



MACLEOD RESIDENCE

364 EAST 14TH STREET, NORTH VANCOUVER BC

CONSERVATION PLAN

JUNE 2019

DONALD LUXTON
AND ASSOCIATES INC 

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1.0 INTRODUCTION

NAME: MACLEOD RESIDENCE
ADDRESS: 364 EAST 14TH STREET, NORTH VANCOUVER, BRITISH COLUMBIA
ORIGINAL OWNER: DUNCAN P. CLARK
FIRST RESIDENTS: WILLIAM RAY AND BEULAH ROSSLAND MACLEOD
BUILDER: WILLIAM SMITH
DATE OF CONSTRUCTION: 1921

The MacLeod Residence, constructed in 1921, is an important example of an interwar residential building constructed during a period of recovery throughout British Columbia, including the Central Lonsdale neighbourhood of North Vancouver. Designed in the Craftsman architectural style, the house was built with local, high quality materials. The MacLeod family, including educator and war veteran William Ray and his wife, Beulah, were the first residents of the house. For close to

a century, the MacLeod Residence has stood as a reminder of the early history of the Central Lonsdale neighbourhood.

This Conservation Plan is based on Parks Canada's *Standards & Guidelines for the Conservation of Historic Places in Canada*. It outlines the preservation, restoration, and rehabilitation that will occur as part of the proposed development.

2.0 HISTORIC CONTEXT

During the first several years of its incorporated existence, the City of North Vancouver was often referred to as 'The Ambitious City'. This was understandable considering the tremendous growth and prosperity of those years, but the City's fortunes followed the general booms and busts of the local economy. After regular ferry service was established in 1903 and the city was incorporated in 1907, North Vancouver experienced a period of unprecedented growth and prosperity. This construction boom accelerated until a general financial depression in 1913 halted this ambitious suburban development. The MacLeod Residence was constructed in 1921, just as the economy was beginning to recover from the effects of the First World War. As soldiers, including first resident William MacLeod, returned to B.C., additional housing was required to accommodate the increasing population. It was, however, many years before the City fully recovered, and the growth that was reestablished during the late 1920s was also curtailed; this time, due to the onset of the Great Depression. During World War Two, the City became a hub of wartime industrial production, and after the cessation of hostilities, it settled into a period of gradual development.

Lower Lonsdale, the commercial core of North Vancouver, is also the earliest and most historic area on the North Shore of Burrard Inlet, and contains many of the City's oldest commercial buildings. The streetcar, ferry to Vancouver and the PGE railway converged at the southern foot of Lonsdale Avenue, the major transportation hub on the North Shore. The area represents a formative period in B.C.'s economy, driven at the time by major industries including logging and shipbuilding. Located to the north of the Lower Lonsdale area, the siting of the MacLeod Residence, along East 14th Street, several blocks east of Lonsdale Avenue, was a popular and convenient area for local residents; close enough to services and transportation hubs, but far enough removed to enjoy a tranquil lifestyle.

The following is an excerpt from the 1921 Wrigley's British Columbia Directory, written the year the MacLeod Residence was constructed:

The North Shore of Burrard Inlet is divided into three municipalities; The District of North Vancouver, which at one time embraced the whole area between the North Arm of the Inlet on the east and Howe Sound on the west, but is now restricted to the area outside of the city, bounded by the Capilano River on the west and the North Arm on the east; the City of North Vancouver, embracing a central area of about 3,500 acres; and the District of West Vancouver, extending from the Capilano River on the east to Howe Sound on the west.

The North Shore industries include the following: Wallace Shipyards, Ltd., North Shore Shingles, Ltd., E. C. Walsh Lumber Co., Ltd., McNair Lumber and Shingles, Ltd., Hobson & Hobson Shingle Mill all within the city; Vancouver Creosoting Works, Capilano Timber Co., Ltd., Robert Dollar Timber Co., Ltd., Vancouver Lumber Co., Ltd., Cedars Ltd., Lynn Valley Lumber Co., Ltd., and the D. Bailey Mill Co., all in the District of North Vancouver; and the Vedder River Shingle Co. and the Askew Shingle Mill, in the District of West Vancouver. There are excellent summer resorts at Woodlands, Deep Cove and other points on the North Arm, and at many different points between Ambleside Ferry Landing on the east and Whitecliff at the terminus of a local branch of the P.G.E. Railway on the west.

At present all transportation to outside points from these municipalities is by ferry boats. A ferry service is operated between the cities of Vancouver and North Vancouver, owned by the latter city, and carries upwards of 3,000,000 passengers annually and a large number of vehicles of all kinds, loaded and unloaded. Efforts are now being put forth to

have this service made a joint charge on all the municipalities interested and to reduce the ferry charges to a lower rate.

West Vancouver is connected with the North Vancouver ferry by means of the P.G.E. Railway, but the Municipal Council also operates a ferry service from Ambleside to Vancouver for passengers and freight, but not for vehicles. In 1920 they carried over 900,000 passengers. The eastern end of the North Vancouver District is served by ferry boats from Vancouver to different points on the North Arm. Strenuous efforts are now being put forth to have a large joint traffic and railway bridge erected at the Second Narrows. The carrying out of this work would at once open up thousands of acres of land admirably adapted for industrial sites, and about 20 miles of deep-water frontage suitable for docks and works of all kinds. Considerable benefit will be conferred by the installation of a car ferry to bring freight cars from the Government docks to connect with the P.G.E. Railway on the North Shore. Suitable barges and docks are not being constructed.

The Capilano Timber Company have constructed a railway up the side of Capilano River to give access to extensive timber limits there.

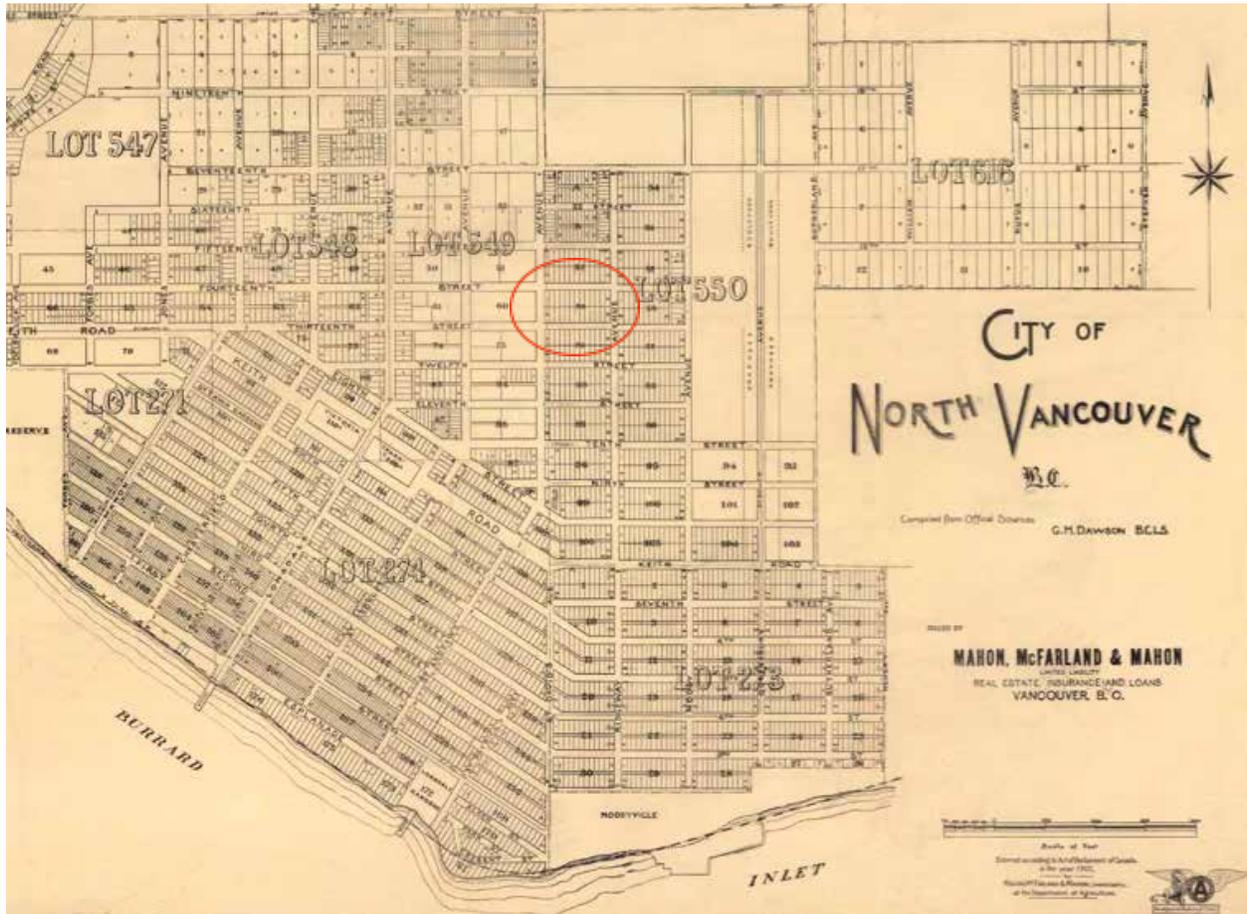
There are several well developed copper and zinc claims near the source of the Lynn Creek, and it is claimed that very valuable iron deposits exist near the headwaters of the Seymour River.

The North Shore is famous for the number of beautiful mountains adjoining, including the Lions (6,500 ft.). Mount Crown (5,450 ft.), and Grouse Mountain (4,500 ft.)

The North Shore possesses a number of beautiful streams of the finest kind of water for domestic and industrial purposes. The principal of these are the Capilano and the Seymour rivers, both of which have been tapped to supply the City of Vancouver and its suburbs with water for all requirements, and the Lynn Creek, which is the source whence the City of North Vancouver takes its water service.

These streams are all great resorts for fishermen, and in summer they are visited by many thousands of tourists from all parts of the world. Notable canyons are on all the streams, but certainly the most notable are those on the Capilano River.

The population on the North Shore is approximately from 12,000 to 15,000.



City of North Vancouver, 1907, Library and Archives Canada e011202289, Block 52, future location of the MacLeod Residence, circled in red



Ferry Landing, 1910, Foot of Lonsdale in North Vancouver, City of Vancouver Archives (CVA) 371-2133



Lower Lonsdale 1913, North Vancouver Museum and Archives 10822



North Vancouver waterfront, 1919, CVA 1123-8



Ferry line-up on Lonsdale Avenue up to Eighth Street, 1931, CVA Br P75.2



Ferry Slip at the foot of Lonsdale, 1958, CVA 288-072.2

B. C. Co.
196 O/S Batts, Western University, *Original*
ATTESTATION PAPER. No. **911908**
Full

CANADIAN OVER-SEAS EXPEDITIONARY FORCE.

QUESTIONS TO BE PUT BEFORE ATTESTATION.

1. What is your surname? **Mac LEOD**
- 1a. What are your Christian names? **William Ray**
- 1b. What is your present address? **Atchely, B.C. Canada.**
2. In what Town, Township or Parish, and in what Country were you born? **Chilliwack, B.C.**
3. What is the name of your next of kin? **John Alexander MacLeod**
4. What is the address of your next of kin? **Atchely, B.C.**
- 4a. What is the relationship of your next of kin? **Father**
5. What is the date of your birth? **June 25th, 1892**
6. What is your Trade or Calling? **School Teacher**
7. Are you married? **No**
8. Are you willing to be vaccinated or re-vaccinated and inoculated?
9. Do you now belong to the Active Militia?
10. Have you ever served in any Military Force? **Yes**
1st Officers Training Corps - 8 mos
11. Do you understand the nature and terms of your engagement?
12. Are you willing to be attested to serve in the CANADIAN OVER-SEAS EXPEDITIONARY FORCE? **Yes**

DECLARATION TO BE MADE BY MAN ON ATTESTATION.

William Ray MacLeod do solemnly declare that the above are answers made by me to the above questions and that they are true, and that I am willing to fulfil the engagements made by me now made, and I hereby engage and agree to serve in the Canadian Over-Sea Expeditionary Force, and to be attached in any part of the service thereof, for the term of one year, or during the war now existing between Great Britain and Germany should that war last longer than one year, and for six months after the termination of that war provided His Majesty should so long require my services, or until legally discharged.

Date: *May 5th* 1916 *W. Ray MacLeod* (Signature of Recruit)
St. P. S. Atchely (Signature of Witness)

OATH TO BE TAKEN BY MAN ON ATTESTATION.

William Ray MacLeod do make Oath, that I will be faithful and bear true Allegiance to His Majesty King George the Fifth, His Heirs and Successors, and that I will do in duty bound honestly and faithfully defend His Majesty, His Heirs and Successors, in Person, Crown and Dignity, against all enemies, and will observe and obey all orders of His Majesty, His Heirs and Successors, and of all the Generals and Officers set over me. So help me God.

Date: *May 5th* 1916 *W. Ray MacLeod* (Signature of Recruit)
St. P. S. Atchely (Signature of Witness)

CERTIFICATE OF MAGISTRATE.

The Recruit above named was examined by me that if he made any false answer to any of the above questions he would be liable to be punished as provided in the Army Act.

The above questions were then read to the Recruit in my presence.

I have taken care that he understands each question, and that his answer to each question has been duly repeated as required to, and the said Recruit has made and signed the declaration and taken the oath before me, at *Vancouver* this *fifth* day of *May* 1916

W. R. M. Co.
1916 - 14
C. S. 10000

Description of *MacLeod William Ray* on Enlistment.

Apparent Age *23* years *11* months

Height *5 ft 2 1/2 in*

Weight (Milk when fully expanded) *127 1/2 lb*

Range of expansion *5 1/2 in*

Complexion *Medium*

Eyes *Grey*

Hair *Brown*

Church of England

Presbyterian

Methodist

Report of Congregationalist

Roman Catholic

Jewish

Other denominations

Buildings marks, and marks following surgical operations or previous illness

No visible marks

Scar over R frontal bone
Small scar over L eyebrow
Little finger R hand missing
Scar on front L wrist

CERTIFICATE OF MEDICAL EXAMINATION.

I have examined the above-named Recruit and find that he does not present any of the causes of rejection specified in the Regulations for Army Medical Services.

He was seen at the required distance with either eye; his heart and lungs are healthy; he has the use of his joints and limbs, and he declares that he is not subject to fits of any description.

I consider him *F.F.C.* fit for the Canadian Over-Sea Expeditionary Force.

Date: *May 5* 1916 *W. R. M. Co.* (Signature of Medical Officer)
Vancouver (Place)

CERTIFICATE OF OFFICER COMMANDING UNIT.

William Ray MacLeod having been duly approved and inspected by me this day, and his Name, Age, Date of Attestation, and every particular particular having been recorded, I certify that I am satisfied with the correctness of this Attestation.

W. R. M. Co. (Signature of Officer)

Date: **YANCOUVER JUN 1 1916**

Library & Archives Canada: Soldiers of the First World War CEF: MACLEOD, WILLIAM RAY; Regimental number(s): 911908, Reference: RG 150, Accession 1992-93/166, Box 7097 – 26; Date of Birth: 25/06/1892

MARKETING ACT IS FAVORED

Government Knows What It Is Doing, Declares W. L. Macken.

MARKETING REGULATION

Hon. Mackenzie King, the Opposition, is questioning the constitutionality of the Marketing Act. I happen to know the department of justice has considered this question very carefully several weeks, and we know the government will not commit anything it is not prepared to do.

Mr. W. L. Macken, vice-president of the Fraser Valley Milk Association, in an address before the Board of Trade last night, said the subject of "The Producer at the Center" is the subject of the Marketing Act.

Mr. Macken explained that the new legislation will undoubtedly be passed, and also that there is unanimity among both producers and consumers, and that there should be no question of marketing.

Mr. Macken took a dig at the Chamber of Commerce, which put out a questionnaire on the subject, when he said that it is the nature of the question that some of the raised issues for which the marketing act becomes law.

Confidence in the men asking the questions continued. "They are at you in the desire that all fit from it, consumer as well as producer, for it is only by harmonious community of interest that marketing problems will be ironed out."

Mr. Macken devoted the greater part of his talk to the British Marketing Act, showing its wide powers, and the act as part of the economic revolution. The act, he said, is only a regulation designed to be dormant until the provinces have passed their marketing acts. Some think the act will not go far enough, while others think its constitutionality, he

IN the DOMAIN of ART

CA Weekly Causerie - - - of Interest to Art Lovers

By RETA W. MYERS

ELECTION of ten members to the council of the Vancouver Art Gallery Association will be the major piece of business to be undertaken at the third annual meeting of this group which will be held at the gallery on May 16. Within the next week nomination forms will be sent out to all members with the request that they file the names of those whom they feel would be valuable members of this body.

Following previous elections there has always appeared to be considerable criticism of the personnel of the council, with particular reference to the fact that several members' names have been passed over, although their qualifications appear to be most desirable. If those who are most prone to criticize would take an interest in the matter before the election, we would have more sympathy for them.

Now is the time to consider the matter. The government of the gallery and its affairs should be of utmost interest to members of the Art Gallery Association. Careful selection of names for nomination and then full attendance at the annual meeting so that the election represents the full opinion of the body would seem to ensure best results. Too often those who have criticized the council have been those who have not taken the trouble to attend the election and cast their own vote.

The place of artists in this body is also a point that is worthy of consideration. While laymen have the common sense and business experience so necessary to the government of such an organization, the place of the artist is paramount when it comes to the judgment of work. The fact that there are different schools of opinion and that the layman feels the artists themselves can not agree, should have little bearing on the matter. No matter how an artist leans, the fact remains that behind him he has years of study and training that give him proper understanding of the necessary fundamentals of painting and sculpture. Such opinions are valuable and will result in adding considerably to the prestige and reputation of the gallery, both locally and abroad.

Watching from the sidelines, it appears that there is too great a gulf between artist and layman and that a closer relation between the two would

are free to choose from a variety of scene that offers the vast new workshops and factories to be found in all parts of the Union, the naval dockyards at Leningrad or the tea plantations at Batoum. On their return they must produce work illustrative of their travels at an exhibition especially organized for the purpose. Such work remains the property of the artist.

In two years more than 1000 artists were sent to different parts of the Union, the resulting work showing that the artists had no dearth of inspiration. Intense realism is the keynote of contemporary Russian art, and as yet there is no place for the stunted and the quack. But the revolution has given such impetus to the artists of the Soviet regime that, urged to expression by an irresistible uprush of renewed vitality, they are creating a new world of colors, figures and ideas, with violent enthusiasms and titanic forces struggling together in the rebirth of a great nation.

INCIDENTALLY, it is interesting to know that the Artists' Co-operative, the organization under which professional artists are "rationalized," manufactures all working materials and supplies them at reasonable prices. In this way uniformity of quality and steadiness of supply is assured.

There is much to be said on both sides of the question concerning the organization of artists. Genius blossoms in strange places and art is one commodity that can not be sold across counters. Artists, too, are inclined to be effervescent people not easily organized and sometimes more spurred on by adversity than by having life made easy.

There are many examples of such men who created masterpieces in order to keep from starving in a garret but who never reached the heights when financial responsibility had been lifted. There is something about strivings and struggles that often produce great work. Maybe it is because the mind and body are much more sensitive when not lulled to rest with easy living. Perhaps it is the opportunity for struggle that encourages latent faculties to a pitch where men become more than ordinary mortals and take on some of the attributes of the gods.

It has been proved that during times of depression, national art has taken on greater importance and more worthwhile work is produced than in

CHILLIWACK MOURNS NATIVE SON'S DEATH

Many Attend Funeral of W. R. MacLeod, Popular School Inspector.

CHILLIWACK, April 21.—The funeral of William Ray MacLeod, inspector of public schools in the Peace River block, who died at Pouce Coupe, April 14, was held here Friday noon. Service was conducted in Cooke's Presbyterian Church by Rev. John McTurk and Rev. George Turpin, chaplain of Chilliwack Branch Canadian Legion. There was a very large attendance, including more than 100 returned men in a body, who followed the casket, draped with the Union Jack, to the I. O. O. F. cemetery, where interment was made in the family plot.

Mr. MacLeod was a native son of Chilliwack and a member of one of the Valley's best known and most highly esteemed families. He went overseas with the 196th (University) Battalion, losing a leg and suffering severe shrapnel wounds. Returning from overseas he took up school teaching and was for a number of years principal of Lynn Valley public school, North Vancouver. About three years ago he was appointed to the provincial public school inspectorate staff and assigned to the Peace River district, where he did excellent work and attained a marked degree of popularity.

Deceased was the son of John A. MacLeod, who was a school teacher in the Fraser Valley in early days, and for a number of years reeve of the municipality of Chilliwack.

Besides his father, Mr. MacLeod leaves a wife and two sons; two brothers, Flight-Lieutenant Earl L. MacLeod, of the Royal Canadian Air Force at Winnipeg, and Clarence H. MacLeod at home. The late John Virgil MacLeod, of North Vancouver high school staff, was a brother, and another brother, Malcolm, was killed in the first battle of Ypres. Two sisters are also deceased. Four of the five deaths in the family have occurred in the month of April.

Among those from outside points at the funeral were Flight-Lieutenant MacLeod; S. J. Willis, deputy minister of education, Victoria; A. R. Lord, L. J. Bruce, H. H. Mackenzie, F. G. Calvert, E. G. Daniels, J. G. Pollock, provincial public school inspectors; W. H. Davison, North Vancouver; Mr. and Mrs. W. D. Kipp, Vancouver; Reeve R. M. Grauer, Richmond.

The Daily Province, April 21, 1934, page 18

3.0 STATEMENT OF SIGNIFICANCE

NAME: MacLeod Residence
ADDRESS: 364 East 14th Street, North Vancouver, British Columbia
ORIGINAL OWNER: Duncan P. Clark
FIRST RESIDENTS: William Ray and Beulah Rossland MacLeod
BUILDER: William Smith
DATE OF CONSTRUCTION: 1921

Description of the Historic Place

The MacLeod Residence, located at 364 East 14th Street in North Vancouver's historic Central Lonsdale neighbourhood, is a wood-frame interwar house with Craftsman influences. One and one-half storeys in height, the house is characterized by its prominent side-gabled roof, central shed roof dormer, and full-width verandah.

Heritage Value of the Historic Place

Constructed in 1921, the MacLeod Residence is significant for its association with the economic recovery of the interwar period in North Vancouver, and for its Craftsman architecture.

During the early 1900s, the City of North Vancouver was often referred to as 'The Ambitious City', a name attributed to its tremendous growth and early prosperity. Lonsdale, the historic commercial core of North Vancouver, grew explosively, establishing a streetcar, ferry service to Vancouver, and the PGE railway, all of which converged at the foot of Lonsdale Avenue. Growth and development continued from the turn of the twentieth century until the general financial depression in 1913 halted the ambitious construction of the previous years. The MacLeod Residence is valued as an example of residential architecture constructed shortly after the First World War, as the community's economy was still in recovery. Construction of the house was commissioned in 1921 by the principal of

Lonsdale School, Duncan Clark, and was constructed by local contractor William Smith. The house was sold to fellow educator William Ray MacLeod, a World War One veteran and principal of Lynn Valley School, and his new wife Beulah; the couple remained in the home until 1924. Following the MacLeods, the house was owned by a series of working professionals, including the treasurer of a logging company, an accountant, and another school teacher. The MacLeod Residence represents the type of housing built during the interwar period when smaller-scale one and one-half storey houses in traditional styles were built on vacant lots.

The MacLeod Residence is valued as a very good example of the influence of the Craftsman style, the most popular housing style in the Lower Mainland in the early twentieth century. The Craftsman style was typified by rational space planning, the use of natural materials and a mix of traditional design elements inspired by the Arts and Crafts movement, such as picturesque rooflines, decorative brackets and a rich textural contrast of siding and shingles. Characteristic of the style, the design of this house includes an uninterrupted verandah with tapered verandah piers, exposed raftertails, triangular eave brackets and a variety of wooden siding types. The MacLeod Residence illustrates the gradual economic recovery that followed the end of the First World War, and also the persistence of the Craftsman style.

Character-Defining Elements

The elements that define the heritage character of the MacLeod residence are its:

- original location on East 14th Street in the Central Lonsdale neighbourhood of North Vancouver;
- siting on a corner lot with mature landscaping;
- continuous residential use since 1921;
- residential form, scale and massing as expressed by its: one and one-half storey height with prominent side-gabled roof, and full-width verandah accessed by a flight of steps;
- wood-frame construction with a variety of siding types including cedar shingles and narrow lapped wooden siding;
- features of the Craftsman architectural style including: overhanging eaves with exposed raftertails and triangular eave brackets; pointed bargeboards; full-width front verandah with square wooden columns at each corner and square newel posts on either side of the staircase; shingle clad tapered verandah piers; decorative open verandah balustrade; closed low stair balustrade; central shed roof dormer on front elevation and central shed roof wall dormer on rear elevation; wooden bellyband; and bellcast cedar shingle cladding of the main body with narrow lapped wooden siding on the foundation level;
- wooden-sash and frame windows including: single, paired, and tripartite casement and double-hung assemblies with bellcast shingles above each frame on the main body; and
- masonry elements including its concrete foundation, and internal central red brick chimney.

4.0 CONSERVATION GUIDELINES

4.1 STANDARDS AND GUIDELINES

The MacLeod Residence is an A-listed building on the municipal heritage register and is a significant historical resource in the City of North Vancouver. The Parks Canada's *Standards & Guidelines for the Conservation of Historic Places in Canada* is the source used to assess the appropriate level of conservation and intervention. Under the *Standards & Guidelines*, the work proposed for the MacLeod Residence includes aspects of preservation, rehabilitation and restoration.

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

Interventions to the MacLeod Residence should be based upon the Standards outlined in the *Standards & Guidelines*, which are conservation principles of best practice. The following **General Standards** should be followed when carrying out any work to an historic property.

STANDARDS

Standards relating to all Conservation Projects

1. Conserve the heritage value of a historic place. Do not remove, replace, or substantially alter its intact or repairable character-defining elements. Do not move a part of a historic place if its current location is a character-defining element.
2. Conserve changes to a historic place, which 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 a historic place that requires minimal or no change to its character defining elements.
6. Protect and, if necessary, stabilize a historic place until any subsequent intervention is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbance of archaeological resources, take mitigation measures to limit damage and loss of information.
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 the 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 upon close inspection. Document any intervention for future reference.

4.0 CONSERVATION GUIDELINES

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 a historic place and 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 a 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.

4.2 CONSERVATION REFERENCES

The proposed work entails the preservation, restoration and rehabilitation of the exterior of the MacLeod Residence and the rehabilitation of the surrounding site. The following conservation resources should be referred to:

Standards and Guidelines for the Conservation of Historic Places in Canada, Parks Canada, 2010.
<http://www.historicplaces.ca/en/pages/standards-normes/document.aspx>

National Park Service, Technical Preservation Services. Preservation Briefs:

Preservation Brief 6: Dangers of Abrasive Cleaning to Historic Buildings.
<http://www.nps.gov/tps/how-to-preserve/briefs/6-dangers-abrasive-cleaning.htm>

Preservation Brief 10: Exterior Paint Problems on Historic Woodwork.
<http://www.nps.gov/tps/how-to-preserve/briefs/10-paint-problems.htm>

Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns.
<http://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm>

Preservation Brief 37: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing.
<http://www.nps.gov/tps/how-to-preserve/briefs/37-lead-paint-hazards.htm>

Preservation Brief 39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.
<http://www.nps.gov/tps/how-to-preserve/briefs/39-control-unwanted-moisture.htm>

Preservation Brief 45: Preserving Historic Wooden Porches.
<http://www.nps.gov/tps/how-to-preserve/briefs/45-wooden-porches.htm>

4.3 GENERAL CONSERVATION STRATEGY

The primary intent is to preserve the existing historic structure, while undertaking a rehabilitation of the exterior balconies and surrounding site to increase the site's functionality for continued residential use. As part of the scope of work, character-defining elements will be preserved, while missing or deteriorated elements will be restored. A new infill structure is proposed to the rear of the historic residence, and the original garage will be removed.

Proposed Redevelopment Scheme

The development scheme for this property has been prepared by Bradbury Architecture and Karl Wein Associates. The major proposed interventions of the overall project are to:

- preserve the historic structure in-place;
- remove the exterior main floor rear balcony;
- rehabilitate the front balcony by extending to the west; and
- demolish the existing garage to accommodate construction of a new duplex infill structure to the rear of the site.

Due to the proposed new infill building on site, all new visible construction will be considered a modern addition to the historic structure. The *Standards & Guidelines* list recommendations for new additions to historic places. The proposed design scheme should follow these principles:

- Designing a new addition in a manner that draws a clear distinction between what is historic and what is new.
- Design for the new work may be contemporary or may reference design motifs from the historic place. In either case, it should be compatible in terms of mass, materials, relationship of solids to voids, and colour, yet be distinguishable from the historic place.
- The new additions should be physically and visually compatible with, subordinate to and distinguishable from the preserved historic façade.

An addition should be subordinate to the historic place. This is best understood to mean that the addition must not detract from the historic place or impair its heritage value. Subordination is not a question of size; a small, ill-conceived addition could adversely affect an historic place more than a large, well-designed addition.

Additions or new construction should be visually compatible with, yet distinguishable from, the historic place. To accomplish this, an appropriate balance must be struck between mere imitation of the existing form and pointed contrast, thus complementing the historic place in a manner that respects its heritage value.

4.4 SUSTAINABILITY STRATEGY

Heritage conservation and sustainable development can go hand in hand with the mutual effort of all stakeholders. In a practical context, the conservation and re-use of historic and existing structures contributes to environmental sustainability by reducing solid waste disposal, saving embodied energy, and conserving historic materials that are often less consumptive of energy than many new replacement materials.

In 2016, the Federal Provincial Territorial Ministers of Culture & Heritage in Canada (FPTMCHC) published a document entitled, *Building Resilience: Practical Guidelines for the Retrofit and Rehabilitation of Buildings in Canada* that is "intended to establish a common pan-Canadian 'how-to' approach for practitioners, professionals, building owners, and operators alike."

The following is an excerpt from the introduction of the document:

[Building Resilience] is intended to serve as a "sustainable building toolkit" that will enhance understanding of the environmental benefits of heritage conservation and of the strong interrelationship between natural and built heritage conservation. Intended as a

4.0 CONSERVATION GUIDELINES

*useful set of best practices, the guidelines in **Building Resilience** can be applied to existing and traditionally constructed buildings as well as formally recognized heritage places.*

These guidelines are primarily aimed at assisting designers, owners, and builders in providing existing buildings with increased levels of sustainability while protecting character-defining elements and, thus, their heritage value. The guidelines are also intended for a broader audience of architects, building developers, owners, custodians and managers, contractors, crafts and trades people, energy advisers and sustainability specialists, engineers, heritage professionals, and officials responsible for built heritage and the existing built environment at all jurisdictional levels.

***Building Resilience** is not meant to provide case-specific advice. It is intended to provide guidance with some measure of flexibility, acknowledging the difficulty of evaluating the impact of every scenario and the realities of projects where buildings may contain inherently sustainable elements but limited or no heritage value. All interventions must be evaluated based on their unique context, on a case-by-case basis, by experts equipped with the necessary knowledge and experience to ensure a balanced consideration of heritage value and sustainable rehabilitation measures.*

***Building Resilience** can be read as a stand-alone document, but it may also further illustrate and build on the sustainability considerations in the *Standards and Guidelines for the Conservation of Historic Places in Canada*.*

4.5 ALTERNATE COMPLIANCE

As a listed building on the Municipal Heritage Register, the MacLeod Residence may be eligible for heritage variances that will enable a higher degree of heritage conservation and retention of original material, including considerations available under the following municipal legislation.

4.5.1 BRITISH COLUMBIA BUILDING CODE

Building Code upgrading ensures life safety and long-term protection for historic resources. It is important to consider heritage buildings on a case-by-case basis, as the blanket application of Code requirements do not recognize the individual requirements and inherent strengths of each building. Over the past few years, a number of equivalencies have been developed and adopted in the British Columbia Building Code that enable more sensitive and appropriate heritage building upgrades. For example, the use of sprinklers in a heritage structure helps to satisfy fire separation and exiting requirements. Table A-1.1.1.1., found in Appendix A of the Code, outlines the “Alternative Compliance Methods for Heritage Buildings.”

Given that Code compliance is such a significant factor in the conservation of heritage buildings, the most important consideration is to provide viable economic methods of achieving building upgrades. In addition to the equivalencies offered under the current Code, the City can also accept the report of a Building Code Engineer as to acceptable levels of code performance.

4.5.2 ENERGY EFFICIENCY ACT

The provincial Energy Efficiency Act (Energy Efficiency Standards Regulation) was amended in 2009 to exempt buildings protected through heritage designation or listed on a community heritage register from compliance with the regulations. Energy Efficiency standards therefore do not apply to windows, glazing products, door slabs or products installed in heritage buildings. This means that exemptions can be allowed to energy upgrading measures that would destroy heritage character-defining elements such as original windows and doors.

4.0 CONSERVATION GUIDELINES

These provisions do not preclude that heritage buildings must be made more energy efficient, but they do allow a more sensitive approach of alternate compliance to individual situations and a higher degree of retained integrity. Increased energy performance can be provided through non-intrusive methods of alternate compliance, such as improved insulation and mechanical systems. Please refer to the *Standards & Guidelines for the Conservation of Historic Places in Canada* for further detail about “Energy Efficiency Considerations.”

4.5.4 HOMEOWNER PROTECTION ACT

The Homeowner Protection Act was implemented in 1998 as a means to strengthen consumer protection for the purchase of new homes. The act was passed following a commission of enquiry into the leaky condo crisis, and was intended on protecting homeowners by ensuring home warranty insurance was provided on new construction, covering two years on labour and materials, five years on the building envelope and 10 years on the structure of the home. As the Act was intended to regulate new construction, considerations were not taken of buildings that have remained in sound condition for a many number of years that already far exceeded what the HPA requires for a warranty on a new home. The act did not take into consideration the protection of heritage projects, and consequently resulted in the loss of significant heritage fabric through the requirement of new windows and rainscreen wall assemblies on residential heritage rehabilitation projects. An example being the requirement to remove original wooden siding that has successfully protected the building for 100 years, and replace it with a rainscreen assembly that is only warrantied for five years. Not only was valuable heritage fabric lost, but new materials will likely not last nearly as long as the original.

Amendments to the Homeowner Protection Act Regulation made in 2010 allow for exemptions for heritage sites from the need to fully conform to the BC Building Code under certain conditions, thus removing some of the barriers to compliance that previously conflicted with heritage conservation standards and guidelines. The changes comprised:

1. an amendment to the Homeowner Protection Act Regulation, BC Reg. 29/99 that allows a warranty provider, in the case of a commercial to residential conversion, to exclude components of the building that have heritage value from the requirement for a warranty, and
2. clarification of the definition of ‘substantial reconstruction.’ The latter clarification explains that 75% of a home must be reconstructed for it to be considered a ‘new home’ under the Homeowner Protection Act, thus enabling single-family dwelling to multi-family and strata conversions with a maximum of 75% reconstruction to be exempt from home warranty insurance. The definition of a heritage building is consistent with that under the Energy Efficiency Act.

The MacLeod Residence falls into the second category, as the proposed project involves retaining a high degree of the original structure and less than 75% of the house will be reconstructed. Consequently, this project is not considered a substantial reconstruction as per the amended definition in the Homeowners Protection Act, and will be exempt from the requirement of a warranty. This amendment will enable a higher degree of retention and preservation of original fenestration, siding and woodwork.

4.6 SITE PROTECTION & STABILIZATION

It is the responsibility of the owner to ensure the heritage resource is protected from damage at all times. At any time that the building is left vacant, it should be secured against unauthorized access or damage through the use of appropriate fencing and security measures. Additional measures to be taken include:

- Are smoke and fire detectors in working order?
- Are wall openings boarded up and exterior doors securely fastened once the building is vacant?
- Have the following been removed from the interior: trash, hazardous materials such as inflammable liquids, poisons, and paints and canned goods that could freeze and burst?

The building should be protected at all times during construction work. Install monitoring devices to document and assess cracks and possible settlement of the facades, as required.

5.0 CONSERVATION RECOMMENDATIONS



A condition review of the MacLeod Residence was carried out during a site visit on May 28, 2019. The recommendations for the preservation, restoration and rehabilitation of the historic site are based on the site review and archival research that provide valuable information about the original appearance of the historic building.

The following chapter describes the materials, physical condition and recommended conservation strategy for the MacLeod Residence based on Parks Canada *Standards & Guidelines for the Conservation of Historic Places in Canada*.

5.1 SITE

The McLeod Residence sits on a prominent corner lot at East 14th Street and Ridgeway Avenue in the City of North Vancouver. The house is recognized as a category A heritage resource on the Municipal Heritage Register. A part of the redevelopment of the site, the historic residence will be preserved in its original location and the rear garage will be demolished to accommodate construction of the proposed infill structure. The west and north sides of the house will be rehabilitated to accommodate the revised deck configuration while the street-fronting east and south sides of the house will be preserved.

All heritage resources within the site should be protected from damage or destruction at all times. Reference Section 4.6: Site Protection for further information.

5.0 CONSERVATION RECOMMENDATIONS



Conservation Strategy: Rehabilitation

- Preserve the original location of the building. All rehabilitation work should occur within the property lines. Retain the main frontage on East 14th Street.
- Any drainage issues should be addressed through the provision of adequate site drainage measures.
- Carefully salvage relevant material from original garage for use on main house prior to demolition.
- Design a new infill structure to the north of the historic structure that is “physically and visually compatible with, subordinate to, and distinguishable from the historic place” as recommended in **Standard 11**.

5.2 FORM, SCALE & MASSING

The MacLeod Residence features a residential form, scale and massing as expressed by its one and one-half storey height with prominent side-gabled roof, and full-width verandah accessed by a flight of steps. As part of the scope of work, the overall form, scale and massing of the historic residence.

Conservation Strategy: Preservation

- Preserve the overall form, scale and massing of the building.

5.0 CONSERVATION RECOMMENDATIONS

5.3 FOUNDATIONS

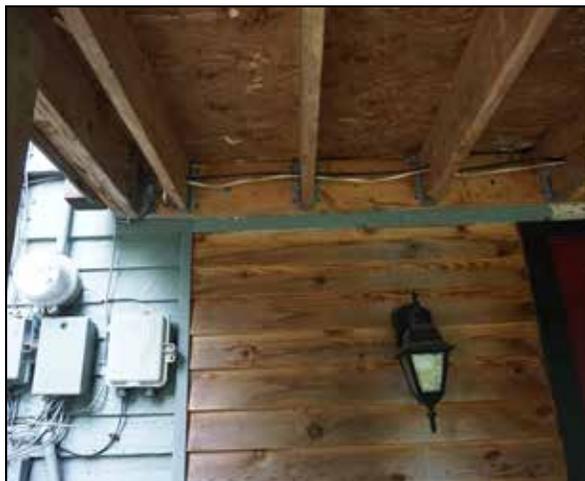
The historic residence sits on original concrete foundations, which will be retained in place as part of the redevelopment scheme. Careful attention should be executed to ensure the foundations are not damaged during adjacent construction work.

Conservation Strategy: Preservation

- Existing foundations should be preserved.
- If foundations are to be rehabilitated or new foundations are proposed in the future, concrete is a suitable material. New material should match original in appearance, as viewed from the exterior.
- In the event of any structural rehabilitation of the historic house, foundations should be reviewed by a Structural Engineer. Once condition is assessed, conservation recommendations can be finalized.

5.4 EXTERIOR WOOD-FRAME WALLS

The MacLeod house has been maintained in good condition and features a Craftsman architectural style. Character-defining exterior elements include the overhanging eaves with exposed raftertails and triangular eave brackets pointed bargeboards, full-width front verandah with square wooden columns



at each corner and square newel posts on either side of the staircase, shingle clad tapered verandah piers, decorative open verandah balustrade, closed low stair balustrade, central shed roof dormer on front elevation and central shed roof wall dormer on rear elevation, wooden bellyband, and bellcast cedar shingle cladding of the main body with narrow lapped wooden siding on the foundation level. As part of the scope of work, character-defining elements will be preserved, and repaired where required. Exterior siding on the rear elevation below deck and where deck will be removed should be restored to match existing.

Conservation Strategy: Preservation

- Due to the integrity of wood frame structure, the exterior walls should be preserved through retention and in-situ repair work.
- Preserve the original wood-frame structure of the historic building.
- Preserve original siding on all elevations. Exterior siding on the rear elevation below deck and where deck will be removed should be restored to match existing.
- Replace any damaged siding to match existing in material, size, profile and thickness. Utilize salvaged shingles from garage, where possible.
- At time of repainting, clean siding using approved heritage cleaning procedures.
- Cleaning procedures should be undertaken with non-destructive methods. Areas with biological growth should be cleaned using a soft, natural bristle brush, without water, to remove dirt and other material. If a more intense cleaning is required, this can be accomplished with warm water, mild detergent (such as D/2 Biological Solution®) and a soft bristle brush. High-pressure power washing, abrasive cleaning or sandblasting should not be allowed under any circumstances.

5.4.1 WOOD TRIM

The house features original painted wood trim, which is in good condition and will be preserved. In locations where trim may be damaged or missing, new wood trim to match original in kind will be installed and painted to match existing.

5.0 CONSERVATION RECOMMENDATIONS



Conservation Strategy: Preservation

- Any existing trim should be preserved, and new material that is visually physically compatible with the original should be reinstated when original fabric is missing. Combed and/or textured lumber is not acceptable. Hardi-plank or other cementitious boards are not acceptable

5.5 VERANDAH/ PORCH

The historic residence features a character-defining front verandah with original detailing. As part of the proposed redevelopment, the front verandah will be extended to the west and wrapped around the side of the house. Railing design should be compatible with but distinguishable from historic original.

Heritage homes were typified by a low balustrade of approximately 24" in height. To ensure the heritage character of the house is preserved, the restored balustrade design should reflect the original configuration. In order to restore the original balustrade height, alternate compliance measures should be explored, such as the use of metal pipe rail and glass panels to make up the remaining height to meet code requirements.

Conservation Strategy: Rehabilitation

- Existing balustrade should be preserved.
- Existing low height of the balustrade should be retained, with alternate compliance methods utilized to achieve code height, if required.
- New possible alternative materials may be glass panels, metal pipe rails or a combination of both.
- New balustrade on west verandah extension should be compatible yet distinguishable from the historic original. To be reviewed by heritage consultant.

5.0 CONSERVATION RECOMMENDATIONS



5.6 FENESTRATION

Windows, doors and storefronts are among the most conspicuous feature of any building. In addition to their function — providing light, views, fresh air and access to the building — their arrangement and design is fundamental to the building's appearance and heritage value. Each element of fenestration is, in itself, a complex assembly whose function and operation must be considered as part of its conservation.

— Standards and Guidelines for the Conservation of Historic Places in Canada.

5.6.1 WINDOWS

All windows on the MacLeod residence have previously been rehabilitated and appear to be in good condition. As part of the scope of work, windows will be preserved and repaired, as required. Any alterations or proposed new windows to be reviewed by heritage consultant.

Conservation Strategy: Preservation

- Inspect for condition and complete detailed inventory to determine condition of all windows.
- Retain existing window sashes; repair as required; install replacement matching sashes where missing or beyond repair.
- Preserve and repair as required, using in kind repair techniques where feasible.
- Prime and repaint as required in appropriate colour, based on colour schedule devised by Heritage Consultant.



5.6.2 DOORS

All existing doors will be preserved with the exception of the rear patio door, which may be converted into a window.

Conservation Strategy: Preservation and Rehabilitation

- Retain the door openings in their existing locations, and preserve and repair all existing doors.
- Rehabilitate rear main-level door following removal of deck. Replace with window, as desired. Consider utilizing original window salvaged from garage.
- Any new doors should be visually compatible with the historic character of the building.

5.0 CONSERVATION RECOMMENDATIONS



5.7 ROOF

The MacLeod Residence features a prominent side-gabled roof with front and rear shed-roofed dormers. The original roof configuration will be retained, including all original trim and detailing. If desired, cedar shingles may be reinstated at time of roof replacement.

Conservation Recommendation: Preservation

- Preserve the roof structure in its current configuration, as expressed by its prominent side-gabled configuration with front and rear shed-roofed dormers.
- If required, roofing membrane and cladding system may be rehabilitated. At time of roofing replacement in the future, cedar shingles are the preferred material, but Duroid shingles or Aged Cedar Enviroshingles™ are also acceptable.

- Retain the original bargeboards and fascia boards, as well as the soffit any exposed roof elements.
- Ensure adequate rainwater disposal system and proper drainage from the site is maintained.

5.7.1 CHIMNEY

The house features one internal red brick chimney, which will be preserved.

Conservation Recommendation: Preservation

- Preserve the chimney in its original configuration.
- Investigate condition of brickwork. If required, brickwork may be repointed and cleaned using a natural bristle brush and mild rinse detergent.



5.8 INFILL HOUSE

A new duplex infill house is proposed for the rear of the site, facing Ridgeway Avenue. The new construction is distinguishable in form from the main house and features a compatible material palette.

Conservation Strategy: New

- Infill house should not mimic historic appearance of the main house, and should be distinguishable.
- Asphalt shingles are acceptable for new construction, and should be grey or black 3-tab shingles, preferably.
- Colour scheme should be compatible with, but different from, the historic MacLeod Residence.

5.9 COLOUR SCHEDULE

The house has been repainted, which appears to be in good condition. A restoration colour scheme will be developed in conjunction with the project architect, and may be adopted at time of repainting, if desired.

The building displays areas where there was original applied paint. The final colour scheme will be based on a colour palette that will be determined by sampling. Onsite testing will be carried out once access is available, and paint samples assessed by microscopic analysis in order to reveal the original colour scheme of the structure.

Conservation Strategy: Restoration

- Determine an appropriate historic colour scheme for exterior painted finishes.

6.0 MAINTENANCE PLAN

A Maintenance Plan should be adopted by the property owner, who is responsible for the long-term protection of the heritage features of the MacLeod Residence. The Maintenance Plan should include provisions for:

- Copies of the Maintenance Plan and this Conservation Report to be incorporated into the terms of reference for the management and maintenance contract for the building;
- Cyclical maintenance procedures to be adopted as outlined below;
- Record drawings and photos of the building to be kept by the management / maintenance contractor; and
- Records of all maintenance procedures to be kept by the owner.

A thorough maintenance plan will ensure the integrity of the MacLeod Residence is preserved. If existing materials are regularly maintained and deterioration is significantly reduced or prevented, the integrity of materials and workmanship of the building will be protected. Proper maintenance is the most cost effective method of extending the life of a building, and preserving its character-defining elements. The survival of historic buildings in good condition is primarily due to regular upkeep and the preservation of historic materials.

6.1 MAINTENANCE GUIDELINES

A maintenance schedule should be formulated that adheres to the *Standards & Guidelines for the Conservation of Historic Places in Canada*. As defined by the *Standards & Guidelines*, maintenance is defined as:

Routine, cyclical, non-destructive actions necessary to slow the deterioration of a historic place. It entails periodic inspection; routine, cyclical, non-destructive cleaning; minor repair and refinishing operations; replacement of damaged or deteriorated materials that are impractical to save.

The assumption that newly renovated buildings become immune to deterioration and require

less maintenance is a falsehood. Rather, newly renovated buildings require heightened vigilance to spot errors in construction where previous problems had not occurred, and where deterioration may gain a foothold.

Routine maintenance keeps water out of the building, which is the single most damaging element to a heritage building. Maintenance also prevents damage by sun, wind, snow, frost and all weather; prevents damage by insects and vermin; and aids in protecting all parts of the building against deterioration. The effort and expense expended on an aggressive maintenance will not only lead to a higher degree of preservation, but also over time potentially save large amount of money otherwise required for later repairs.

6.2 PERMITTING

Repair activities, such as simple in-kind repair of materials, or repainting in the same colour, should be exempt from requiring city permits. Other more intensive activities will require the issuance of a Heritage Alteration Permit.

6.3 ROUTINE, CYCLICAL AND NON-DESTRUCTIVE CLEANING

Following the *Standards & Guidelines for the Conservation of Historic Places in Canada*, be mindful of the principle that recommends “using the gentlest means possible”. Any cleaning procedures should be undertaken on a routine basis and should be undertaken with non-destructive methods. Cleaning should be limited to the exterior material such as concrete and stucco wall surfaces and wood elements such as storefront frames. All of these elements are usually easily cleaned, simply with a soft, natural bristle brush, without water, to remove dirt and other material. If a more intensive cleaning is required, this can be accomplished with warm water, mild detergent and a soft bristle brush. High-pressure washing, sandblasting or other abrasive cleaning should not be undertaken under any circumstances.

6.4 REPAIRS AND REPLACEMENT OF DETERIORATED MATERIALS

Interventions such as repairs and replacements must conform to the *Standards & Guidelines for the Conservation of Historic Places in Canada*. The building's character-defining elements – characteristics of the building that contribute to its heritage value (and identified in the Statement of Significance) such as materials, form, configuration, etc. - must be conserved, referencing the following principles to guide interventions:

- An approach of minimal intervention must be adopted - where intervention is carried out it will be by the least intrusive and most gentle means possible.
- Repair rather than replace character-defining elements.
- Repair character-defining elements using recognized conservation methods.
- Replace 'in kind' extensively deteriorated or missing parts of character-defining elements.
- Make interventions physically and visually compatible with the historic place.

6.5 INSPECTIONS

Inspections are a key element in the maintenance plan, and should be carried out by a qualified person or firm, preferably with experience in the assessment of heritage buildings. These inspections should be conducted on a regular and timely schedule. The inspection should address all aspects of the building including exterior, interior and site conditions. It makes good sense to inspect a building in wet weather, as well as in dry, in order to see how water runs off – or through – a building. From this inspection, an inspection report should be compiled that will include notes, sketches and observations. It is helpful for the inspector to have copies of the building's elevation drawings on which to mark areas of concern such as cracks, staining and rot. These observations can then be included in the report. The report need not be overly complicated or formal, but must be thorough, clear and concise. Issues of concern, taken from the report should then be entered in a log book so that corrective action

can be documented and tracked. Major issues of concern should be extracted from the report by the property manager.

An appropriate schedule for regular, periodic inspections would be twice a year, preferably during spring and fall. The spring inspection should be more rigorous since in spring moisture-related deterioration is most visible, and because needed work, such as painting, can be completed during the good weather in summer. The fall inspection should focus on seasonal issues such as weather-sealants, mechanical (heating) systems and drainage issues. Comprehensive inspections should occur at five-year periods, comparing records from previous inspections and the original work, particularly in monitoring structural movement and durability of utilities. Inspections should also occur after major storms.

6.6 INFORMATION FILE

The building should have its own information file where an inspection report can be filed. This file should also contain the log book that itemizes problems and corrective action. Additionally, this file should contain building plans, building permits, heritage reports, photographs and other relevant documentation so that a complete understanding of the building and its evolution is readily available, which will aid in determining appropriate interventions when needed.

The file should also contain a list outlining the finishes and materials used, and information detailing where they are available (store, supplier). The building owner should keep on hand a stock of spare materials for minor repairs.

6.6.1 LOG BOOK

The maintenance log book is an important maintenance tool that should be kept to record all maintenance activities, recurring problems and building observations and will assist in the overall maintenance planning of the building.

6.0 MAINTENANCE PLAN

Routine maintenance work should be noted in the maintenance log to keep track of past and plan future activities. All items noted on the maintenance log should indicate the date, problem, type of repair, location and all other observations and information pertaining to each specific maintenance activity.

Each log should include the full list of recommended maintenance and inspection areas noted in this Maintenance Plan, to ensure a record of all activities is maintained. A full record of these activities will help in planning future repairs and provide valuable building information for all parties involved in the overall maintenance and operation of the building, and will provide essential information for long term programming and determining of future budgets. It will also serve as a reminder to amend the maintenance and inspection activities should new issues be discovered or previous recommendations prove inaccurate.

The log book will also indicate unexpectedly repeated repairs, which may help in solving more serious problems that may arise in the historic building. The log book is a living document that will require constant adding to, and should be kept in the information file along with other documentation noted in section **6.6 Information File**.

6.7 EXTERIOR MAINTENANCE

Water, in all its forms and sources (rain, snow, frost, rising ground water, leaking pipes, back-splash, etc.) is the single most damaging element to historic buildings.

The most common place for water to enter a building is through the roof. Keeping roofs repaired or renewed is the most cost-effective maintenance option. Evidence of a small interior leak should be viewed as a warning for a much larger and worrisome water damage problem elsewhere and should be fixed immediately.

6.7.1 INSPECTION CHECKLIST

The following checklist considers a wide range of potential problems specific to the MacLeod Residence, such as water/moisture penetration, material deterioration and structural deterioration. This does not include interior inspections.

EXTERIOR INSPECTION

Site Inspection:

- Is the lot well drained? Is there pooling of water?
- Does water drain away from foundation?

Foundation

- Moisture: Is rising damp present?
- Is there back splashing from ground to structure?
- Is any moisture problem general or local?
- Is spalling from freezing present? (Flakes or powder?)
- Is efflorescence present?
- Is spalling from sub-fluorescence present?
- Is damp proof course present?
- Are there shrinkage cracks in the foundation?
- Are there movement cracks in the foundation?
- Is crack monitoring required?
- Is uneven foundation settlement evident?

Wood Elements

- Are there moisture problems present? (Rising damp, rain penetration, condensation moisture from plants, water run-off from roof, sills, or ledges?)
- Is wood in direct contact with the ground?
- Is there insect attack present? Where and probable source?
- Is there fungal attack present? Where and probable source?
- Are there any other forms of biological attack? (Moss, birds, etc.) Where and probable source?
- Is any wood surface damaged from UV radiation? (bleached surface, loose surface fibres)
- Is any wood warped, cupped or twisted?
- Is any wood split? Are there loose knots?
- Are nails pulling loose or rusted?
- Is there any staining of wood elements? Source?

6.0 MAINTENANCE PLAN

Condition of Exterior Painted Materials

- Paint shows: blistering, sagging or wrinkling, alligatoring, peeling. Cause?
- Paint has the following stains: rust, bleeding knots, mildew, etc. Cause?
- Paint cleanliness, especially at air vents?

Verandahs / Porches:

- Are steps safe? Handrails secure?
- Do any support columns show rot at their bases?
- Attachment – are porches, steps, etc. securely connected to the building?

Windows

- Is there glass cracked or missing?
- Are the seals of double glazed units effective?
- If the glazing is puttied has it gone brittle and cracked? Fallen out? Painted to shed water?
- If the glass is secured by beading, are the beads in good condition?
- Is there condensation or water damage to the paint?
- Are the sashes easy to operate? If hinged, do they swing freely?
- Is the frame free from distortion?
- Do sills show weathering or deterioration?
- Are drip mouldings/flushing above the windows properly shedding water?
- Is the caulking between the frame and the cladding in good condition?

Doors

- Do the doors create a good seal when closed?
- Are the hinges sprung? In need of lubrication?
- Do locks and latches work freely?
- If glazed, is the glass in good condition? Does the putty need repair?
- Are door frames wicking up water? Where? Why?
- Are door frames caulked at the cladding? Is the caulking in good condition?
- What is the condition of the sill?

Gutters and Downspouts

- Are downspouts leaking? Clogged? Are there holes or corrosion? (Water against structure)
- Are downspouts complete without any missing sections? Are they properly connected?
- Is the water being effectively carried away from the downspout by a drainage system?
- Do downspouts drain completely away?

Roof

- Are there water blockage points?
- Is the leading edge of the roof wet?
- Is there evidence of biological attack? (Fungus, moss, birds, insects)
- Are flashings well seated?
- Does the soffit show any signs of water damage? Insect or bird infestation?

6.7.2 MAINTENANCE PROGRAMME

INSPECTION CYCLE:

Daily

- Observations noted during cleaning (cracks; damp, dripping pipes; malfunctioning hardware; etc.) to be noted in log book or building file.

Semi-annually

- Semi-annual inspection and report with special focus on seasonal issues.
- Thorough cleaning of drainage system to cope with winter rains and summer storms
- Check condition of weather sealants (Fall).
- Clean the exterior using a soft bristle broom/brush.

6.0 MAINTENANCE PLAN

Annually (Spring)

- Inspect concrete for cracks, deterioration.
- Inspect metal elements, especially in areas that may trap water.
- Inspect windows for paint and glazing compound failure, corrosion and wood decay and proper operation.
- Complete annual inspection and report.
- Clean out of all perimeter drains and rainwater systems.
- Touch up worn paint on the building's exterior.
- Check for plant, insect or animal infestation.
- Routine cleaning, as required.

Five-Year Cycle

- A full inspection report should be undertaken every five years comparing records from previous inspections and the original work, particularly monitoring structural movement and durability of utilities.
- Repaint windows every five to fifteen years.

Ten-Year Cycle

- Check condition of roof every ten years after last replacement.

Twenty-Year Cycle

- Confirm condition of roof and estimate effective lifespan. Replace when required.

Major Maintenance Work (as required)

- Thorough repainting, downspout and drain replacement; replacement of deteriorated building materials; etc.

APPENDIX A: RESEARCH SUMMARY

Name: MacLeod Residence
Address: 364 East 14th Street, North Vancouver, British Columbia
Original Owner: Duncan P. Clark
First Residents: William Ray and Beulah Rossland MacLeod
Builder: William Smith
Date of Construction: 1921

Building Permit:

- City of North Vancouver Building Permit Number: 1743; 1921; Owner D.P. Clark; contractor W. Smith; House: value \$3000; Lot 14, Block 52, District Lot 550

Directories:

1921: no entry
1922 - 1924: MacLeod William Ray
1925 - 1926: W.H. Brown, Sec. Treas. Campbell Logging
1927 - 1929: J.S. McKenzie, accountant, Capilano Timber
1930: H.L.O Pearson, schoolteacher
1931: vacant
1932 - 1933: T.D. Edwards
1934: vacant
1935 - 1937: Mrs. C. A. Adams
1938 - 1939: Arthur P. Croker, district rep. BCER

Vital Events:

- Death Registration: William Ray MacLeod; April 14, 1934; Pouce Coupe; BC Archives Reg. #1934-09-495916
- Death Registration: Beulah Roseline Macleod; March 19, 1978; North Vancouver; BC Archives Reg. #1978-09-005140
- Marriage Registration: William Ray Macleod & Beulah Rossland Champion; Marpole; July 7, 1921; BC Archives Reg. #1921-09-235386

Attestation Papers:

- Library & Archives Canada: Soldiers of the First World War CEF: MACLEOD, WILLIAM RAY; Regimental number(s): 911908, Reference: RG 150, Accession 1992-93/166, Box 7097 – 26; Date of Birth: 25/06/1892