which may leave evidence of repairs. Minimal

intervention is the approach, not the mass replacement of an entire elevation so that all the boards look the same. Evidence of repair and maintenance is characteristic of a rural, working site like there O'Keefe Ranch and conservation efforts should not attempt to mask these.

Furthermore, a different approach to the same material may be warranted on the O'Keefe Ranch depending on the building and its use. For example, windows on buildings that are used as offices or residences should be well-sealed whereas windows on buildings that are used for day-time programs or as exhibit buildings could be drafty or their putty be allowed to deteriorate for longer periods between maintenance, as the role of these windows is simply to let in natural light and not to protect people from the elements. We don't want to lose windows or allow cracked windows to pose danger to visitors, but an old drafty window on the Cook House or School House is not a conservation concern and does not require immediate intervention until it comes closer to 'not performing as intended'.

Based on the above explanation and criteria, the general condition of structures and components will be determined based on 'performing as intended', as will the individual elements or materials. If a roof is leaking or missing shingles it might be noted as in 'poor' or 'fair' condition, depending on the extent of the failure, but if it is generally performing as a roof, even if it might be getting close to the end of its expected service life, its condition will be noted as good, with a note to monitor its performance.

Recommendations relating to individual Structures or Other Site Features

The following table lays out the list of heritage attributes and character-defining elements of the Historic O'Keefe Ranch along with their current condition, their proposed level of use, the proposed conservation treatment, as well as recommendations, considerations and external factors.

Conservation Treatments Table

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
Natural, open and low topography of the landscape	n/a	Unchanged	Preservation	<ul style="list-style-type: none"> When carrying out landscape maintenance or considering new landscape design, conserve the overall existing sense and inter-relationship of landscape features, including trees, slopes, topography, designed landscapes, built features and other landscape components. Consider the history of the evolution of the site in landscape design decisions. Integrate interpretive elements and methods as part of future site planning and design. Ensure that site use changes do no compromise the health of character-defining vegetation Understand the site's ecological features and how they contribute to the natural and cultural heritage value of the landscape. Balance the conservation of the historical and cultural character of the Lands with the site's naturally occurring biodiversity. Manage invasive species by removing or reducing invasive alien species that are resulting in the loss of character-defining ecological, landscape and built features and their components. Apply FireSmart Farm & Ranch Wildfire Preparedness guidance and principles https://firesmartbc.ca/farm-and-ranch-wildfire-preparedness/ 	<ul style="list-style-type: none"> In any future site design, incorporate site planning and landscape design that respects the overall natural, rural and agricultural character of the site. Where new landscape design is considered, ensure that any new features acknowledge historical landscape elements and are compatible with existing landscape elements either natural or cultural.
Deep Creek that runs through the site	n/a	Unchanged	Preservation	<ul style="list-style-type: none"> Preserve the Creek by preventing soil and bank erosion, and protect it from the dumping of chemicals, hazardous materials and waste Ensure that site use changes do no compromise the health of character-defining vegetation and natural attributes 	<ul style="list-style-type: none"> Work with OKIB and native species experts to prepare a maintenance/management plan to support the ongoing care of the creek reeds and wildlife.
The "viewshed" of the historic place - the area visible from the ranch and the view of the ranch from its highway approaches	n/a	Unchanged	Preservation	<ul style="list-style-type: none"> Conserve views and vistas from, to and within the site. 	
The rural/agricultural appearance of the site with its many utilitarian barn and shed-like structures	n/a	Unchanged	Preservation	<ul style="list-style-type: none"> Preserve the historic agricultural and rural buildings by using them 	<ul style="list-style-type: none"> Ensure that any new uses or development don't block the views of the historic agricultural and rural buildings Ensure that the majority of buildings on site are of this character and any new development is subordinate (Doesn't steal the show) from this historic typology of buildings

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
Evidence of former ranch use through the presence of farm animal enclosures, farm animals and a fenced corral	n/a	Unchanged	Preservation	<ul style="list-style-type: none"> • Preserve the farm animal enclosures and maintain farm animals on site 	<ul style="list-style-type: none"> • Perhaps through or in partnership with third party operators, the return of cattle, horses and more robust ranch related programming centred around BC’s farming and ranching history (and current best practices such as regenerative farming) as well as any compatible farm-animal programs such as horse-riding, demonstrations or festivals, animal-therapy and organizations such as 4-H BC or Farm to School BC. • https://farmtoschoolbc.ca/ • https://southlandsfarm.pike13.com/categories/82432 • https://www.bcaitc.ca/blog/tour-farm-schools-bc • https://www.4hbc.ca/contact
100+ year old Ponderosa Pine trees	Poor	Unchanged	Preservation	<ul style="list-style-type: none"> • Commission an arborist assessment of the Ponderosa Pines on site as well as conservation guidelines for their preservation • Prepare a maintenance / management plan to support the ongoing care of character-defining elements in the landscape. • Protect and maintain vegetation by using non-destructive methods in daily, seasonal and cyclical maintenance tasks. • Ensure that site use changes do no compromise the health of character-defining vegetation 	<ul style="list-style-type: none"> • The role of these trees in the site interpretation could be augmented. Consider programming around tree species in the North Okanagan and their role in traditional and current construction practices, in climate change and climate resilience.
Creek reeds	n/a	Unchanged	Preservation	<ul style="list-style-type: none"> • Protect and maintain vegetation by using non-destructive methods in daily, seasonal and cyclical maintenance tasks. • Ensure that site use changes do no compromise the health of character-defining vegetation 	<ul style="list-style-type: none"> • Work with OKIB and native species experts to prepare a maintenance / management plan to support the ongoing care of the creek reeds and wildlife. • Explore the notion of local women-focused themes (medicinal plants, midwifery, artisanal traditions, female coalitions and collaborations etc) and programming led and mentored by women leaders and knowledge holders at OKIB
Continuous and ongoing residential, agricultural and commercial use since 1867	n/a	Unchanged	Preservation		<ul style="list-style-type: none"> • The augmentation of compatible and appropriate agricultural, commercial and residential uses (over-night accommodations, retreats or even residencies) are all historic activities that could be game changers in the financial sustainability of the site • Conserve the heritage value of the site by considering its character-defining elements in any new additions or new construction. • Make any new building physically and visually compatible with, but distinguishable from, the built form currently found on site. • Consider a variety building styles, massing and types that reflect the site’s past history of use and change. • Develop plans for interior and exterior spaces, with a form and character of development, that satisfy the economic expectations and needs of the site while retaining the primary characteristics of the site.

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
Educational and cultural tourism use since 1967	n/a	Unchanged	Preservation		<ul style="list-style-type: none"> The educational and cultural tourism programs can be augmented and developed in combination with commercial activities on the site to generate more revenue and address historic, current and evolving relevant societal and local themes
Wood or pipe post and rail fencing throughout the site	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Maintain traditional style and materials of fencing throughout the site 	
Collections and Artefacts held at the O’Keefe Ranch Museum and Archives on site	Fair to Poor Artefacts are currently at risk for being stored in Greenhow Museum basement with water ingress, organic growth and lack of temperature and moist controls.	Changed/ Reduced Access	Preservation on or off-site	<ul style="list-style-type: none"> Work with a museums professional to assess the archives, the artefacts collection, their condition and their storage situation Follow museum professional guidance to sort, curate, dilute and if necessary deaccession a portion of the items As part of the above professional assessment, determine whether it is important for the O’Keefe Ranch archives to be accessed by researchers and located on site given the low volume of requests and the fact that the VMA also holds an O’Keefe Ranch collection? Discuss whether the position of curator is needed for effective development of museum exhibits or can the the VMA staff support ranch staff with exhibit development if and where necessary? 	<ul style="list-style-type: none"> Can exhibits be developed via student or residency contracts? For example the visiting national Indigenous exhibit (Where Are The Children?) in 2022 was very successful, with a summer student developing added powerful content about Okanagan residential schools.
Machinery and exhibits associated with the ranching era	Fair**	Changed	Selective Preservation	<ul style="list-style-type: none"> It is likely that this collection has grown too large and unfocused to effectively store, maintain and interpret. Consider assessing and reducing the collection to the most important, representative pieces that truly enhance the visitor experience, and that the ranch can also maintain, and develop fresh, effective, self-guided interpretation for them. Offer scheduled guided tour of these machines as a new program. 	
Machinery and exhibits associated with the historic site era	Fair**	Changed	Selective Preservation	<ul style="list-style-type: none"> It is likely that this collection has grown too large and unfocused to effectively store, maintain and interpret. Consider assessing and reducing the collection to the most important, representative pieces that truly enhance the visitor experience, and that the ranch can also maintain, and develop fresh, effective, self-guided interpretation for them. Offer scheduled guided tour of these machines as a new program. 	

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
1966 provincial Stop of Interest Sign	Good	Unchanged	Preservation	<ul style="list-style-type: none"> This iconic sign is part of a larger ‘stops of interest’ provincial program that today seems outdated and many of the signs contain inappropriate text. Explore the BC Stops of Interest program and add it to the site’s interpretive program and guided tours. This sign offers opportunities to make connections to other sites and explore the damage and lesson of past narratives https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/stop-of-interest Monitor the log post holding up the sign for deterioration and replace in-kind when necessary 	
1989 St. Ann’s 100th year memorial cairn	Good	Unchanged	Preservation	<ul style="list-style-type: none"> This masonry structure constructed of river stones should be monitored, cleaned and repointed once and a while just like a chimney. 	
1990 O’Keefe Ranch & Interior Heritage Society Cairn	Good	Unchanged	Preservation	<ul style="list-style-type: none"> This masonry structure constructed of stone slabs should be monitored, cleaned and repointed once and a while just like a chimney. 	
O’Keefe House rose garden	unknown	Unchanged	Preservation		
1981 Visitor Center	Fair to Good	Unchanged	Preservation	<ul style="list-style-type: none"> Food services on site are a crucial services that bring people to the site and keep them on site. In times where food services at this building were not optimal or non-existent, visitor numbers and revenue were significantly impacted. Explore and maintain a beneficial third-party food service provider that not only adds value and revenue to the site but potentially represents a stand-alone destination which can offer opportunities for the ranch to capitalize on the restaurant audience. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.1 	<ul style="list-style-type: none"> Consider expanding or adapting this building as per recommendations in O’Keefe Ranch Land-Use Plan 2018. Any additions should be “physically and visually compatible with, subordinate to and distinguishable” (Standard 11 for Rehabilitation) from the Visitor Centre so as not to create confusion about the evolution of the site or about the age of the existing buildings.
1941 Greenhow Museum (on 1893 foundations)	Fair to Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.2 	<ul style="list-style-type: none"> The Greenhow House is the only multi-use space on site where classes or meetings could be held all year round. Consider adaptive reuse of this building to accommodate both an exhibit space but also flex-rooms that could be generating other programs for revenue. Consider partial or full relocation of O’Keefe Archives and stored artefacts from this building and even from the site to introduce different uses to the basement and to the practical main floor spaces of this building. If collection remains in this building in its current configuration, the basement will require renovations to adequately house the archival materials that need stable moisture, temperature and structural conditions.
1978 Stagecoach Depot	Fair to Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.3 	<ul style="list-style-type: none"> The uses in this building are of a random assortment. The requirements for each use are different begging the question whether a more intentional, effective use of the building could be imagined involving relocation, reconfiguration and improvements. Anecdotally it was mentioned that the water in the cowboy washrooms smells terrible due to the copper pipes (?). If these washrooms are intended to serve the ‘glamping’ experience, this should be looked into.

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
1886, 1896, and 1900 O'Keefe House with its caretaker's wing, circular driveway, fountain, concrete gate posts and wrought iron gates	Fair	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.4 Replacing damaged plaster walls with drywall is an acceptable intervention, but always intervene prudently and only where necessary. 	
Caretaker House (see above entry)	Fair to Good	Unchanged	Preservation and Rehabilitation	<ul style="list-style-type: none"> Mechanical systems in this residence require updating and repair, see RJC report. Also, the water in the caretaker residence is not potable, partly because of its source but also because at least some of the pipes in the house or in the supply line are galvanized. This should be addressed. 	
Pavilion	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.5 	
Gazebo	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.6 	
ca. 1867 Pioneer Cabin	Fair	Reduced Access	Preservation	<ul style="list-style-type: none"> There is no current public access to this building and it can remain this way without impacting its contribution to the visit experience or to its heritage value Stabilize the structure, repair loose cladding and prune back the large tree that is encroaching on the roof and dumping debris on this very old structure. Follow RJC 'By Buildings Summary of Recommendations' section 5.1.7 	
1941 Cowboy Bunkhouse	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.8 	
Bird Pens	Good	Unchanged	Preservation		
1896 Windmill #1	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.10 	
ca. 1890 Log Barn (rebuilt in 1989)	Fair	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.11 	
Hay Shed	Poor	Reduced Access	Decommission/remove	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.12 	
Ye Ol' Feed Shed	Fair	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.13 	
ca. 1890 and 1920 Meat & Dairy Building	Poor	Reduced Access	Preservation	<ul style="list-style-type: none"> Stabilize and formalize the limited access to this building while improving the interpretation around the building so people can learn about its features without entering. Reduce scope in RJC 'By Buildings Summary of Recommendations' section 5.1.14 to the last three points only, skipping the structural upgrades 	
ca. 1900 Chinese Cook's House	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.15 	
1875 Log House, relocated 1896	Fair to Good	Unchanged	Preservation	<ul style="list-style-type: none"> Currently very restricted public access downstairs and upstairs, and this can remain Follow RJC 'By Buildings Summary of Recommendations' section 5.1.16 	
1965 General Store	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC 'By Buildings Summary of Recommendations' section 5.1.17 	<ul style="list-style-type: none"> Currently sells lots of candy. Explore the notion of clearing out some of the shelf exhibits (some are repetitive) to sell more items

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
1965 Blacksmith Shop	Fair to Good	Changed/ temporarily reduced access	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.18 unless a new tenant/use is identified and a rehabilitation of the interior is required to meet new requirements 	<ul style="list-style-type: none"> Consider terminating informal agreement with blacksmith business and repurposing the building for revenue generating and program supporting activities. Always look for partners and tenants that offer program support or augmentation, are collaborative with ranch operations, staff and hours, and that will work within profit sharing or lease agreements so that the ranch is generating revenue from these compatible operators.
1870 and c. 1915 Red Shed	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Always look for partners and tenants that offer program support or augmentation, are collaborative with ranch operations, staff and hours, and that will work within profit sharing or lease agreements so that the ranch is generating revenue from these compatible operators. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.19 	
c.1890 Carriage Shed	Fair	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.20 	
1889 St. Ann’s Church	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.21 	
ca. 1900 Smoke House	Good	Reduced Access	Preservation	<ul style="list-style-type: none"> There is no current public access to this building and it can remain this way without impacting its contribution to the visit experience or to its heritage value Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.22 	
Pump House	Fair	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.23 	
c. 1900 Windmill #2	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.24 	
1901 Water Cisterns	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.25 	
SPPC Display #1	Good	Unchanged	Preservation	<ul style="list-style-type: none"> It is likely that the collection housed in this structure has grown too large and unfocused to effectively store, maintain and interpret. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.26 	<ul style="list-style-type: none"> Consider assessing and reducing the collection to the most important, representative pieces that truly enhance the visitor experience, and that the ranch can also maintain. This structure could potentially be adapted for more valuable, revenue-generating uses.
SPPC Display #2	Fair to Good	Unchanged	Preservation	<ul style="list-style-type: none"> It is likely that the collection housed in this structure has grown too large and unfocused to effectively store, maintain and interpret. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.27 	<ul style="list-style-type: none"> Consider assessing and reducing the collection to the most important, representative pieces that truly enhance the visitor experience, and that the ranch can also maintain. This structure could potentially be adapted for more valuable, revenue-generating uses.
1981 Implement Shed #1	Fair to Good	Unchanged	Preservation	<ul style="list-style-type: none"> An assessment of the artefacts in the Implements sheds needs to be carried out to determine which are valuable to the visitor experience and worth conserving and interpreting, and which could be disposed of or donated to another facility. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.28 	<ul style="list-style-type: none"> This structure could potentially be adapted for more valuable, revenue-generating uses.
ca. 1950 Implement Shed #2	Good	Unchanged	Preservation	<ul style="list-style-type: none"> An assessment of the artefacts in the Implements sheds needs to be carried out to determine which are valuable to the visitor experience and worth conserving and interpreting, and which could be disposed of or donated to another facility. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.29 	<ul style="list-style-type: none"> This structure could potentially be adapted for more valuable, revenue-generating uses.

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
Tack Shed	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.30 	
Corral	Good (but not grandstand platform which is poor/condemned)	Unchanged or reduced access	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.31 	<ul style="list-style-type: none"> Unless a new relevant use is found for the grandstand it might need to be removed
Glamping	Good	Unchanged	Preservation	<ul style="list-style-type: none"> The notion of overnight accommodation and access to off-hours experiences on the site has great educational and financial potential. Consideration should be given to the first season’ feedback to determine if this program should remain unchanged, be adjusted or be cancelled. 	
1912 Balmoral School House (relocated here in 1989)	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.33 	
1890 Schubert House (relocated here in 1989)	Fair to Good	Improved	Preservation	<ul style="list-style-type: none"> The vacant, unheated state of this building in the off-season months has brought significant repair and maintenance issues, for example the falling apart ceiling in the kitchen and the foundation cracks. Minimally heat in the winter to avoid ongoing deterioration. Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.34 	<ul style="list-style-type: none"> Consider adapting the building for off-season residency
c. 1920 Schubert Barn (relocated here in 1989)	Fair to Good	Unchanged/ Reduced Access	Preservation	<ul style="list-style-type: none"> The location for possible adaptive reuse, (for example a business partner or vendor) is unattractive due to its proximity to a nearby trailer. Stabilize and reduce access Reduce RJC ‘By Buildings Summary of Recommendations’ section 5.1.35 to no action 	
1981 SPPC Clubhouse	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.36 	
Storage Building	Good	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.37 	
Storage Shed	Poor	Unchanged	Preservation	<ul style="list-style-type: none"> Follow RJC ‘By Buildings Summary of Recommendations’ section 5.1.38 	
Pedestrian Bridge	Good	Unchanged	Preservation		<ul style="list-style-type: none"> Interpretive opportunities to educate about historic bridges on site overtime but also to view the bridge as a symbol of reconciliation and a place where reconciliation or trust building activities could take place.
Decommissioned Bridge	Poor/ decommissioned	Unchanged	Decomission/ remove	<ul style="list-style-type: none"> Unless vehicle access to the other side of the site is needed for programming 	
1901 Cistern Ruin	Poor/ decommissioned	Unchanged	Preservation	<ul style="list-style-type: none"> Notwithstanding the ruined state, the presence of this cistern as one of three remains important. 	
Field	n/a	Unchanged	Preservation and Restoration	<ul style="list-style-type: none"> Open fields and meadows are important for the contextual value of the site. Conserve. 	

Character Defining Element or other site feature	Current Condition	Proposed Level of Use	Proposed Conservation Treatment/s	Recommendations, Considerations and External Factors	Future Considerations and Recommendations
Cemetery	Fair	Improved	Preservation	<ul style="list-style-type: none"> Conserve the character-defining features of the original cemetery and its boundaries. 	<ul style="list-style-type: none"> Improved interpretation, tours and events around the cemetery have great potential to expand the visitor experience. Consider cultural, educational and revenue opportunities from introducing a columbarium burial service associated with the historic cemetery as per recommendations and research outlined in the 2018 Feasibility Study and Land Planning reports.
Water pump access ramp	Poor/ decommissioned	Improved	Preservation?	<ul style="list-style-type: none"> Access to the water pump needs to be restored? 	
Outbuildings, Animal Feed Buildings	Good	Unchanged	Preservation		
Animal Feed Buildings	Good	Unchanged	Preservation		
Parking and Road Lots	Fair to Good	Unchanged	Preservation		
Irrigation and Water Lines	Good	Unchanged	Preservation		

Replacement In-Kind

As the current main conservation treatment that should continue to be applied at the Historic O'Keefe ranch is *Preservation*, the nine standards for Preservation (see page 23) should always be considered when planning any intervention on the site, whether it involves stabilization, repair or maintenance. Preservation Standards 3 (an approach calling for minimal intervention) and 8 (Maintain character-defining elements on an ongoing basis and Replace in-kind any extensively deteriorated or missing parts) are especially important as rules of thumb for this site given its unique extent and integrity.

"Replacement in-kind" means replacing a feature by using the physical evidence of its form, material and detailing to reproduce it.

The following are the basic guidelines to follow when thinking about material replacements:

- Document the existing element, making sure to identify the material and any detailing or tooling that might be present.
- Replace the material "in kind," matching existing or removed material in type or species, style, dimension, texture, and detailing.
- If conditions warrant or require a change in material, refer to the Guidelines for that specific material in the Standards & Guidelines for the Conservation of Historic Places in Canada. Guidelines are available for Wood and Wood Products, Masonry, Concrete, Architectural and Structural Metals, Glass and Glass Products, Plaster and Stucco, and other Miscellaneous Materials. As a general guidelines, if using the same kind of material is not technically, economically or environmentally feasible, then a compatible substitute material may be considered; for example, replacing redwood decking with cedar, a less endangered species. The replacement feature should be as similar as possible to the original, both visually and functionally.

The dominance of wood-clad and wood-roofed buildings, featuring a diversity of wood cladding styles and treatments, as well as a variety of wood roof shingle applications, is an important characteristic of the O'Keefe Ranch site and should be preserved. Roofing and cladding are sacrificial layers that need to be replaced as part of a maintenance cycle, and for this reason understanding the principles of replacement in-kind is important for the ongoing conservation management of the site.

There are many effective fire retardant and weather protective treatments and coatings for wood products today which can be considered at this historic place, as long as the visual effect they have on the wood product is not distracting and the product is still deemed to be matching in type or species, style, dimension, texture, and detailing.

Guidelines for Roofs

The majority of the historic buildings on the O'Keefe Ranch, whether from the ranching era or from the historic site era, are roofed with unpainted cedar shakes or shingles, and this is a character defining aspect of the site as a whole. New buildings or additions that may be developed on site could theoretically have distinguishable roofs such as metal or duroid shingle roofs, but the historic wood roofs should be preserved and replaced in-kind when repair or replacement is required.

If over 20% of the shingles on any one surface appear eroded, cracked, cupped or split, or if there is evidence of pervasive moisture damage in the attic, replacement should be considered. If only a few shingles are missing or damaged, selective replacement may be possible. For limited replacement, the old shingle is removed and a new shingle can be inserted and held in place with a thin metal tab, or "babbie." This reduces disturbance to the sound shingles above. In instances where a few shingles have been cracked or the joint of overlapping shingles is aligned and thus forms a passage for water penetration, a metal flashing piece slipped under the shingle can stop moisture temporarily. If moisture is getting into the attic, repairs must be made quickly to prevent deterioration of the roof structural framing members.

Before specifying a replacement roof, it is important to establish the original shingle material, configuration, detailing and installation pattern. Use the existing or historic shingles to determine the size, shape, exposure length, and any special features they have to specify replacement.

Replacement wood shingle roofs can involve the use of shingles treated with chemicals or pressure-impregnated salts to retard fire.

Highest Priority in Replacement Shingles:

- best quality wood with a similar surface texture
- matching size and shape: thickness, width, length
- matching installation pattern: exposure length, overlap, hips, ridges, valleys, etc.
- matching decorative features: fancy butts, colour, exposed nails

Areas of Acceptable Differences:

- species of wood
- method of fabrication of shingle, if visual appearance matches
- use of fire-retardants, or preservative treatments, if visual impact is minimal
- use of modern flashing, if sensitively installed
- use of small sleepers for ventilation, if the visual impact is minimal and rake boards are sensitively treated
- method of nailing, if the visual pattern matches

For more guidance refer to Guidelines for Roofs, section 4.3.3 of the [Standards & Guidelines for the Conservation of Historic Places in Canada](#).

US National Park Service - Preservation Brief 19 - The Repair and Replacement of Historic Wooden Shingle Roofs

<https://www.nps.gov/orgs/1739/upload/preservation-brief-19-wood-shingle-roofs.pdf>

Guidelines for windows

The majority of the historic building on the O'Keefe Ranch have wood, single-pane windows in wood frames. Historic wood windows are constructed differently than modern windows and their repair, maintenance or replacement should always be conducted by a wood window professional who has experience with historic, traditional wood windows, and is familiar with their parts, their operation, their removal and their re-installation.

In some cases a window will need to be replaced in-kind, which again will require a window manufacturer or shop that can create single-pane wood sashes of historic dimensions and profiles.

On the majority of buildings the objective is not to improve the thermal performance of the windows nor to obtain perfect weather-tight assemblies. The conservation intent is to preserve the original design and look of the historic windows, their function as glazed openings on the elevations, and to maintain the integrity of their materials and function overtime. Windows that are painted shut, broken, are inoperable or showing signs of deterioration (of the wood, glass, hardware, paint or putty) should be repaired, preserving the windows themselves and the overall health of the building.

If a new plan for one of the historic buildings involves an appropriate change of use that perhaps involves occupying the interior as a living space or storing materials that require temperature and moisture control, an upgrading of the window performance can be considered in the form of external wood storms or interior storm windows. See guidance below:

Vancouver Heritage Foundation - Why a Wood Storm Window?

<https://www.vancouverheritagefoundation.org/wp-content/uploads/2021/03/HERG-Storm-Window-criteria-May-2018.pdf>

When a window is damaged beyond repair, based on the assessment of a wood window professional who has experience with historic, traditional wood windows, a new replica of the window sash or entire assembly could be warranted. The replica window is the in-kind replacement of the historic window in materials and dimensions, however the operability of the

window can involve more modern mechanisms such as sliding tracks held in place by springs or friction rather than the traditional counterweights.

For more guidance refer to Guidelines for Windows, section 4.3.5 of the Standards & Guidelines for the Conservation of Historic Places in Canada

US National Park Service - Preservation brief 9 - The Repair of Historic Wooden Windows <https://www.nps.gov/orgs/1739/upload/preservation-brief-09-wood-windows.pdf> and The Weatherization of Historic Buildings: Repair and Upgrade Windows and Doors <https://www.nps.gov/articles/000/weatherization-of-historic-buildings-windows-and-doors.htm>

Guidelines for cladding

The majority of the historic buildings on the O'Keefe Ranch are clad in wood Boards & Battens although some feature wood drop siding like St. Ann's Church and the Schubert House or other styles of horizontal wood cladding boards. About half of the buildings have painted cladding but the majority of the more utilitarian buildings such as the barns and sheds are unpainted.

Retain the painted or unpainted finish of each structure as part of its preservation, while considering protective coatings, stains or treatments for unpainted cladding.

Retain the cladding finish original to the buildings whether it was smooth or rough cut. The Schubert House for example is clad in smooth, painted boards whereas the majority of other buildings feature rough cut boards.

When repairing, painting or replacing cladding in-kind, do not attempt to hide the nail holes, nicks, cracks and superficial damage that older boards present. This 'patina' is crucial to the character and authenticity of the buildings, they are like wrinkles on an elder's skin. As long as these 'aging signs' do not preclude the cladding from performing as cladding, they should be preserved. In cases where the board itself is rotten, brittle, or has cracks that expose the interior of the building, it will likely need to be replaced in-kind with a new board.

For more guidance refer to Guidelines for Exterior Walls, section 4.3.4 of the Standards & Guidelines for the Conservation of Historic Places in Canada

National Trust for Canada Wood Siding Guide
https://archive.nationaltrustcanada.ca/sites/www.heritagecanada.org/files/VHF_YourHouse_WoodSiding_4.pdf

US National Park Service - Preservation Brief 26 - The Preservation and Repair of Historic Log Buildings

<https://www.nps.gov/orgs/1739/upload/preservation-brief-26-log-buildings.pdf>

US National Park Service - Preservation Brief 20 - The Preservation of Historic Barns

<https://www.nps.gov/orgs/1739/upload/preservation-brief-20-barns.pdf>

Future Considerations for the site as a whole

Site use

Overhaul and update of Interpretive Program

Currently, the main function of the Historic O'Keefe Ranch as a historic site. The experience of the historic site itself, the self-guided touring of the site and its buildings, represent the traditional, nostalgic and anchor experience for most visitors. This core purpose and experience can be optimized first and foremost with an update of the interpretive program on site, which is outdated, inconsistent and not as engaging and effective as it could be. Consider an interpretive approach that reflects both positive and controversial aspects of the site's history, including the untold stories of the racialized, marginalized and uncelebrated individuals or groups associated with the site. The interpretive program is a vehicle for learning and self-reflection and not just a fixed narrative.

Sample Case Studies:

Fort St. James National Historic Site self-guided audio tours

<https://parks.canada.ca/lhn-nhs/bc/stjames/activ/audio>

Elk River Alliance engaging interpretive signs program

<https://elkriveralliance.ca/signage/>

Tséi Zhéte Sinwaa Éex'i Yé Conrad Historic Site Interpretive Plan 2021

<https://emrlibrary.gov.yk.ca/Tourism/conrad-historic-site-interpretive-plan-2021.pdf>

L'Anse aux Meadows National Historic Site

<https://parks.canada.ca/lhn-nhs/nl/meadows/activ>

Port au Choix National Historic Site

<https://parks.canada.ca/lhn-nhs/nl/portauchuix/activ>

Great Salt Lake Shorelands Preserve

<https://segd.org/projects/great-salt-lake-shorelands-preserve/>

Create and follow a sustainable use plan

Either by consolidating some of the best ideas in the many existing business, feasibility and strategic plans, or by commissioning a fresh plan, commit to finding more robust uses of the site to increase revenue and establish relevant, meaningful connections between the local community and the site. Inspired by the The O'Keefe Ranch and Interior Heritage Society's Strategic Plan (July 1, 2023- March 31, 2027), prioritize the following three strategic themes:

- Build corporate relationships and sponsorships
- Generate multiple reliable and growing revenue streams
- Develop on-site partnerships which increase the visitor experience and revenue potential for all partners

As part of the sustainable use plan, develop protocols for specific uses (film making, recreational uses, etc.) that both mitigate damage to, and offer repair and maintenance opportunities of, character-defining elements.

Example for successful commercial uses on historic sites:

Surtees Property Redevelopment, Kelowna

<https://www.cbc.ca/news/canada/british-columbia/barn-owl-brewing-kelowna-heritage-preservation-1.6740862>

Consolidation and reconfiguration

Consider consolidating uses, buildings and exploring reconfiguration opportunities to make the site more effective as part of, or in the absence of, a new site use plan. A consolidation of buildings and/or a reorganization of interiors and uses be considered to better use the existing buildings. This task would include creating a list of all the core use spaces needed (volunteer green room with bathrooms and kitchen, storage etc), the possible new use spaces desired (Residency living space? Crafting/creating vendor space? Class/meeting rooms? Rental venue?) as well as underused buildings, overlapping uses, incompatible uses etc. It is likely that a fresh look on the current uses of all the buildings would result in some opportunities for efficiencies and improvements.

As part of this planning process, examine the current partnerships on site, including the list of organizations and programs that add value to the site but don't pay rent or share any expenses. Some of these value-added programs may be taking up critical space in buildings that could be generating revenue under different uses. Can any spaces be shared by some of these programs, or rotate? Can any of these 'vendors' enter into new agreements that are profitable or at least cover the expenses their incur on site?

Traditional Crafts & Trades Training, Demonstrations and Site Maintenance Opportunities

Given the large-scale of the site, its high-visibility and existing maintenance workshops, consider collaborating with the Okanagan College Carpentry, Electrical, Mechanical Building

Trades and even the Motor Vehicle Trades Programs to offer the site as an apprentice lab where instructors and students can teach, demonstrate and learn about historic construction techniques and materials in return for contributing to some of the repair and maintenance programs on the ranch.

<https://www.okanagan.bc.ca/trades-and-apprenticeship>

FireSmart Farm & Ranch Wildfire Preparedness

Apply for a Farm & Ranch FireSmart Assessment and follow the guidance while considering the site-wide character defining elements as outlined in the Statement of Significance.

<https://firesmartbc.ca/farm-and-ranch-wildfire-preparedness/>

Current Photographs - general views



The natural, open and low topography of the landscape and The rural/ agricultural appearance of the site with its many utilitarian barn and shed-like structures



Educational and cultural tourism use since 1967. View of glamping site. Evidence of former ranch use through the presence of a fenced corral



The "viewshed" of the historic place - the area visible from the ranch and the view of the ranch from its highway approaches



Landscape elements such as the large 100+ year old Ponderosa Pine trees, the species that was used for most of the building materials



Deep Creek that runs through the site with creek reeds from which tule mats were and continue to be made by Sylx women



Current Photographs of the Character Defining Elements



Pioneer Log Cabin - later the Chicken House – ca. 1867. The log structure is visible beneath the board and batten cladding.

Reroofed in 1989; Lifted and placed on a cement slab in 1992.



Log House – 1875. Moved to current location in 1896.



O'Keefe House – constructed in 1886, 1896, and 1900 with its circular driveway, fountain, concrete gate posts and wrought iron gates.

In 1944, a grey stucco was applied over the original drop siding exterior.



The stucco was repaired and a top coat applied in 1993. The shingle roof has been replaced several times, most recently in 1989, and the porch was repaired in 1997



St. Ann's Church – 1889.

Interior restored in 1965. In 1989, rehabilitation of sacristy structure. From 2015-2017 the exterior was restored and a new foundation installed.



St. Ann's Cemetery with 51 identified burials from 1883 to 2000.

Cemetery picket fence was installed c. 1981



Red Shed – East section 1870; West section garage (now the Pottery Studio) ca. 1915



Log Barn – ca. 1890; rebuilt in 1989



Meat and Dairy House – ca. 1890 and 1920 (Dairy House second storey)

1960s garage structure was added to the east side of the Meat House

Entire building was reroofed in 1989.



Carriage Shed – ca. 1890

Renovated for use as an entrance to the Ranch as well as a gift shop and snack bar in 1965

1981 extensive renovation.



Cooks'
Bunkhouse – ca.
1900



East Implement
Shed – ca. 1950



Three concrete cisterns -1901.

Two intact, one collapsed. Of the two intact, one is enclosed in a wood structure.

Left: intact, uncovered concrete cistern.



Right:
1901 concrete cistern enclosed in
a wood structure.



Left: Collapsed concrete cistern
with a tree growing in it



Left: Smoke House – ca. 1900

Below: Greenhow House/Museum Building – 1941 on 1893 foundations





The 1966 'stop of interest' sign from the province



View of St. Ann's Catholic Church from the cemetery



Ford House (aka Cowboy Bunk House) – 1941

In the late 1980s, it was modified to depict a typical ranch bunkhouse.



Metal windmill - 1896 - next to the original pioneer cabin marking the location of the first water well near a natural spring.



Rural buildings combined with evidence of a wealthy estate



Wood or pipe post and rail fencing throughout the site



General Store -
1965 -
constructed from
salvaged lumber



Wood sidewalk
and salvaged
street lamps
leading to St.
Ann's Church-
1967



St. Ann's Cemetery
picket fence - c.
1981



Firehall/Stagecoach
Depot - 1978

Showers were
installed in recent
years on the ground
floor to serve the
glamping customers



West Implement
Shed – 1981



Core Building –
1981



Maintenance Shed –
1981



Metal windmill - c.
1900 - salvaged in
1990 from a different
North Okanagan
farm and restored by
the Spallumcheen
Pioneer Power Club.

It is intentionally
located near the
corrals, farm
buildings and former
site of the grist mill
where a second early
windmill is
documented to have
been located in the
early 1900s.



Schubert House –
1890 - Relocated
from north of
Otter Lake in
1989



Barn - c. 1920 –
relocated from
Lot B across
highway to next
to the Schubert
House in 1989.

Commonly
referred to as the
Schubert Barn



Balmoral School
– 1912 -
Relocated from
Balmoral crossing
in 1989



Balmoral School
interior



Top left: 1966 provincial Stop of Interest Sign
 Top right: 1989 St. Ann's 100th year memorial cairn

Left: 1990 O'Keefe Ranch & Interior Heritage Society Cairn



Machinery and exhibits associated with the ranching era





O'Keefe Ranch Museum and Archives collections and artefacts, likely one of the most extensive in BC for the historic ranching era, with over 1,500 textual documents, 3000 photographs and 10,000 artifacts including a unique collection of Canadian stoves and heaters dating from early 1800s.



Archival photos



Above: O'Keefe Ranch painting by Marquis of Lorne, 1882. Source: Vernon Museum & Archives 16074.

Below: Thomas Wood and Cornelius O'Keefe in front of the main O'Keefe ranch house c.1890. Source: Vernon Museum & Archives 3518





Above: 1895 View of O'Keefe and Greenhow houses with sheep in foreground
Source: O'Keefe Ranch Archives 0335.

Below: View of the O'Keefe Ranch in 1905. Source: Vernon Museum & Archives 788





Above: O'Keefe Ranch, view from west side of Deep Creek in 1910. Source: O'Keefe Archives 068.

Below: Tierney O'Keefe on a McCormick Deering tractor 1930. Source: O'Keefe Archives 070





Above: View of O'Keefe House c. 1935. Source: O'Keefe Archives 035.

Below: O'Keefe House recently stuccoed in 1949 . Source: O'Keefe Archives 0174





Above: View of O'Keefe Ranch 1940. Source: Vernon Museum & Archives 24420.

Below: Cattle Drive on the O'Keefe Ranch c.11954. Source: Vernon Museum & Archives 11965.





Above: View of O'Keefe Ranch c. 1954. Source: Vernon Museum & Archives 11964.
Below: B.C. Premier W.A.C. Bennett cutting the ribbon at official opening of O'Keefe Ranch June 1967. Source: Vernon Museum & Archives 4968





Above: View of O'Keefe Ranch House 1968. Source: Vernon Museum & Archives 27844.

Below: Aerial view of O'Keefe Ranch 1970. Source: Vernon Museum & Archives 24183





Above: O'Keefe Ranch Historic Site in the 1970s. Source: Vernon Museum & Archives 3747.

Below: St. Ann's and a vintage tractor 1979. Source: Vernon Museum & Archives 24482





Above: O'Keefe Ranch sign and church in 1985. Source: Vernon Museum & Archives 791.

Below: St. Ann's church in 1989. Source: Vernon Museum & Archives 29337





Left: Ken Mather, O'Keefe Ranch Manager in 1989 in front of the recently rebuilt Log Barn. Source: Vernon Museum & Archives 13836.



Right: The relocation of an O'Keefe barn from the other side of the highway in 1991, now located next to the Schubert House. Source: Vernon Museum & Archives 14412

Research Resources

Archives

Museum and Archives of Vernon - newspaper clippings, archival photographs, publications and records

The O'Keefe Ranch Archives - legal agreements, photos, newspapers and publications, Carmen Kirkland's St. Ann's Cemetery history and burials research

British Columbia Regional Digitized History - photos, newspapers and publications

Books and Publications

Acheson, Cassidy. 2022. Reawakening Memory and Refusing Erasure: Sqilxw Legacies of Resistance through Familial Stories of Mary Ann and Mary Terese. UBCO Thesis. 2022.

Field, S. 2019. Cornelius O'Keefe: The Life, Loves, and Legacy of an Okanagan Rancher.

Hiebert, Gordon - Wood & Water Developments. 2018. Historic O'Keefe Ranch Land Planning. <https://okeeferanch.ca/uploads/files/Glamping-RFP-Supporting-Documents-1-OKeefe-Ranch-Land-Use-Plan.pdf>

Hayes, Derek. 2012. British Columbia: A New Historical Atlas.

Louis, S. 2002. Q'sapi: A History of Okanagan People as Told by Okanagan Families (pp. 112-114).

Mather, Ken. 1995. Home Sweet Home: A History of the O'Keefe Ranch 1867-1977

Mather, Ken. 2006. Historic O'Keefe Ranch Infrastructure & Building Assessment Report

Parks Canada. 2010. Standards & Guidelines for the Conservation of Historic Places in Canada. 2nd edition.

Sauer, Sandra R. 1995. The O'Keefe Ranch: An Archaeological Perspective. SFU Thesis

Thomson, Duane. 1990. Cayuses and Shorthorns: The Ranching Industry in the Southern Interior of British Columbia in the Nineteenth Century. Paper delivered to the B.C. Studies Conference

US National Park Service - Preservation Briefs <https://www.nps.gov/orgs/1739/preservation-briefs.htm>

Websites

<https://www.syilx.org/about-us/syilx-nation/>

<https://okib.ca/>

<https://www.thelanguagehouse.ca/>

<https://en.wikipedia.org/wiki/>

List_of_National_Historic_Sites_of_Canada_in_British_Columbia#:~:text=The first National

[https://infotel.ca/newsitem/how-to-inherit-a-28m-property-the-story-behind-the-okeefe-range/it76044_Historic_Sites,Langley_and_Yuquot_in_1923.&text=Download_coordinates_as:,GPX_\(all_coordinates\)](https://infotel.ca/newsitem/how-to-inherit-a-28m-property-the-story-behind-the-okeefe-range/it76044_Historic_Sites,Langley_and_Yuquot_in_1923.&text=Download_coordinates_as:,GPX_(all_coordinates))

https://en.wikipedia.org/wiki/Barnard's_Express

https://en.wikipedia.org/wiki/O'Keefe_Ranch

<https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/stop-of-interest>

<https://www.saobserver.net/community/ranch-older-than-canada-3672902>

<https://okeeferanch.ca/uploads/files/Glamping-RFP-Supporting-Documents-1-OKeefe-Ranch-Land-Use-Plan.pdf>

http://www.biographi.ca/en/bio/o_keefe_cornelius_14E.html

<https://www.nps.gov/orgs/1739/preservation-briefs.htm>

Other

City of Vernon files

Site Visit, October 2023

Bruce Cummings, O'Keefe Ranch & Interior Heritage Society Chair - Interview - October 18, 2023

Sherrilee Franks, O'Keefe Ranch Manager - Interviews - October 17-18, 2023



Engineers

Historic O'Keefe Ranch

Part 3 - Capital and Operations Management Plan

9380 BC-97 Vernon BC

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Executive Summary

Building from the Facility Condition Assessment (FCA) and the Heritage Conservation Plan (HCP) (separately reported), RJC Engineers has prepared two Capital and Operations Management Plan scenarios for the City of Vernon. Both scenarios follow a preventive maintenance approach:

Scenario 1 utilizes a predictive maintenance philosophy and follows the recommendations provided in the Facility Condition Assessment while adding costs from additional recommendations within the Heritage Conservation Plan. These recommendations follow a restoration approach by completing programs and projects that attempt to maintain the current level of service to all buildings, resulting in a plan with a combination of capital restoration projects and on-going maintenance. We refer the reader to Section 3.1, Figure 1, for visual representation. The projected 10-year capital cost of following Scenario 1 is \$3,240,000.

Scenario 2 is developed by shifting to condition-based maintenance philosophy or often referred to as a Preservation focus (following ANCE's HCP) and including relevant additional scopes from the HCP. This scenario considers the condition and recommendations of an asset from the Facility Condition Assessment and heritage significance and the importance to the site programming from the HCP to determine if a reduced level of service is acceptable. This plan results in a higher frequency and increase in ongoing maintenance with capital projects remaining where required to address items that impact the life safety or importance to the site programming of an asset. We refer the reader to Section 3.1, Figure 2, for visual representation. The projected 10-year capital cost of following Scenario 2 is \$2,020,000.





1.0 Introduction

The following Capital and Operations Management Plan (COMP) for the Historic O'Keefe Ranch is the final deliverable for the City of Vernon under Read Jones Christoffersen Ltd.'s engagement for the Ranch. The COMP forms the second part of Phase 2 of the overall services. Phase 2 also includes preparation of a Heritage Conservation Plan (HCP) Prepared by Ance Building Services Co. and submitted separately.

The purpose of this capital and operations management plan is to provide a detailed 1-10 year-plan, defining a maintenance, renewal, and improvement program for the site assets. This includes typical maintenance and renewal activities that, if carried out, will prolong the service life of the components of the Historical O'Keefe Ranch.

The COMP is informed by the previously completed Facility Condition Assessment (FCA) and the Statements of Significance (SOS) (project Phase 1) and the Heritage Conservation Plan (HCP), including added recommendations and costs arising from the HCP.

These documents provide information on the current condition, heritage significance and recommendations to conserve the assets of the ranch.

In the development of this report, RJC completed the following work:

- Review available documentation from the City of Vernon and O'Keefe Ranch and Interior Heritage Society.
- Prepare a written report including two COMP scenarios as informed by the FCA, SOS and HCP.

The following appendices are included at the conclusion of this report:

- **Appendix 3-A: Glossary** provides reference typical terms and practices used in creating the plan.
- **Appendix 3-B: Capital and Operations Management Plan Summary** provides a summary of the projects and programs and the changes made between the two scenarios.
- **Appendix 3-C: Capital and Operations Management Plan Scenario 1: Restoration Approach** provides plan for the programs and projects recommended for the restoration approach.
- **Appendix 3-D: Capital and Operations Management Plan Scenario 2: Preservation Approach** provides plan for the programs and projects recommended for the preservation approach.



2.0 Background

A summary of the FCA, SOS and HCP documents can be found in the sections below.

2.1 RJC Engineers: Facility Condition Assessment

Under Phase 1, the Facility Condition Assessment identified the current building and site asset conditions and provided recommendations to restore, rehabilitate and repair the building to be used in a fully operational use. Priorities for each recommendation within the FCA were derived from the risk of occurrence (risk probability) and the consequence of occurrence. These risks were then grouped into recommended timelines for remedial recommendations to be undertaken with related opinions of probable cost. The overall FCA output provided recommendations that maintain the use, and generally align with an approach that **restores or rehabilitates** the capital items.

We refer the reader to the Phase 1 work in the Facility Condition Assessment report previously submitted.

2.2 Ance Building Services Co.: Statement of Significance

A Statement of Significance (SOS) was completed for the O'Keefe Ranch in December 2023 and included with the Phase 1 reporting. By way of summary, we note the following.

The SOS, in its simple, non-technical language, is "a declaration of value that briefly explains what a historic place is and why it is important". Although this is a site with long-established heritage significance, a SOS was not previously undertaken. The SOS captures the many layers of heritage value embedded in the O'Keefe Ranch site, from its Indigenous connections and ongoing meaning which need to be further explored and directly articulated by its Indigenous neighbours, the NK'map̓lq̓s band (Okanagan Band), through its settlement by the O'Keefe family, its use as a ranch, as a small commercial and transportation depot, the diversity of people who worked and lived here over the decades, its transformation into a historic site by second generation O'Keefe family members and its role in the Okanagan Valley community and cultural tourism sphere today.

2.3 Ance Building Services Co.: Heritage Conservation Plan

The Heritage Conservation Plan (HCP) explains how The City of Vernon will sustain the significance identified in the Statement of Significance (the heritage values and character defining elements) in any new use, alteration, repair or management.



The HCP utilizes a simple thinking process which starts with describing what is there, the condition of each part, what is proposed to happen to the historic place and its components, and the principles by which you will manage it (following the Standards and Guidelines for the Conservation of Historic Places in Canada).

The HCP recommends a practical approach to conservation while heavily relying on **Preservation** for the site, with some buildings considered for **Restoration or Rehabilitation**. For reference, the conservation approaches are:

Preservation: the action or process of protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of an historic place, or of an individual component, while protecting its heritage value.

Restoration: the action or process of accurately revealing, recovering or representing the state of an historic place, or of an individual component, as it appeared at a particular period in its history, while protecting its heritage value.

Rehabilitation: the action or process of making possible a continuing or compatible contemporary use of an historic place, or an individual component, while protecting its heritage value.

When comparing to the FCA it is helpful to understand that a condition assessment primarily considered a restoration and rehabilitation approach in order to retain or regain the current use of the buildings. While the HCP, however, recommends revision to a preservation approach.

We refer the reader to the completed HCP, separately submitted as Part 2 of the current engagement, for further details.

3.0 Capital and Operations Management Plan Methodology

A comprehensive Capital and Operations Management Plan provides information on how to manage the built assets of the Ranch and relies on the following:

- .1 Understanding the current use of an asset, in the case of O'Keefe Ranch, this is the buildings, services and infrastructure.
- .2 Understanding the current condition and prioritized recommendations from the FCA and the impact of altering or changing these recommendations, and in particular considering a changed approach to the level of service, by following a different conservation approach.



- .3 Understanding an asset's heritage importance and importance to site programming as described in the HCP.
- .4 Considering different heritage conservation approaches and implementing appropriate methods.
- .5 Applying these methods to create a functional plan that can be executed by the Owner.

These plans do not include for the operating costs of the Ranch such as staffing levels, salaries, insurance, utilities and other data that are external to the managing of the built assets.

3.1 Capital and Operations Management Plan Scenarios

To plan for the maintenance, renewal and improvement programs for the Ranch a preventative maintenance approach has been considered. Within this approach two scenarios were formed.

These scenarios have been explained further in the sections below. Details of the scenarios and comparison of the scopes is included in Appendix 3-B, with a summary ten year budgeting in Appendix 3-C and 3-D.

3.1.1 Scenario 1 – Restoration Approach

Scenario 1 utilizes a predictive maintenance philosophy and follows the recommendations provided in the Facility Condition Assessment as well as additional recommendations from the Heritage Conservation Plan. These recommendations follow a restoration approach by completing programs and projects that attempt to maintain the current level of service to all buildings. Resulting in a plan with a combination of capital restoration projects and on-going maintenance, as shown in Figure 1.

This provides the City and Ranch with a plan if a predictive maintenance approach is selected. The level of service generally remains unchanged. The purpose of this scenario is to provide a “benchmark” for comparison.

Scenario 1 requires two years of large capital projects of \$550,000 and \$410,000 and a budget of \$2,280,000 for the years 3 to 10. The ten-year total projected cost is \$3,240,000.

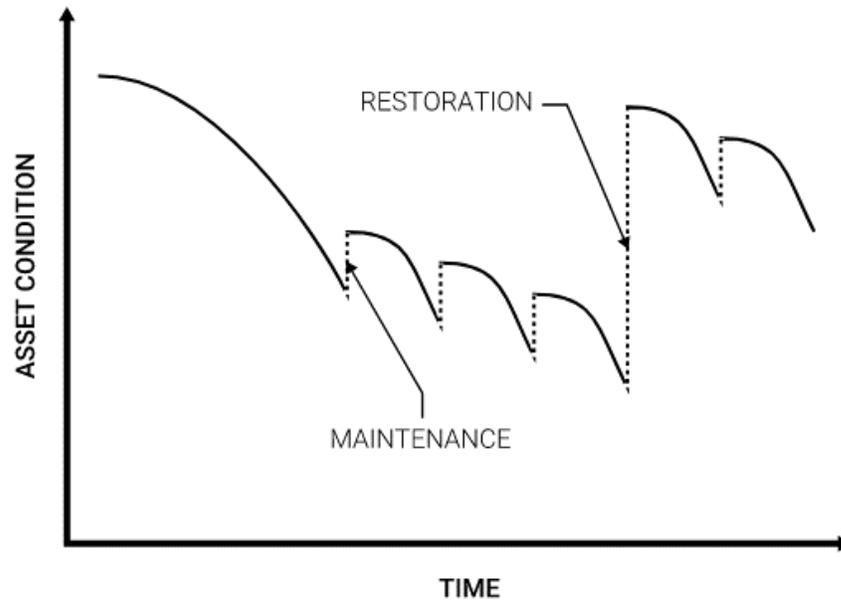


Figure 1: Restoration Approach

3.1.2 Scenario 2– Preservation Approach

Scenario 2 follows a condition-based maintenance philosophy or often referred to as a Preservation focus (following ANCE's HCP). This scenario considers the condition and recommendations of an asset from the Facility Condition Assessment and heritage significance and the importance to the site programming from the HCP to determine if a reduced level of service is acceptable. This plan results in a higher frequency and an increase in ongoing maintenance with capital projects remaining where required to address items that impact the life safety or importance to the site programming of an asset, as shown in Figure 2.

Examples of increased ongoing maintenance and where larger restoration projects have been altered or removed if the reduction in use or heritage importance of a building was deemed acceptable are as follows:

- Item 3 – Roof Replacement Program was removed from the plan. This was accommodated by increasing the Roof Maintenance Program (Item 1).
- Item 12 – Greenhow Museum Stair Replacement was retained in both Scenarios as it was deemed to be a life safety item and the use of the building has high importance to the site programming.

A full summary of these changes can be found in Appendix 3-B.

A major consideration of this approach is the reduced use of an asset if the maintenance is not followed. This reduction in asset use could range from limiting occupancy to complete loss of an asset. Under this scenario the activities in each year include:

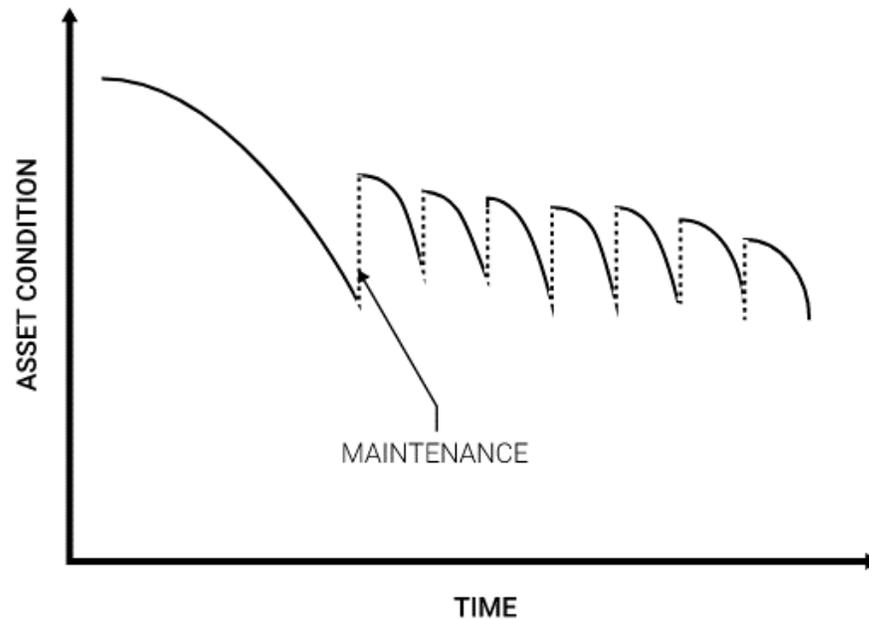


Figure 2: Preservation Approach

Scenario 2 requires the following budget:

- Year 1 – complete the recommended assessments and further evaluation activities, totalling a budget of \$90,000.
- Year 2 – undertake a capital renewal program with a budget of \$700,000, primarily focusing on Projects arising, but also acting upon the Programs. The basis is the recommended Projects arising from the FCA and considering the HCP approaches, for example the Greenhow Museum stairs are repaired/replaced and the bridge decommissioned.
- Years 3 through 10 follow a capital maintenance approach, primarily focused on the ongoing maintenance, with a budget of \$1,230,000.

The 10-year projected cost for Scenario 2 is \$2,020,000. By altering recommended timelines for capital projects in this approach there is a potential for an increased backlog of capital renewal work that may need to be undertaken.

The details for Scenarios 1 and 2 are included in Appendix 3-C and 3-D of this part of the overall reporting.

3.1.3 Additional Scenarios

Additional scenarios can be developed. For example, if the City wishes to revise the approach for a particular building from preservation to rehabilitation, the action items can be updated and a new scenario presented. Alternately, the level of service could be further decreased, resulting in an overall budget decrease and an increase in the rate at which deferred maintenance accumulates.

4.0 Closing

We trust the information contained within this report satisfies your current requirements. Should you have any comments, questions or concerns, please contact the undersigned. We remain available to review and discuss findings and future action.

Yours truly,

READ JONES CHRISTOFFERSEN LTD.
EGBC Permit to Practice No. 1002503

Reviewed by:



2024-04-12



Trenton Squair, BSc, P.Eng., CAHP, BCAHP
Project Engineer

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Principal

TDS/jpy

Appendix 3-A – Glossary

Appendix 3-B – Summary of Capital and Operations Management Plan Scenarios

Appendix 3-C – Capital and Operations Management Plan Scenario 1: Restoration Approach

Appendix 3-D – Capital and Operations Management Plan Scenario 2: Preservation Approach



Engineers

Appendix 3-A

Glossary



Glossary of Terms

Maintenance is an activity or series of activities intended to arrest or mitigate deterioration and extend the useful service life of building components. Maintenance is generally considered to include routine or repeating activities of small scope, which involve no major alterations to existing components.

Preservation: the action or process of protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of an historic place, or of an individual component, while protecting its heritage value.

Restoration: the action or process of accurately revealing, recovering or representing the state of an historic place, or of an individual component, as it appeared at a particular period in its history, while protecting its heritage value.

Rehabilitation: the action or process of making possible a continuing or compatible contemporary use of an historic place, or an individual component, while protecting its heritage value.¹

Why is Maintenance Required?

The main focus of routine building maintenance is to preserve the useful service life of the building components and to reduce the possibility of damage to elements such as interior drywall finishes. The review of building components coupled with the scheduled maintenance activities affords the opportunity to detect potential problems with the building components at an early stage, or possibly detect a potential problem with a related building system or component. Failure to adhere to this maintenance plan and the schedules defined here could result in deterioration and damage.

All building materials are subject to deterioration as a result of various environmental factors including rain, sunlight, pollution, mechanical damage, corrosive chemicals, fatigue, and biological agents. The rate of this deterioration is subject to the properties of the materials and the degree of exposure to any detrimental elements or forces.

Record Keeping

Proper record keeping that catalogues when maintenance occurs and what actions were undertaken or recommended is imperative. Maintenance Staff at the Ranch should be made aware of the building components and be familiar with the potential problems and maintenance requirements.

¹ Definitions provided by ANCE in their reporting and repeated here for reader reference.



Maintenance Program Initiation and Budgeting

The overall scenarios presented in **Appendix 3-C and 3-D** focus on programs and projects required to maintain an asset, and attempts to identify the timing and nature of activity over the next 10 years. A budget must be determined and set aside for maintenance of the Ranch. Regular reassessment of yearly expenditures should be completed to develop an effective, cost efficient program.

Monies allocated to the plan should not be confused with the additional requirement to establish a renewal and operating plan and appropriate budget. Renewal and operating costs refer to the larger sum of money needed for the complete upgrades of a particular building material or component or regular operating costs of the Ranch. The opinions of probable cost presented in Appendix 3-C and 3-D of this report provide a framework only and are in 2024 dollars. More accurate forecasting of the anticipated costs can be established with the addition of the Ranch's operating costs and an appropriate factor for inflation included.

Opinions of Probable Cost

Opinions of Probable Costs (OPC) for the recommendations are presented by RJC to provide an expectation as to the magnitude of costs required to complete the recommended work. The opinions provided are based on conceptual repair methods, recently obtained broad unit rates and past experience with similar projects. A detailed estimate of costs has not been provided, as it would require the preparation of plans, details, specifications, and schedules to achieve a quantified summary of estimated costs. It is assumed in the creation of these costs that work will be completed by a contractor.

Opinions of Probable Costs are based on RJC's review of the present condition of the building. Deferral of the work could result in increased repair costs. Please note that the cost of remediation could vary greatly depending upon the materials chosen and any deterioration uncovered during the remediation work.

Contract administration range depending on the scope and can run from 10% through 20%, typically smaller projects are found to have a higher percentage of costs. For the purposes of the provided OPCs we have included soft costs to be 18% of construction costs.

When budgeting, soft costs, including Society costs, engineering fees, costs for management, permits, and testing should also be added. Soft costs range depending on the scope and can run from 15% through 25%, typically smaller projects are found to have a higher percentage of soft costs, depending on the project details and requirements. For the purposes of the provided OPCs we have included soft costs to be 25% of construction costs.

An Owner contingency of 20% is included with each Opinion of Probable Cost. A contingency of at least this amount should be included in all construction budgets to allow for variation in estimated unit prices due to



competitive bidding, repair work resulting from additional deterioration, and additional work required to repair any damage caused by or discovered during construction.

Due to the known potential of hazardous materials we have included a Hazardous Material Contingency of 15% of the construction costs. This contingency does not include for the testing of materials but rather the potential increase in effort to abatement and contain work areas with hazardous materials.

Selecting a Contractor

Undertaking general maintenance and the specific maintenance requirements of the building is not simple. These recommendations have considered using a general contractor. Considerations can be made to use alternate workforces such as post-secondary school programs, volunteers etc. As well, the City and Ranch may want to consider creating a multi-year standing offer with a Contractor to complete the maintenance. Heritage work should be completed by skilled professionals as described in the HCP.



Engineers

Appendix 3-B

Summary of Capital and Operations Management Plan Scenarios



Plans and Programs

The basis of the scenarios was formed from the recommended programs and projects in the FCA, below is a summary of those recommendations and commentary where programs have been adjusted to align with preservation scenario.

Prioritized Recommendation Plan

The recommendations have followed the prioritized plan of programs and projects based on the risk assessment matrix presented in Section 3.0 of the previously issued FCA. Recommended work has been grouped into Programs and Projects based on the following criteria:

Programs: work is to be completed at multiple buildings in phases over a period of several years.

Projects: work is to be completed at one building or at multiple buildings and is not phased over several years.



1.1.1 High Priority Programs

Table 1, identifies programs to address conditions considered to be of moderate priority and should begin within the next year.

TABLE 1: HIGH PRIORITY PROGRAMS				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
1	All Building Roofs	Roof Maintenance Program	<p>Clean eavestroughs, remove vegetation and debris from roofs bi-annually (fall/spring). Replace loose or missing shingles as required. Repair and repaint fascia as required. Immediate repairs to active leaking at Stagecoach Depot. Cut back overhanging tree and remove debris from Pioneer Cabin roof. Re-Detail Log House Lean-To roof edge with mitered edges and add signage and post to redirect pedestrians. Investigate chimney penetration at St. Anne’s Church to confirm source of leaking and repair flashing. Review and repair leaks at Pump House roof.</p>	<p>To accommodate the recommended preservation approach in addition to the work that is recommended in the FCA the program budget for the roof maintenance program has been increased.</p> <p>In the short term we have adjusted the budget for the roofing to start in 2025. The roof maintenance and repair buildings consider the roof replacement prioritization list included in Appendix G of the FCA.</p> <p>Repairs to the roofs should follow the guidelines for roofs as identified in the HCP.</p>
2	All Buildings and Small Buildings	Landscaping, Small Building Maintenance, and Monitoring Budget Program	<p>Landscape to provide 4" clearance around buildings. Repair or replace small buildings as required. See Section 5.1 of the FCA for immediate projects. Continue to monitor conditions indicated in Section 5.1 of the FCA for changes. Monitoring can be completed internally. Notify a professional if conditions change. At a minimum the following items should be included in the annual monitoring program.</p> <ul style="list-style-type: none"> ▪ Gazebo checking posts and cracked beam. ▪ Cowboy Bunkhouse spalled foundation wall. ▪ Both Windmills buried posts. ▪ Log House active leaking at the interior of the building. ▪ Red Shed cracking in the extended concrete slab-on-grade, foundation, and building for movement. ▪ Water Cisterns cracking in walls. <p><i>Note. This program is considered high priority based on the recommended timeline not the severity of the condition.</i></p>	<p>The landscaping budget has not changed from the recommendations included in the FCA.</p> <p>All work should follow the Conservation Treatments Table included in the HCP.</p>



1.1.2 Moderate Priority Programs

Table 2, on the next page, identifies programs address conditions considered to be of moderate priority and should begin with two to five years.

TABLE 2: MODERATE PRIORITY PROGRAMS				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
3	All Building Roofs	Roof Replacement Program	Complete a roof replacement program starting in the next 5 years. The program is recommended to replace the roofs of four buildings a year for the next nine years. The first roofs considered for replacement should include the Stagecoach Depot and Chinese Cook's House. For a full prioritization of roof replacements see Appendix G of the FCA.	<p>To follow the guidelines for roofs outlined in the HCP, RJC has shifted the roof replacement program outside of the 10-year horizon.</p> <p>To address this approach, the maintenance budget (Item 1) has been increased.</p> <p>RJC notes that by delaying the replacement does not mean that these costs will not occur, but by implementing a more robust maintenance and preservation program to the roofs the service life of these roofs can be extended.</p>
4	All Sanitary and Domestic Distribution Piping and Supply Ducts	Mechanical System Monitoring and Assessment Program	See Section 2.0 in Appendix E of the FCA for detail. Inspect and clean sanitary pipes. Look for pinhole leaks in domestic water distribution and sanitary waste piping. Inspect and clean supply ducts. This program is recommended to be completed every 5 years.	This budget has not changed from the recommendations included in the FCA.
5	All Windows and Doors	Window and Door Program	Repair and paint window and door trims, replace glazing seals and broken glass, repair or replace door doors. The program is recommended to repair or replace windows in three buildings a year for the next seven years.	<p>This budget has not changed from the recommendations included in the FCA.</p> <p>All work should follow the Conservation Treatments Table included in the HCP.</p>
6	All Building Cladding	Cladding Maintenance and Painting Program	<p>Replace damaged cladding trims and loose or missing cladding as required. Clean and paint cladding as required. Paint at risk cladding to extend service life. This program is recommended to replace 5% of cladding in the next 30 years.</p> <p>Provide additional support or connection to the structure of the building at the top of the Chinese Cook's House stairs.</p> <p>Repair stained sheathing at Red Shed and Pump House.</p>	<p>This budget has not changed from the recommendations included in the FCA.</p> <p>All work should follow the Conservation Treatments Table included in the HCP.</p>



1.1.3 Lesser Priority Programs

Identifies programs address conditions considered to be of lesser priority and should begin with six to ten years.

TABLE 3: MODERATE PRIORITY PROGRAMS				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
7	All Buildings	Assessment Budget	Allowance for building assessments as required. This program is recommended for assessment of 2-4 buildings every five years.	The assessment budget has been increased to include for annual reviews or the plan. The intent of these assessments is to review the current condition of the Ranch and determine that years prioritized work.
8	All Fences	Fence Maintenance Program	Repair fencing in the spring with like materials as required.	Considering the Heritage Importance of the fencing and method of preservation, this program has been reduced and extended to allow for a more ongoing repair method.
9	All Paved Surfaces	Road Maintenance Program	Repair potholes and slope for drainage as required.	Considering the Heritage Importance of the roads and paths and method of preservation, this program has been reduced and extended to allow for a more ongoing repair method.
10	All Water Lines	Irrigation and Water Line Replacement Program	Replace damaged lines and garden hydrants in the spring as required.	As the irrigation and waterlines was not identified in the HCP, this program has been reduced and extended to allow for a more ongoing repair approach.



1.1.4 High Priority Projects

Table 4 identifies projects address conditions considered to be a high priority and should be completed within the next year.

TABLE 4: HIGH PRIORITY PROJECTS				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
11	Visitor Center, Greenhow Museum & O'Keefe House	Hazardous Materials Assessment	Retain environmental engineer report for review of organic growth in Visitor Center and Greenhow Museum basements and animal dropping and vermiculite insulation in O'Keefe House attic.	To prepare for larger capital project year. This assessment has remained as recommended in the FCA.
12	Greenhow Museum	Stair Replacement and Repair	Replace basement and second floor emergency exit stairs.	This work has been moved to year 2 to align with the larger capital project recommendation.
13	Meat & Dairy Building	Additional Structural Support	Add permanent support at Dairy Building, Garage (B3 in Appendix C of the FCA). Complete structural review and design to address as-found conditions. Add blocking at cut joists at Meat Building.	Following the recommendations of the HCP. The repair project has been altered to provide a reduced use for the building.
14	Meat & Dairy Building	Wall and Floor Repairs	Temporarily support and repair North and East wall in Dairy Building (B1 in Appendix C of the FCA) and rotted floor structure in Meat Building (B2 in Appendix C of the FCA). Landscape to expose structure. Remove and reinstate cladding at North wall. Install vents over openings at North wall. Patch concrete steps to Dairy Building front entrance.	Following the recommendations of the HCP. The repair project has been altered to provide a reduced use for the building.
15	Blacksmith Shop	Forge Ventilation System Replacement	See section 2.0 of Appendix E of the FCA for detail. Systems should be replaced, and appropriate thimbles are needed for the penetrations through the roof.	Following the recommendations of the HCP. The repair project has been removed to change the existing use to reduce the repair recommendations. Minor repairs have been captured in the roof maintenance program budget (Item 1).
16	O'Keefe House & Blacksmith Shop	Chimney Repairs	Provide additional support to leaning chimney at O'Keefe House. Replace spalled bricks and repoint mortar. Provide double wall flashing at combustible roof at Blacksmith Shop.	This work has been moved to year 2 to align with the larger capital project recommendation.
17	Hay Shed	Concrete Repair	Remove deteriorated concrete, clean rebar, replace any reinforcement with significant cross-sectional area loss, and repair concrete.	Following the recommendations of the HCP. The repair project has been altered to provide a reduced use for the building.
18	Decommissioned Vehicle Bridge & Log Foot Bridge	Bridge Removal and Replacement	Retain environmental engineer report for environmental impact of bridges removal. Remove and dispose of bridges. Cost to install a new bridge has not been carried.	This work has been moved to year 2 to align with the larger capital project recommendation.
19	O'Keefe House	Geotechnical Report	Retain geotechnical engineer report for review of retaining wall.	To prepare for larger capital project year. This assessment has remained as recommended in the FCA.
20	Visitor Center	Carpentry Repairs	Temporarily support roof structure, remove rotted wood from post and add new pedestal. Remove rotted truss trails and provide flashing.	This work has been moved to year 2 to align with the larger capital project recommendation.
21	Visitor Center	Basement Repairs	Clean basement walls and extend rainwater leaders. If condition persists, add drainage and waterproofing.	This work has been moved to year 2 to align with the larger capital project recommendation.



1.1.5 Moderate Priority Projects

Table 5 identifies projects address conditions considered to be at moderate risk and should be completed within two to five years.

TABLE 5: MODERATE PRIORITY PROJECTS				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
22	O'Keefe House & Schubert Barn	Structural Assessment	Retain structural engineer report for review of O'Keefe House roof structure and deflecting ceilings in bathroom and small dining room, Log Barn hay loft, and Schubert Barn structural system.	To prepare for larger capital project year. This assessment has been brought forward to year one.
23	Corral	Grandstand Removal	Remove grandstand platform. Cost to install a new grandstand has been carried as an optional cost in addition to the removal.	Following the recommendations of the HCP. The repair project has been altered to reduce access to the grandstands. Future removal may need to be considered.
24	Various	New Fire Rated Rooms	See section 2.0 of Appendix E of the FCA for detail. Construct new fire rated rooms to house furnaces and water heaters as recommended.	This budget has not changed from the recommendations included in the FCA.
25	O'Keefe House, Log Barn, Carriage Shed & Schubert House	Foundation Repairs	Provide support and repair foundation columns at O'Keefe House. Replace spalled bricks and repoint mortar joints. Provide fill below Log Barn East Lean-To concrete slab. Provide fill where Carriage Shed foundation is undermined. Repair Schubert House pony wall where tilted and repair CMU blocks that are damaged.	This budget has not changed from the recommendations included in the FCA.
26	Various Locations	Miscellaneous Electrical Repairs	See Appendix F of the FCA for detail. Remove old meter outside of Stagecoach Depot. Replace disconnect switches in Meat and Dairy Building and SPPC Display #1. Clean up wiring in O'Keefe House and Schubert House.	This budget has not changed from the recommendations included in the FCA.
27	Schubert House & Log House	Chimney Repairs	Replace spalled bricks and repoint mortar joints where required.	This budget has not changed from the recommendations included in the FCA.
28	O'Keefe House	Water Management	Repair CMU basement wall and add extend rainwater leaders. If condition persists, add drainage away from the area. Remove rotted portions of porch and repair. Add new scuppers.	This budget has not changed from the recommendations included in the FCA.
29	Visitor Center	Cooling Unit Replacement	See section 2.0 of Appendix E of the FCA for detail. Replace cooling unit in the near future.	This budget has not changed from the recommendations included in the FCA.
30	Greenhow Museum	Hot Water Heater Replacement	See section 2.0 of Appendix E of the FCA for detail. Remove and dispose of old heater and install new.	This budget has not changed from the recommendations included in the FCA.
31	Stagecoach Depot	Hot Water Heater Replacement	See section 2.0 of Appendix E of the FCA for detail. Remove and dispose of old heater and install new	This budget has not changed from the recommendations included in the FCA.
32	O'Keefe House	Condensate Pump Replacement	See section 2.0 of Appendix E of the FCA for detail. Remove and dispose of old condensate pump and install new.	This budget has not changed from the recommendations included in the FCA.



TABLE 5: MODERATE PRIORITY PROJECTS				
33	Carriage Shed	Hot Water Heater Replacement	See section 2.0 of Appendix E of the FCA for detail. Remove and dispose of old heater and install new	This budget has not changed from the recommendations included in the FCA.
34	SPPC Clubhouse	Furnace Upgrade	See section 2.0 of Appendix E of the FCA for detail. System should be upgraded soon.	This budget has not changed from the recommendations included in the FCA.
35	SPPC Clubhouse	Hot Water Heater Replacement	See section 2.0 of Appendix E of the FCA for detail. Remove and dispose of old heater and install new	This budget has not changed from the recommendations included in the FCA.
36	Various	Hot Water Upgrade	See section 2.0 of Appendix E of the FCA for detail. Upgrade systems to provide hot water at sinks.	This budget has not changed from the recommendations included in the FCA.
37	Various	Miscellaneous Mechanical Repairs	See section 2.0 of Appendix E of the FCA for detail. Configure natural gas piping in Museum and SPPC Clubhouse. Provide drain pans for hot water heaters. Replace galvanized piping at Pump House. Upgrade piping insulation.	This budget has not changed from the recommendations included in the FCA.

1.1.6 Lesser Priority Projects

Table 6, on the next page, identifies projects address conditions considered to be lesser priority and should be completed within six to ten years.

TABLE 6: LESSER PRIORITY PROJECTS				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
38	Implement Sheds, SPPC Displays and SPPC Clubhouse	Minor Structural Repairs	Expose base of lean-to wood posts to concrete footing were buried. Remove rotted wood and add new pedestals at these locations. Provide new strap anchors at SPPC Display #2 and Tack Shed. Clean saddle connections at base of posts in Implement Sheds.	This project has been removed. To implement this recommendation the funding is expected to come from Item 6. Reviews should be completed of identified structural concerns to determine if changes occur.
39	Visitor Center, Caretaker's House, & SPPC Clubhouse	IGU Replacement	Replace IGUs as required.	This project has been removed. To implement this recommendation the funding is expected to come from Item 5. Potential failure may result in user comfort concerns.
40	O'Keefe House & Schubert House	Plaster and Lath Repair or Replacement	Option 1: Repair existing plaster and lath. Heat buildings in the winter to extend service life. Option 2: Replace damaged plaster and lath with drywall (carried in OPC).	This has been changed to a maintenance program with an annual budget to review and repair areas as outlined in the HCP.
41	O'Keefe House	Air Handling Unit Repair	See section 2.0 of Appendix E of the FCA for detail. Replace cooling coil in air handling unit.	This budget has not changed from the recommendations included in the FCA.
42	St. Anne's Church	Heating Upgrade	See section 2.0 of Appendix E of the FCA for detail. Update heating to sealed combustion condensing unit.	This has been removed as it was identified in the HCP as not requiring heat. Winter heating has been included for in HCP.5.



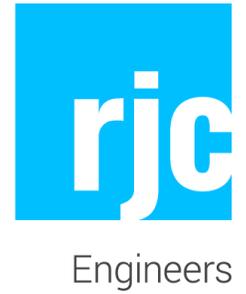
1.1.7 Projects Identified in the HCP

7, on the next page, identifies projects that were identified in the HCP and not the FCA.

TABLE 7: PROJECTS IDENTIFIED IN THE HCP				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
HCP.1	Greenhow Museum	Artefact Assessment	N/A	<ul style="list-style-type: none"> Work with a museums professional to assess the archives, the artefacts collection, their condition and their storage situation Follow museum professional guidance to sort, curate, dilute and if necessary deaccession a portion of the items As part of the above professional assessment, determine whether it is important for the O’Keefe Ranch archives to be accessed by researchers and located on site given the low volume of requests and the fact that the VMA also holds an O’Keefe Ranch collection? Discuss whether the position of curator is needed for effective development of museum exhibits or can the VMA staff support ranch staff with exhibit development if and where necessary?
HCP.2	Various	Machinery and Exhibits Artefact Assessment	N/A	<ul style="list-style-type: none"> It is likely that this collection has grown too large and unfocused to effectively store, maintain and interpret. Consider assessing and reducing the collection to the most important, representative pieces that truly enhance the visitor experience, and that the ranch can also maintain, and develop fresh, effective, self-guided interpretation for them. Offer scheduled guided tour of these machines as a new program.
HCP.3	Various	Arborist Assessment	N/A	<ul style="list-style-type: none"> Commission an arborist assessment of the Ponderosa Pines on site as well as conservation guidelines for their preservation Prepare a maintenance / management plan to support the ongoing care of character-defining elements in the landscape. Protect and maintain vegetation by using non-destructive methods in daily, seasonal and cyclical maintenance tasks. Ensure that site use changes do no compromise the health of character-defining vegetation



TABLE 7: PROJECTS IDENTIFIED IN THE HCP				
Item	Location	Program Title	Scenario 1: Restoration Approach	Scenario 2: Preservation Approach
HCP.4	1966 Provincial Stop of Interest Sign	Signs and Interpretation	N/A	<ul style="list-style-type: none"> This iconic sign is part of a larger 'stops of interest' provincial program that today seems outdated and many of the signs contain inappropriate text. Explore the BC Stops of Interest program and add it to the sites interpretive program and guided tours. This sign offers opportunities to make connections to other sites and explore the damage and lesson of past narratives https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/stop-of-interest Monitor the log post holding up the sign for deterioration and replace in-kind when necessary
HCP.5	Various	Operational Heating at Finished Buildings		<ul style="list-style-type: none"> Provide minimum 7 Degrees Celsius temporary heating at buildings with interior finishes (e.g. Schubert House, Carriage Shed, etc.)



Appendix 3-C

Capital and Operations Management Plan Scenario 1: Restoration Approach

Scenario 1: Restoration Approach				Maintenance and Renewal Expenditures									
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Reference #	Location	Title	Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Programs													
1	Various	Roof Maintenance Program	Roof maintenance and cleaning (gutters, patches, etc).	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
2	Various	Landscaping, Small Building Maintenance, and Monitoring Program	Landscape to provide 4" clearance around buildings. Repair or replace small buildings as required. Monitor the indicated conditions for changes.	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
3	Various	Roof Replacement Program	Replace roofs.			\$ 70,000.00	\$ 70,000.00	\$ 70,000.00	\$ 70,000.00	\$ 70,000.00	\$ 70,000.00	\$ 70,000.00	\$ 70,000.00
4	Various	Mechanical System Monitoring and Inspection Program	Inspect and clean sanitary pipes Monitor piping for pin holes and leaks Inspect supply ducts internally		\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00
5	Various	Window and Door Program	Repair and paint window and door trims, repair glazing.		\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
6	Various	Cladding Maintenance and Painting Program	Repair and replace cladding and trims Clean and pain cladding trims		\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00
7	Various	Assessment Budgets	Retain Building Inspector Report as required.						\$ 8,000.00				
8	Various	Fencing Maintenance Program	Repair and paint fences.						\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
9	Various	Road Maintenance Program	Repair potholes and slope for drainage as required.						\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00
10	Various	Irrigation and Water Line Replacement Program	Replace water lines and garden hydrants.							\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00
Projects													
11	Visitor Center, Greenhow Museum, O'Keefe House	Hazardous Materials Assessment	Retain hazardous materials report for organic growth at base of basement wall and pipes. Retain hazardous materials report for animal droppings and vermiculite insulation. Retain hazardous materials report for organic growth.	\$ 10,000.00									
12	Greenhow Museum	Stair Replacement and Repair	Replace basement and emergency exit stairs. Repair second floor stairs.	\$ 25,000.00									
13	Meat & Dairy	Additional Structural Support	Add support at Dairy and Garage. Add blocking at cut joists. Ensure support is close enough as to ensure that South masonry wall is not load bearing.	\$ 7,000.00									
14	Meat & Dairy	Wall and Floor Repairs	Support and repair north and east walls. Remove and reinstate cladding. Landscape to expose structure. Install vents over openings. Patch repair concrete steps to Dairy building.	\$ 20,000.00									
15	Blacksmith Shop	Replace forge ventilation systems		\$ 18,000.00									
16	O'Keefe House, Blacksmith Shop	Chimney Repairs	Provide additional support to leaning chimney. Replace spalled bricks. Provide double wall flue flashing at combustile roof.	\$ 5,000.00									
17	Hay Shed	Concrete Repair	Clean reinforcement and repair concrete.	\$ 25,000.00									
18	Decommissioned Foot Bridge and Log Foot Bridge	Bridge Removal and Replacement	Environemntal Impact Report Remove and Dispose of bridges	\$ 125,000.00									
19	O'Keefe House	Geotechnical Report	Retain geotechnical report for review of wall.	\$ 8,000.00									
20	Visitor Center	Carpentry Repairs	Remove rotted truss tails and provide flashing Remove rotted wood from post and add pedestal	\$ 8,000.00									
21	Visitor Center	Drainage Replacement	Add drainage and extend RWL. Address cooler room Clean walls	\$ 25,000.00									
22	O'Keefe House, Log Barn, Schubert Barn	Structural Assessment	Retain structural engineer report on roof and deflecting ceilings at O'Keefe House Retain structural engineer report for Schubert Barn Retain structural engineer report for Log Barn loft		\$ 10,000.00								
23	Corral	Grandstand Remove and Replacement	Remove grandstand and replace with new.		\$ 10,000.00								
24	Various	Fire Rated Rooms	Built fire rated rooms for water heaters, furnaces, etc.		\$ 60,000.00								
25	O'Keefe House, Log Barn Lean-To, Carriage Shed, Schubert House	Foundation Repair	Provide fill where undermined Repair wood pony wall where tilted and repair CMU blocks that are damaged Provide support and repair foundation columns Add fill to support concrete slab		\$ 25,000.00								
26	Various	Misc. Electrical Repairs	Replace disconnect switches at Meat and Dair and SPPC #1 Replace ITE panel at pump house Remove old meter at Stagecoach Depot Clean up wiring at O'Keefe House and Schubert House		\$ 9,000.00								
27	Log House, Schubert House	Chimney Repairs	Replace spalled brick Repoint mortar joints		\$ 5,000.00								
28	O'Keefe House	Water Management	Clean walls and extend gutters. If conditions persist add drainage. Remove rotted wood at proch and patch repair. Add scuppers		\$ 5,000.00								
29	Visitor Center	Cooling Unit Replacement	Replace Cooling unit and cooling fan coil		\$ 14,000.00								
30	Museum	Hot Water Heater Replacement	Remove and dispose of old heater and install new.		\$ 6,000.00								
31	Stagecoach Depot	Hot Water Heater Replacement	Remove and dispose of old heater and install new.		\$ 6,000.00								
32	O'Keefe House	Condensate Pump Replacement	Remove and dispose of old heater and install new.		\$ 2,000.00								
33	Carriage Shed	Hot Water Heater Replacement	Remove and dispose of old heater and install new.		\$ 3,000.00								
34	SPPC Clubhouse	Furnace Upgrade	Upgrade to new furnace		\$ 13,000.00								
35	SPPC Clubhouse	Hot Water Heater Replacement	Remove and dispose of old heater and install new.		\$ 6,000.00								
36	Various	Hot Water Upgrade	Upgrade water systems to have hot water at sinks		\$ 10,000.00								
37	Various	Misc. Mechanical Repairs	Configure natural gas piping in Museum and SPPC Clubhouse Provide drain pan for water heaters Replace galvanized piping at Pumphouse Upgrade piping insulation		\$ 8,000.00								

Scenario 1: Restoration Approach				Maintenance and Renewal Expenditures									
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Reference #	Location	Title	Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Programs													
38	Implement Sheds, SPPC Displays, SPPC Clubhouse	IGU Replacement	Replace IGUs as required.						\$ 6,000.00				
39	Visitor Center, Caretaker's House, SPPC Clubhouse	IGU Replacement	Replace IGUs as required.						\$ 50,000.00				
40	O'Keefe House, Schubert House	Plaster and Lath Repair or Replacement	Repair plaster and lath or replace with drywall.						\$ 14,000.00				
41	O'Keefe House	AHU Repair	Replace cooling coil in unit						\$ 6,000.00				
42	St. Anne's Church	Heating Upgrade	Update to sealed combustion condensing unit						\$ 13,000.00				
HCP.1	Greenhow Museum	Greenhow Museum Artefact Review	Review artefacts to determine if inventory can be reduced	\$ 5,000.00									
HCP.2	Various	Machinery and Exhibits Artefact Assessment	Review artefacts to determine if inventory can be reduced	\$ 5,000.00									
HCP.3	Various	Arborist Assessment	Review and maintain vegetation	\$ 3,000.00									
HCP.4	1966 Provincial Stop of Interest Sign	Signs and Interpretation	Update signage for interpretation			\$ 5,000.00			\$ 5,000.00			\$ 5,000.00	
HCP.5	Various	Operational Heating at Finished Buildings	Provide minimum 7 degrees celsius heating during winter months of un-used buildings.	\$ 6,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00
Subtotal				\$ 310,000.00	\$ 230,000.00	\$ 113,000.00	\$ 108,000.00	\$ 108,000.00	\$ 235,000.00	\$ 173,000.00	\$ 173,000.00	\$ 178,000.00	\$ 173,000.00
Contract Administration (18%)				\$ 55,800.00	\$ 41,400.00	\$ 20,340.00	\$ 19,440.00	\$ 19,440.00	\$ 42,300.00	\$ 31,140.00	\$ 31,140.00	\$ 32,040.00	\$ 31,140.00
Soft Costs (25%)				\$ 77,500.00	\$ 57,500.00	\$ 28,250.00	\$ 27,000.00	\$ 27,000.00	\$ 58,750.00	\$ 43,250.00	\$ 43,250.00	\$ 44,500.00	\$ 43,250.00
Owner Contingencies (20%)				\$ 62,000.00	\$ 46,000.00	\$ 22,600.00	\$ 21,600.00	\$ 21,600.00	\$ 47,000.00	\$ 34,600.00	\$ 34,600.00	\$ 35,600.00	\$ 34,600.00
Hazardous Materials Contingency (15%)				\$ 46,500.00	\$ 34,500.00	\$ 16,950.00	\$ 16,200.00	\$ 16,200.00	\$ 35,250.00	\$ 25,950.00	\$ 25,950.00	\$ 26,700.00	\$ 25,950.00
Total				\$ 551,800.00	\$ 409,400.00	\$ 201,140.00	\$ 192,240.00	\$ 192,240.00	\$ 418,300.00	\$ 307,940.00	\$ 307,940.00	\$ 316,840.00	\$ 307,940.00
Rounded Total				\$ 550,000.00	\$ 410,000.00	\$ 210,000.00	\$ 200,000.00	\$ 200,000.00	\$ 420,000.00	\$ 310,000.00	\$ 310,000.00	\$ 320,000.00	\$ 310,000.00



Engineers

Appendix 3-D

Capital and Operations Management Plan Scenario 2 Preservation Approach

Scenario 2: Preservation Approach				Maintenance and Renewal Expenditures									
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Reference #	Location	Title	Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Programs													
1	Various	Roof Maintenance Program	Roof maintenance and cleaning (gutters, patches, etc).		\$ 40,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00
2	Various	Landscaping, Small Building Maintenance, and Monitoring Program	Landscape to provide 4" clearance around buildings. Repair or replace small buildings as required. Monitor the indicated conditions for changes.	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
3	Various	Roof Replacement Program	Replace roofs.										
4	Various	Mechanical System Monitoring and Inspection Program	Inspect and clean sanitary pipes Monitor piping for pin holes and leaks Inspect supply ducts internally		\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
5	Various	Window and Door Program	Repair and paint window and door trims, repair glazing.		\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
6	Various	Cladding Maintenance and Painting Program	Repair and replace cladding and trims Clean and pain cladding trims		\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00
7	Various	Assessment Budgets	Retain Building Inspector Report as required.		\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
8	Various	Fencing Maintenance Program	Repair and paint fences.	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
9	Various	Road Maintenance Program	Repair potholes and slope for drainage as required.	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
10	Various	Irrigation and Water Line Replacement Program	Replace water lines and garden hydrants.	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
Projects													
11	Visitor Center, Greenhow Museum, O'Keefe House	Hazardous Materials Assessment	Retain hazardous materials report for organic growth at base of basement wall and pipes. Retain hazardous materials report for animal droppings and vermiculite insulation. Retain hazardous materials report for organic growth.	\$ 10,000.00									
12	Greenhow Museum	Stair Replacement and Repair	Replace basement and emergency exit stairs. Repair second floor stairs.		\$ 25,000.00								
13	Meat & Dairy	Additional Structural Support	Add support at Dairy and Garage. Add blocking at cut joists. Ensure support is close enough as to ensure that South masonry wall is not load bearing.		\$ 7,000.00								
14	Meat & Dairy	Wall and Floor Repairs	Support and repair north and east walls. Remove and reinstate cladding. Landscape to expose structure. Install vents over openings. Patch repair concrete steps to Dairy building.		\$ 5,000.00								
15	Blacksmith Shop	Replace forge ventilation systems											
16	O'Keefe House, Blacksmith Shop	Chimney Repairs	Provide additional support to leaning chimney. Replace spalled bricks. Provide double wall flue flashing at combustile roof.		\$ 5,000.00								
17	Hay Shed	Concrete Repair	Clean reinforcement and repair concrete.		\$ 5,000.00								
18	Decommissioned Foot Bridge and Log Foot Bridge	Bridge Removal and Replacement	Environemntal Impact Report Remove and Dispose of bridges		\$ 125,000.00								
19	O'Keefe House	Geotechnical Report	Retain geotechnical report for review of wall.	\$ 8,000.00									
20	Visitor Center	Carpentry Repairs	Remove rotted truss tails and provide flashing Remove rotted wood from post and add pedestal		\$ 8,000.00								
21	Visitor Center	Drainage Replacement	Add drainage and extend RWL. Address cooler room Clean walls		\$ 20,000.00								
22	O'Keefe House, Log Barn, Schubert Barn	Structural Assessment	Retain structural engineer report on roof and deflecting ceilings at O'Keefe House Retain structural engineer report for Schubert Barn Retain structural engineer report for Log Barn loft	\$ 10,000.00									
23	Corral	Grandstand Remove and Replacement	Remove grandstand and replace with new.			\$ 5,000.00							
24	Various	Fire Rated Rooms	Built fire rated rooms for water heaters, furnaces, etc.		\$ 60,000.00								
25	O'Keefe Hous,e Log Barn Lean-To, Carriage Shed, Schubert House	Foundation Repair	Provide fill where undermined Repair wood pony wall where tilted and repair CMU blocks that are damaged Provide support and repair foundation columns Add fill to support concrete slab		\$ 25,000.00								
26	Various	Misc. Electrical Repairs	Replace disconnect switches at Meat and Dair and SPPC #1 Replace ITE panel at pump house Remove old meter at Stagecoach Depot Clean up wiring at O'Keefe House and Schubert House		\$ 9,000.00								
27	Log House, Schubert House	Chimney Repairs	Replace spalled brick Repoint mortar joints					\$ 5,000.00					
28	O'Keefe House	Water Management	Clean walls and extend gutters. If conditions persist add drainage. Remove rotted wood at proch and patch repair. Add scuppers				\$ 5,000.00						
29	Visitor Center	Cooling Unit Replacement	Replace Cooling unit and cooling fan coil			\$ 14,000.00							
30	Museum	Hot Water Heater Replacement	Remove and dispose of old heater and install new.					\$ 6,000.00					
31	Stagecoach Depot	Hot Water Heater Replacement	Remove and dispose of old heater and install new.			\$ 6,000.00							
32	O'Keefe House	Condensate Pump Replacement	Remove and dispose of old heater and install new.		\$ 2,000.00								
33	Carriage Shed	Hot Water Heater Replacement	Remove and dispose of old heater and install new.		\$ 3,000.00								
34	SPPC Clubhouse	Furnace Upgrade	Upgrade to new furnace				\$ 13,000.00						
35	SPPC Clubhouse	Hot Water Heater Replacement	Remove and dispose of old heater and install new.				\$ 6,000.00						
36	Various	Hot Water Upgrade	Upgrade water systems to have hot water at sinks					\$ 10,000.00					
37	Various	Misc. Mechanical Repairs	Configure natural gas piping in Museum and SPPC Clubhouse Provide drain pan for water heaters Replace galvanized piping at Pumphouse Upgrade piping insulation			\$ 8,000.00							
38	Implement Sheds, SPPC Displays, SPPC Clubhouse	IGU Replacement	Replace IGUs as required.										

Scenario 2: Preservation Approach				Maintenance and Renewal Expenditures									
				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Reference #	Location	Title	Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Programs													
39	Visitor Center, Caretaker's House, SPPC Clubhouse	IGU Replacement	Replace IGUs as required.										
40	O'Keefe House, Schubert House	Plaster and Lath Repair or Replacement	Repair plaster and lath or replace with drywall.		\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00
41	O'Keefe House	AHU Repair	Replace cooling coil in unit						\$ 6,000.00				
42	St. Anne's Church	Heating Upgrade	Update to sealed combustion condensing unit										
HCP.1	Greenhow Museum	Greenhow Museum Artefact Review	Review artefacts to determine if inventory can be reduced	\$ 5,000.00									
HCP.2	Various	Machinery and Exhibits Artefact Assessment	Review artefacts to determine if inventory can be reduced	\$ 5,000.00									
HCP.3	Various	Arborist Assessment	Review and maintain vegetation	\$ 3,000.00									
HCP.4	1966 Provincial Stop of Interest Sign	Signs and Interpretation	Update signage for interpretation			\$ 5,000.00			\$ 5,000.00			\$ 5,000.00	
HCP.5	Various	Operational Heating at Finished Buildings	Provide minimum 7 degrees celsius heating during winter months of un-used buildings.	\$ 6,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00
Subtotal				\$ 67,000.00	\$ 391,000.00	\$ 110,000.00	\$ 96,000.00	\$ 93,000.00	\$ 83,000.00	\$ 72,000.00	\$ 72,000.00	\$ 77,000.00	\$ 72,000.00
Contract Administration (18%)				NA	\$ 70,380.00	\$ 19,800.00	\$ 17,280.00	\$ 16,740.00	\$ 14,940.00	\$ 12,960.00	\$ 12,960.00	\$ 13,860.00	\$ 12,960.00
Soft Costs (25%)				NA	\$ 97,750.00	\$ 27,500.00	\$ 24,000.00	\$ 23,250.00	\$ 20,750.00	\$ 18,000.00	\$ 18,000.00	\$ 19,250.00	\$ 18,000.00
Owner Contingencies (20%)				\$ 13,400.00	\$ 78,200.00	\$ 22,000.00	\$ 19,200.00	\$ 18,600.00	\$ 16,600.00	\$ 14,400.00	\$ 14,400.00	\$ 15,400.00	\$ 14,400.00
Hazardous Materials Contingency (15%)				NA	\$ 58,650.00	\$ 16,500.00	\$ 14,400.00	\$ 13,950.00	\$ 12,450.00	\$ 10,800.00	\$ 10,800.00	\$ 11,550.00	\$ 10,800.00
Total				\$ 80,400.00	\$ 695,980.00	\$ 195,800.00	\$ 170,880.00	\$ 165,540.00	\$ 147,740.00	\$ 128,160.00	\$ 128,160.00	\$ 137,060.00	\$ 128,160.00
Rounded Total				\$ 90,000.00	\$ 700,000.00	\$ 200,000.00	\$ 180,000.00	\$ 170,000.00	\$ 150,000.00	\$ 130,000.00	\$ 130,000.00	\$ 140,000.00	\$ 130,000.00



THE CORPORATION OF THE CITY OF VERNON REPORT TO COUNCIL

SUBMITTED BY: Rena Crosson,
Manager, Financial Operations

COUNCIL MEETING: REG COW I/C
COUNCIL MEETING DATE: April 22, 2024
REPORT DATE: April 12, 2024
FILE: 1970-13-05

SUBJECT: 2024 TAX RATE OPTIONS CORRECTED

PURPOSE:

Due to an administrative error in the 2024 Tax Rate Option report presented to Council April 8, 2024, this report is to provide Council with the corrected information required to consider two options for setting the 2024 general municipal tax rates. The two options presented are summarized in Attachment 1 – 2024 Tax Rate Calculation & Options Summary, page 1.

RECOMMENDATION:

- 1) THAT Council rescind the original motion from the April 8, 2024 Council Meeting as follows:
“THAT Council select Option 1, Using Prior Year Tax Base Proportions but Maximizing Utility Class Revenue, as identified on Page 2 of Attachment 1 in the report titled “2024 Tax Rate Options”, dated March 28, 2024, respectfully submitted by the Manager, Financial Operations;

AND FURTHER, that Council direct Administration to prepare the Tax Rates Bylaw #5990 for initial readings at the April 22, 2024, Regular meeting of Council.”
- 2) THAT Council select Option 1, Using Prior Year Tax Base Proportions but Maximizing Utility Class Revenue, as identified on Page 1 of Attachment 1 in the report titled “2024 Tax Rate Options Corrected”, dated April 12, 2024, respectfully submitted by the Manager, Financial Operations.

ALTERNATIVES & IMPLICATIONS:

- 1) THAT Council select Option 2 from the tax rate options, identified in Attachment 1, page 1 in the report titled “2024 Tax Rate Options Corrected”, dated April 12, 2024, respectfully submitted by the Manager, Financial Operations.

Note: The alternative collects the same amount of taxation for the City. The difference in tax rates provided result in different assessment classes in the community paying a different percentage of the total tax burden. Whatever changes are directed by Council, the resulting rates must result in the same amount of total property tax revenue for the City in order to meet its 2024 budgeted operating goals.

ANALYSIS:

A. Committee Recommendations:

N/A

B. Rationale:

1. For the 2024 property tax year, the BC Assessment reports shown in Attachment 2 – 2024 Property Assessment Analysis, have indicated an overall increase in assessment values totalling a little over \$554 million. Of this amount, \$206 million reflects non-market change. Non-market changes are largely due to new construction plus changes in property tax classifications. Residential assessments increased by \$364 million. This is comprised of \$184 million in non-market increases and \$180 million in market increases (1.38%). The average residential property assessment for 2024 (excluding non-market change) is \$696,738 up from \$690,412 in 2023 (0.92% increase). Business assessments saw an increase of \$171 million and is comprised of non-market increases of \$14 million and a market increase of \$157 million.
2. The 2024 – 2028 Financial Plan approved by Council included a 6.71% total tax increase, assuming 1.22% would come from the non-market change, resulting in a provision for a 5.49% net tax increase for existing property tax payers (net of new revenue from non-market assessment changes). Subsequent to its adoption, the finalized assessment values were made available and indicate that the non-market increase in assessments is slightly higher than what was originally estimated. The Financial Plan assumption called for \$630,000 in increased tax revenue due to non-market change. The actual amount is approximately \$743,000. The resulting additional revenue has been built into the tax rate calculations provided in Attachment 1, page 2. The effect of this has reduced the total tax increase from 5.49% to 5.28%. The total 2024 tax revenue requirement approved by Council is \$55,099,311.
3. Historically, the business to residential tax rate ratios from 2020 to 2023 have been as follows:

2023 – 3.2369 2022 – 3.3379 2021 – 2.9415 2020 – 2.8157

The Financial Plan policy statements indicate that the desired ratio should be no greater than 3.2. The recommended Option 1 results in a business to residential ratio of 3.0108 for 2024 (Attachment 1, page 1).

4. In order to provide comparative examples of residential and business tax rates in other jurisdictions, the following represent the 2023 tax rates for residential and business (including the Regional Library rate) and tax rate ratios. This information is from the Ministry of Municipal Affairs published statistical data:

	<u>Residential</u>	<u>Business</u>	<u>Bus./Res Ratio</u>
• Kelowna	\$2.44760	\$6.01950	2.45935
• West Kelowna	\$2.46861	\$5.55054	2.24845
• Lake Country	\$2.68020	\$6.77870	2.52918
• Vernon	\$2.79737	\$9.05489	3.23693
• Salmon Arm	\$2.84890	\$10.07210	3.53543
• Penticton	\$2.99730	\$6.65410	2.22003
• Kamloops	\$3.74000	\$11.58000	3.09626

Note: the Vernon rates above, excluding the Library rates, were \$2.69506 for residential and \$8.72372 for business.

5. Option 1: This option provides for no changes to the allocation of the general municipal tax levy from 2023 to 2024 except for a minor shift between residential and utilities classes. This option maximizes the utility property class tax rate to the provincially-legislated ceiling of \$40 (including the Regional Library tax rate). The additional \$15,000 in revenue from the utility class would

be offset against the residential class and would meet the City's policy statement objective of levying the maximum rate allowed for utility properties. The average residential property, existing in 2024, will see an increase in general municipal taxes of approximately 4.79% or \$89. The residential tax rate would increase from \$2.696373 in 2023 to \$2.799875. A business scenario has also been included which represents a property assessed at \$1 million in 2023 but experiences an assessment increase of 9.08% for 2024 (which mirrors the overall market increase for business properties). General municipal taxes would increase by 5.36% or \$467 in this scenario. The business tax rate would decrease from \$8.727969 in 2023 to \$8.430002. Under Option 1, the business to residential tax rate ratio would decrease to 3.0108. This option is being recommended for several reasons:

- The residential tax increase of 4.79% for the average house and the business tax increase for the illustrated scenario of 5.36% are both within the approved increase supported by Council.
 - The business tax rate of 8.430002 would remain below \$10 per \$1,000 of assessment.
 - The business to residential tax rate ratio of 3.0108 would be below the policy objective of 3.2.
6. Option 2: This option maximizes utility tax revenue just like in Option 1, but also shifts 0.11% of total tax revenue from business to residential classes to achieve more even tax percentage increases between the two classes. \$60,000 in tax revenue would need to shift from business to residential (reduced tax burden on business and increased burden on residential). As a result, the average house would see a 4.96% tax increase which amounts to \$92. The residential tax rate would increase from \$2.696373 in 2023 to \$2.804362 in 2024. For the business scenario used in the previous option, taxes would increase by 4.96% or \$433. The business tax rate would decrease from \$8.727969 to \$8.398420.
 7. A historical property assessment and rate information sheet has been provided in Attachment 3 showing information on residential and business property assessments and tax rates over the last 5 years. This document breaks out the assessment changes year over year (split by non-market and market) on residential and business classes, and the average residential assessment increase. In addition, the historical tax rate and tax base is listed for the last five years. City taxes for the average house are listed per year, as well as the annual increase. A business scenario representing \$1 million with adjustments for the current years assessment increase or decrease average is also listed for each year.
 8. Based on the tax rate option selected, the corresponding bylaw will be an addition to the Regular Council meeting Agenda under 11 – Legislative Matters.
 9. The 2024 tax rates bylaw must be adopted prior to May 15, 2024.
 10. As of April 12, no announcements have been made by the Province regarding school tax rates for 2024.

C. Attachments:

1. Attachment 1 - 2024 Tax Rate Calculation & Options Summary
2. Attachment 2 - 2024 Property Assessment Analysis
3. Attachment 3 – Historical Property Assessment and Rate Information

D. Council's Strategic Plan 2023 – 2026 Goals/Action Items:

The subject of 2024 tax rates involves the following goals/action items in Council's Strategic Plan 2023 – 2026:

- 1. Focus on leading by example in how Council operates to provide excellent cost-effective services.

E. Relevant Policy/Bylaws/Resolutions:

- 1. The 2024 - 2028 Financial Plan Bylaw #5980, adopted January 22, 2024 states:

Taxes will be allocated to the various classes as follows:

- The utility class will be taxed at the maximum combined rate per thousand dollars of value permitted by legislation.
- All remaining classes of property will receive an equal allocation of the percent change in the annual tax levy.
- The City will strive to maintain a business to residential multiplier not exceeding 3.2 to 1 under optimal conditions by adjusting the allocation of the percent change in the annual tax levy if needed.

BUDGET/RESOURCE IMPLICATIONS:

Once the 2024 Tax Rates Bylaw has been adopted to Council, the property tax levies will be calculated and the notices distributed in time for property owners to pay their property taxes by the tax due date of July 2, 2024.

Prepared by:

Approved for submission to Council:

X 
 Rena Crosson
 Manager, Financial Operations


 Patricia Bridal, CAO

Date: April 16, 2024

X 
 Elma Hamming, Director, Financial Services

REVIEWED WITH

- | | | |
|--|---|---|
| <input type="checkbox"/> Corporate Services | <input type="checkbox"/> Operations | <input type="checkbox"/> Current Planning |
| <input type="checkbox"/> Bylaw Compliance | <input type="checkbox"/> Public Works/Airport | <input type="checkbox"/> Long Range Planning & Sustainability |
| <input type="checkbox"/> Real Estate | <input type="checkbox"/> Facilities | <input type="checkbox"/> Building & Licensing |
| <input type="checkbox"/> RCMP | <input type="checkbox"/> Utilities | <input type="checkbox"/> Engineering Development Services |
| <input type="checkbox"/> Fire & Rescue Services | <input type="checkbox"/> Recreation Services | <input type="checkbox"/> Infrastructure Management |
| <input type="checkbox"/> Human Resources | <input type="checkbox"/> Parks | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Financial Services | | <input type="checkbox"/> Economic Development & Tourism |
| <input type="checkbox"/> COMMITTEE: | | |
| <input type="checkbox"/> OTHER: | | |

2024 TAX RATE CALCULATION & OPTIONS SUMMARY

OPTION 1 - USING PRIOR YEAR TAX BASE PROPORTIONS BUT MAXIMIZING UTILITY CLASS REVENUE					City Taxes for Average House		
Property Class	2024 Revenue Re-allocations	2024 Tax Base	2024 Calculated Tax Rates	2024 Tax Rate Multipliers	2023	\$	
1 Residential	(15,000)	37,445,138	2.799875	1.0000	2024	\$	1,862
2 Utility	15,000	493,697	38.256206	13.6635	Difference	\$	89
5 Light Industrial		928,308	11.343211	4.0513	% Increase		4.79%
6 Business		16,015,443	8.430002	3.0108	Business - \$1 million assess increased by 9.08% market change in 2023		
7 Managed Forests		40	0.995151	0.3554	2023	\$	8,728
8 Rec/Non-Profit		212,123	6.546937	2.3383	2024	\$	9,195
9 Farm Land		4,561	1.136828	0.4060	Difference	\$	467
	-	55,099,311			% Increase		5.36%

OPTION 2 - MAXIMIZING UTILITY CLASS REVENUE & SHIFTING 0.11% OF TOTAL TAX REVENUE FROM BUSINESS TO RESIDENTIAL					City Taxes for Average House		
Property Class	2024 Revenue Re-allocations	2024 Tax Base	2024 Calculated Tax Rates	2024 Tax Rate Multipliers	2023	\$	
1 Residential	45,000	37,505,138	2.804362	1.0000	2024	\$	1,954
2 Utility	15,000	493,697	38.256206	13.6417	Difference	\$	92
5 Light Industrial		928,308	11.343211	4.0448	% Increase		4.96%
6 Business	(60,000)	15,955,443	8.398420	2.9948	Business - \$1 million assess increased by 9.08% market change in 2023		
7 Managed Forests		40	0.995151	0.3549	2023	\$	8,728
8 Rec/Non-Profit		212,123	6.546937	2.3346	2024	\$	9,161
9 Farm Land		4,561	1.136828	0.4054	Difference	\$	433
	-	55,099,311			% Increase		4.96%

Average Residential Property Assessment for 2024: \$696,738

2024 TAX RATE CALCULATION & OPTIONS SUMMARY

Budgeted New Revenue:

December 2023 Budget Deliberations	3,467,069
Less: New Revenue from Growth	(743,059)
New Revenue from Tax Increase	2,724,010

Property Class	2023 Tax Rate	2023 Rate Ratio	2023 Tax Base	2023 Tax Base Proportions	2024 Total Budgeted New Revenue	2024 New Revenue from Growth*	2024 New Revenue from Tax Increase**	2024 Tax Base	2024 Assessments
1 Residential	2.696373	1.0000	35,078,262	67.94%		531,220	1,850,657	37,460,138	13,373,859,005
2 Utility	38.307226	14.2069	448,051	0.87%		7,008	23,638	478,697	12,905,015
5 Light Industrial	12.181216	4.5176	825,913	1.60%		58,821	43,573	928,308	81,838,200
6 Business	8.727969	3.2369	15,091,112	29.23%		128,156	796,176	16,015,443	1,899,814,830
7 Managed Forests	0.945280	0.3506	38	0.00%		-	2	40	40,200
8 Rec/Non-Profit	6.387814	2.3690	184,466	0.36%		17,925	9,732	212,123	32,400,300
9 Farm Land	1.131717	0.4197	4,400	0.01%		(71)	232	4,561	4,012,278
			51,632,242	100.00%	3,467,069	743,059	2,724,010	55,099,311	15,404,869,828

Percentage Increase: 6.71% 1.44% 5.28%

Original Assumptions in Approved 2024 Budget 3,467,069 630,000 2,837,069

Percentage Increase: 6.71% 1.22% 5.49%

* New Revenue from Growth is calculated from the 2024 BC Assessment Non-Market Change Report based on estimated 2024 Tax Rates

** New Revenue from Tax Increase is Total New Revenue less New Revenue from Growth and is distributed to property classes using the 2023 tax base proportions.

2024 PROPERTY ASSESSMENT ANALYSIS

ATTACHMENT 2

Property Class	March 2023 Assessments	March 2024 Assessments	Total Change	Change Due To Growth	Change Due To Market	Market Change %
1 Residential	13,009,425,743	13,373,859,005	364,433,262	184,615,836	179,817,426	1.38%
2 Utility	11,696,240	12,905,015	1,208,775	171,435	1,037,340	8.87%
5 Light Industrial	67,802,200	81,838,200	14,036,000	4,525,000	9,511,000	14.03%
6 Business	1,729,051,877	1,899,814,830	170,762,953	13,759,407	157,003,546	9.08%
7 Managed Forests	40,200	40,200	-	-	-	0.00%
8 Rec/Non-Profit	28,877,800	32,400,300	3,522,500	2,629,500	893,000	3.09%
9 Farm Land	3,887,860	4,012,278	124,418	(58,639)	183,057	4.71%
	<u>14,850,781,920</u>	<u>15,404,869,828</u>	<u>554,087,908</u>	<u>205,642,539</u>	<u>348,445,369</u>	
		Percentage Change	3.73%	1.38%	2.35%	

Average Residential Assessment

2023	690,412		2022	620,994	
2024	696,738	(excluding non-market change)	2023	679,452	(excluding non-market change)
\$ Increase	6,326		\$ Increase	58,458	
Percentage Change	0.92%		Percentage Change	9.41%	
2023	690,412		2022	620,994	
2024	706,490	(including non-market change)	2023	690,412	(including non-market change)
\$ Increase	16,078		\$ Increase	69,418	
Percentage Change	2.33%		Percentage Change	11.18%	

HISTORICAL PROPERTY ASSESSMENT ANALYSIS

ATTACHMENT 3

	2020	2021	2022	2023	2024
Residential Assessment	\$ 8,390,412,980	\$ 8,766,207,105	\$ 11,593,343,443	\$ 13,009,425,743	\$ 13,373,859,005
Year over year change		\$ 375,794,125 4.48%	\$ 2,827,136,338 32.25%	\$ 1,416,082,300 12.21%	\$ 364,433,262 2.80%
Non-Market Change (Growth)		\$ 120,229,200 1.43%	\$ 176,825,475 2.02%	\$ 206,519,800 1.78%	\$ 184,615,836 1.42%
Market Change		\$ 255,564,925 3.05%	\$ 2,650,310,863 30.23%	\$ 1,209,562,500 10.43%	\$ 179,817,426 1.38%
Residential Occurances		18,194	18,669	18,843	18,930
Average Residential Assessment excluding growth		\$ 475,210	\$ 611,523	\$ 679,452	\$ 696,738
Year over year change from Average Residential Assessment		\$ 13,463 2.92%	\$ 129,704 26.92%	\$ 58,458 9.41%	\$ 6,326 0.92%
Average Residential Assessment	\$ 461,747	\$ 481,819	\$ 620,994	\$ 690,412	\$ 706,490
Year over year change		\$ 20,072 4.35%	\$ 139,175 28.89%	\$ 69,418 11.18%	\$ 16,078 2.33%
Business Assessment	\$ 1,404,268,170	\$ 1,378,794,910	\$ 1,545,250,701	\$ 1,729,051,877	\$ 1,899,814,830
Year over year change		\$ (25,473,260) -1.81%	\$ 166,455,791 12.07%	\$ 183,801,176 11.89%	\$ 170,762,953 9.88%
Non-Market Change (Growth)		\$ 7,466,599 0.53%	\$ 6,069,659 0.44%	\$ 15,914,483 1.03%	\$ 13,759,407 0.80%
Market Change		\$ (32,939,859) -2.35%	\$ 160,386,132 11.63%	\$ 167,886,693 10.86%	\$ 157,003,546 9.08%

HISTORICAL RATE INFORMATION

	2020	2021	2022	2023	2024 - Option 1
Residential Tax Rate	3.406120	3.398079	2.823696	2.696373	2.799875
Business Tax Rate	9.590620	9.995291	9.425083	8.727969	8.430002
Business to Residential Tax Rate Multiplier	2.8157	2.9415	3.3379	3.2369	3.0108
Residential Tax Base	\$ 28,442,766	\$ 29,788,261 66.58%	\$ 32,736,081 67.28%	\$ 35,078,262 67.94%	\$ 37,445,138 67.96%
Business Tax Base	\$ 13,588,164	\$ 13,781,456 30.80%	\$ 14,564,115 29.93%	\$ 15,091,112 29.23%	\$ 16,015,443 29.07%
Other Classes Tax Base	\$ 1,106,369	\$ 1,170,388 2.62%	\$ 1,357,583 2.79%	\$ 1,462,868 2.83%	\$ 1,638,729 2.97%
Total Tax Base	\$ 43,137,299	\$ 44,740,105	\$ 48,657,779	\$ 51,632,242	\$ 55,099,311
City Taxes for Average House excluding non-market change		1,615	1,727	1,832	1,951
City Taxes for Average House from prior year		1,573	1,637	1,753	1,862
Current Year Average house excluding non-market change less City taxes for average house from prior year		42 2.67%	89 5.47%	79 4.48%	89 4.79%
City Taxes for Average House	1,573	1,637	1,753	1,862	
Business - \$1 million assess with prior year tax rate		9,591	9,995	9,425	8,728
Current year increase/decrease in assessments due to Market		-2.35%	11.63%	10.86%	9.08%
Business - \$1 million assess adjusted by current year Market change		9,760	10,521	9,676	9,195
Difference		170 1.77%	526 5.26%	251 2.66%	467 5.36%