CASA MIA
CONSERVATION PLAN
NOVEMBER 2013
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Situated in along prestigious Southwest Marine Drive in the historic Kerrisdale neighbourhood of Vancouver, the impressive Casa Mia estate was constructed in 1932. The landmark Spanish Colonial Revival mansion is distinguished by its richly articulated massing, roughcast cement stucco cladding and terra cotta roof tiles. Located on a large 0.7-hectare lot facing Southwest Marine Drive and backing onto the Marine Drive escarpment, Casa Mia is one of the remaining, intact, historic estate houses in the neighbourhood. Landscape features include a prominent fence with wrought-iron entry gates at the front of the property, a circular drive, and many mature trees.

The Casa Mia property is valued as a vestige of the interwar Kerrisdale community. Listed on the City of Vancouver Heritage Register as an “A” category resource, Casa Mia is noted as an outstanding example of the Spanish Colonial style and as a masterwork of architect Ross Anthony Lort. The proposed work will restore the building, while developing the remainder of the property. Following a study of historic records, materials and construction of the building, this Conservation Plan is based on the restoration of the original form, scale and massing of the house and materials, and the preservation of its original windows and exterior features. This report sets guidelines for the conservation of the original elements of the house, based on the Standards and Guidelines for the Conservation of Historic Places in Canada (2010). It also includes a cyclical maintenance plan for the house, which will ensure long-term conservation.
2. HISTORY

2.1 THE DEVELOPMENT OF KERRISDALE

Settlement of the Kerrisdale neighbourhood began in the late 1800s, when the fish and logging industries began to take shape along the Fraser River. As more workers arrived in South Vancouver and Point Grey, the need for transportation of people and goods to and from industrial sites increased. In 1902, the CPR responded by building a rail line from Vancouver to Lulu Island; these tracks were taken over by the B.C. Electric Railway (BCER) in 1905. The residential population of Kerrisdale began to increase substantially following the development of streetcar service in 1912. By 1920, more tracks were laid along 41st Avenue to Granville Street, effectively connecting the neighbourhood to the rest of the City. As transportation access and the economy improved after the end of the First World War, new, modest residences began to be constructed. Many of the houses on the rural outskirts of the Kerrisdale neighbourhood were built on large forested lots surrounded by nature and wilderness, yet were still located near enough to the BCER to allow residents to easily commute to downtown Vancouver and other areas of the Lower Mainland. The 1929 stock market collapse and subsequent Great Depression quickly halted many development projects, however, several houses constructed for Vancouver’s elite went ahead during the 1930s, due to the plethora of idled craftsmen, the availability of materials, and the lowered price of luxurious materials and finishes. Casa Mia was one of the grandest and most impressive residences constructed during the interwar recession.

2.2 ORIGINAL OWNERS: THE REIFEL FAMILY

George Conrad Reifel (1893-1958) was one of three children born to family patriarch and brew-master Heinrich “Henry” Reifel and Annie Elizabeth Brown. Henry Reifel was born in 1869 in Speyer, Bavaria and immigrated to the United States in 1886. Trained in the brewing tradition in cities including San Francisco and Portland, Henry continued to travel north until he reached British Columbia in 1888. Upon settling in Vancouver, Reifel established a brewery in the area of Main Street and 16th Avenue on Brewery Creek; though the operation was ultimately unsuccessful, Henry was able to learn from his experiences and open successful breweries in both Victoria and Nanaimo. Sponsored and spurred on by his father, George C. Reifel moved from Nanaimo to Milwaukee to attend brewery school at the young age of sixteen. By the early 1900s, George Reifel, along with his father and his brother, Harry, owned three breweries in British Columbia; their company, Canadian Brewing & Malting, amalgamated with several others to become ‘Vancouver Breweries’ in 1908. Undeterred by the 1917 Prohibition Act, the Reifels took their distillery skills to Japan where they established a successful brewery business.

1917 was the same year George Reifel married Alma Lucy Barnes. After returning from Japan, George and Alma would go on to have three children, Audrey, George, and Alma Jane. By the 1920s, the Reifel’s brewery empire had grown significantly, resulting in the ownership of...
the ‘Breweries and Distilleries Corporation’, which was presided over by Henry Reifel until his retirement in 1933, when he sold his brewing interests. Though retired, Henry remained active in the community through posts with the Vancouver General Hospital, Board of Trade, and Vancouver Pioneers Association.

Aside from the brewery business, George was actively involved in Vancouver’s music scene; he built and owned the successful Commodore Block on Granville Street in 1929, as well as the Vogue and the Studio Theatres, constructed in the 1940s. George hired architect Ross Lort to design his estate along Southwest Marine Drive, in close proximity to his father’s house located at 1451 Angus Drive and his brother’s house, Rio Vista, also located on Southwest Marine Drive. An involved and active citizen, George owned a 500-acre farm on Westham Island, was vice-president of the Alberta Distilleries, and was an avid outdoorsman and hunter. He died in Vancouver in 1958, while the Reifel family remained at Casa Mia until 1965. The Reifel family legacy lives on today in the George C. Reifel Bird Sanctuary on Westham Island, which was donated to the Canadian Federal Crown by George’s son, George Henry Reifel, in 1972.
Excerpt from *Building The West*: “...Not all suffered equally. After the Crash, corporate and institutional commissions for architects virtually disappeared, but capital was still concentrated in the hands of wealthy individuals, who used the downturn in the economy, and the subsequent deflation in labour and material costs, to build lavish estate homes. Most architects closed their practices, and resigned from the AIBC. A few architects, with the right connections, remained very busy. William Gardiner, Palmer & Bow and Ross Lort, among others, designed a number of grand homes during the Depression. An example was the house Lort designed in 1932 for wealthy liquor merchant, George Reifel, Casa Mia. This lavish home was one of the largest ever built in Vancouver, and Reifel paid for everything in cash. Lort supervised the construction, and one Friday, Reifel, who hadn’t paid the architect for a while, peeled a $1,000 banknote off a huge roll of bills and handed it to Lort, who took it home, and hid it under the bedroom carpet under one leg of the bed. He and his wife took turns sitting on the bed until Monday when he could take it to the bank. No one at the bank had ever seen one before.”
Ross Lort began work in the thriving architectural practice of Samuel Maclure on May 11, 1907. He and his father had arrived in Victoria from England on the S.S. Charmer via Vancouver just two days before and the young Lort had been hired by Maclure the day after they landed. Those first days were very difficult as he tried on his own to assuage demanding owners and contractors alike. After this rough start, Maclure took a parental interest in the young draftsman, and Lort would go on to a sixty-year career in architecture, designing some of British Columbia’s most familiar houses, apartments, institutions and places of worship, as well as playing a significant role in the arts in B.C.

Lort was born October 4, 1889 in Birmingham, England. He attended King Edward VI Grammar School, Birmingham from 1899-1903 and Bishop Vesey’s Grammar School, Sutton Coldfield from 1903-06, where he was awarded the prize for drawing. After a year at Vickers Maxim (Engineering) in Birmingham, Ross Lort and his father, John Anthony Lort, a skilled cabinetmaker, came to Victoria in advance of Ross’s mother and sisters. They chose Victoria because it was more or less midway on the Pacific Coast between San Francisco, which was rebuilding after the 1906 earthquake, and Prince Rupert, which had been inspected by surveyors and engineers in May 1906 in anticipation of becoming the western terminus of the Grand Trunk Pacific Railway.

On July 22, 1913, Ross Lort married Cecilia Marion Frances Rolston, daughter of Williams G. Michell Rolston and Marion Dixon Rolston. Lort designed a Chalet-style cottage in Oak Bay, Victoria, with a stucco finish reminiscent of the British Arts & Craft movement, as their first family home. In August, 1916, Ross Lort enlisted with the Canadian Army Service Corps and the following year transferred to the 8th Battalion, Canadian Railway Troops, serving in France and Belgium. He returned to architectural practice in June 1919.

On Lort’s 1920 AIBC membership application, he stated that, “The ability to make my office pay during...
the past eighteen months” was, apart from professional education, evidence of being competent to practice as an architect. Despite substantial projects like the Gibson House in Oak Bay, it was clear that there was insufficient work for both Maclure and Lort in Victoria and it was decided that Lort would return to Vancouver. The practice would mostly handle residential architecture. Lort also established a brief partnership with William F. Jones, 1924-25. With the death of Samuel Maclure in 1929, Wallace Deffett returned from New York to assume his Victoria practice and Ross Lort assumed the Vancouver practice in his own name.

The renown for Maclure’s, and later Lort’s, superior residential design, evolved into a similar recognition for apartment design which, from the early 1930s on, would become an increasingly valuable part of the practice. The earlier examples were of brick in the Art Deco style, which gave a sense of modernity, quality and security, and displayed Lort’s strong sense of appropriate design. Detailing was consistent throughout and the lobbies, stairways, halls and suites were welcoming and generous. Significant examples from this period include two apartments in the West End, the Queen Anne Garden Apartments on Nelson Street, 1930, and the Park Lane Apartments on Chilco, 1931.

As the practice expanded, Ross Lort continued to design distinctive houses. In 1932, he displayed his stylistic versatility with a Spanish Colonial Revival design for Casa Mia, a grand mansion for George C. Reifel. In 1936, Lort designed 3846 West 10th Avenue for H.G. and Elza Barber. Cathy Maclure commented that her father had hoped to work with concrete and it must have been particularly interesting for Lort to work with H.G. Barber on this project. A civil engineer, Barber had begun working for the CPR in 1900 and in 1910 was appointed Assistant Chief Engineer, Western Construction. The Barber residence remains one of the most striking houses in the city. It is an excellent example of the Streamline Moderne style, a two-storey poured concrete cube with square-notched corners, rounded balcony edges and a corrugated panel above the front door. Another unusual project was a beauty school in the West End, 1938, for Madame Maxine, designed in the Spanish Colonial Revival style. In 1952, Lort renovated the family home, originally designed by Fred Townley in 1912, and the results, which showed the quality of design, practicality and livability which his clients sought, were published in Western Homes & Living as “Old House – New Look.” During the Second World War, Ross Lort was asked to design a military hospital in Terrace, in preparation for casualties from an expected confrontation in the Northern Pacific. The experience prepared him to design other hospitals, such as the first Western Society Physical Rehabilitation Centre, 1948. Innovative at the time, it is better known today as the substantially larger G.F. Strong Rehabilitation Centre.

Like other architects of his day, Lort was very active in the local arts scene. In 1923, he joined the Vancouver Little Theatre, which had been founded in 1921. Although he did appear on stage, he is best remembered as the long-time scenic director, collaborating on many occasions with fellow architect, H.H. Simmonds. Lort was an honorary governor of the Dominion Drama Festival and received the Canadian Drama Award for his outstanding contribution to Canadian Drama. Continuing to sketch, paint, and make woodcuts and linocuts, he participated in sketching parties beginning in the late 1920s with Group of Seven members Jock Macdonald, Fred Varley, and others into areas like the Black Tusk Meadows. He explored and painted Lulu Island and the B.C. Interior and took the urban city for his subject as well. Lort was elected to the B.C. Society of Fine Arts in 1931, served on its Executive from 1933-37 and was President from 1945-48, later being elected Life Member. Some of his work, like the enchanting abecedarian All Creatures
Great and Small, self-published in 1931, reveals quite another side of his talents. Much later, in 1946, Lort was elected to the Founding Board of the Community Arts Council of Vancouver which was established to “increase and broaden opportunities for Vancouver citizens to enjoy and participate in cultural activities.” Among the artists and supporters elected to the Board were Lawren Harris, Patrick Keatley, Dr. Norman Mackenzie, H.R. MacMillan, Frank Ross, Jean Russell, Charles Scott and Albert Steinberg.

In 1932, Ross Lort was elected to the Council of the recently-opened Vancouver Art Gallery (VAG). G.L. Thornton Sharp, the Gallery’s architect, was already a member and would remain so until 1940. From time to time Lort chaired the Educational and House and Library Committees. In 1945, VAG Council members Lort, W.H. Malkin, and Lawren Harris were appointed to a “New Building Committee” to explore expanding the Gallery to accommodate the late Emily Carr’s bequest of her work. In 1950 Lort designed the major additions that completely erased the facade of the original Art Deco structure, and despite changes necessitated by a tight budget, the result was a highly successful resolution of a difficult programme, presenting clean and logical forms that became the new face of the Gallery on prominent West Georgia Street. This modernist landmark became redundant when the VAG moved to Rattenbury’s Court House in 1983, and has sadly been demolished.

Ross Lort’s practice expanded to include churches. After K.B. Spurgin’s untimely death in 1936, Lort was hired to design several buildings at the Prince of Wales Fairbridge Farm School near Duncan, and in 1939 provided the designs for the school’s chapel. Lort’s original design was altered when submitted by the Fairbridge Society to renowned English architect, Sir Herbert Baker (1862-1946), who had designed the first Fairbridge Chapel at Pinjarra, Western Australia; during his illustrious career Baker designed the Union Buildings and Government House in Pretoria, South Africa, at the instigation of Cecil Rhodes, and with Sir Edwin Lutyens designed a number of the government buildings in New Delhi, India. Baker suggested the addition of the apsidal sanctuary to give the Chapel “a sense of spaciousness, dignity and beauty, with the five coloured windows to be a ‘crowning light’ above the alter and the clerestory windows to reveal the beauty of the timber construction of the nave roof, and the heightening and stepping back of the tower.” The redesigned chapel was dedicated on April 20, 1940, and still stands today. Among many other churches, Lort was responsible in Vancouver for Augustana Lutheran Church, 1947; Ebenezer Baptist Church, 1954; additions to the Schara Tzedeck Synagogue, 1955 (originally designed by John Harvey, 1947); and St. Matthias Anglican, 1959. In 1958, to celebrate the Centennial of British Columbia, the Royal Architectural Institute of Canada produced a special edition of the Journal to which Ross Lort was asked to contribute a feature article about Samuel Maclure. In 1959, Lort’s entered into partnership with his youngest son, Williams (“Bill”), a graduate of the Universities of British Columbia and Manitoba. The senior Lort continued to practice architecture until about a year before his death on May 16, 1968. He is commemorated by an oak plaque in St. Paul’s Anglican Church in Vancouver’s West End.

I think that I have only entered into a signed agreement with a client four times in my forty years of practice. I have always held to the fact that as a member of a learned profession there is a code that is respected on both sides. I don’t ask my lawyer or my doctor how much he is going to charge me... even today, with several of my clients, it is customary when the terms are stated to look each other in the face, shake hands and that is all the contract necessary.

3. STATEMENT OF SIGNIFICANCE

Name: Casa Mia
Address: 1920 Southwest Marine Drive, Vancouver
Original Owner: George C. Reifel
Date of Construction: 1932
Architect: Ross Anthony Lort

Description of the Historic Place
Casa Mia, located at 1920 Southwest Marine Drive in the Kerrisdale neighbourhood of Vancouver, is a 1,860 square metre, Spanish Colonial Revival mansion. Two storeys in height, Casa Mia is a grand estate house located in an area of similar mansions and estates, and distinguished by its richly articulated massing, roughcast cement stucco cladding, terra cotta roof tiles and front wall with wrought-iron entry gates. The entry sequence follows a linear path from the entry gates to a circular driveway and a porte-cochère, on axis with the front door. The asymmetrical, linear massing follows the north/south edge of the escarpment to the west, where the original property once stretched to the bank of the Fraser River. The complex roofline displays a combination of hipped, gabled and circular roofs clad with red ceramic pantiles. A walled auto court stands adjacent to the service wing to the north, and a courtyard and fountain are located at the southwest corner.

Heritage Value of the Historic Place
Casa Mia is significant as Vancouver’s premier example of Spanish Colonial Revival architecture. This distinctive style of the 1920s-30s unfolded at the height of the influence of Hollywood movies. During the Depression years, Hollywood cranked out an unending supply of historical romances and swashbuckling dramas, shown in flamboyant movie palaces. This led to widespread public acceptance of exotic and whimsical historical motifs, which evoked a feeling of pleasant and comfortable nostalgia in the difficult years after the end of the First World War. California was also becoming more fashionable as a tourist destination, as highway systems developed and road trips to the south became popular. This fascination with romantic period styles was strongly reflected in residential architecture, and during the 1920s and 1930s a house was expected to display a readily-identifiable historical style in order to display the owner’s good taste, hearkening back to the domestic values and ideals of an earlier age. During this period of entrenched traditionalism, Period Revival styles – often used in eclectic blends – reached the height of their popularity.

The Spanish Colonial Revival style allowed both architect and owner to be creative, avant garde, and whimsical. As the movement spread up the west coast of North America, it gained influence from both Mediterranean and Islamic North African cultures, both of which are evident in the exterior features of Casa Mia. This opulent mansion was built at a time when labour and materials were inexpensive, allowing wealthy clients to select the most prestigious finishes and the most talented of craftsmen at significantly reduced prices. Reflected on its exterior in the use of porcelain tiles, terra cotta, cast stone and wrought iron, Casa Mia exemplifies the height of artistry of the 1930s. A four-car garage, rare for 1932, demonstrated Casa Mia’s embrace of new technology and the machine age.
Casa Mia is valued additionally for its association with the influential Reifel family. George Conrad Reifel (1893-1958) was one of three children born to family patriarch and brew-master Heinrich “Henry” Reifel and Annie Elizabeth Brown. George moved from Nanaimo to Milwaukee to attend brewery school at the age of sixteen. By the early 1900s, the Reifel men, Henry, George, and brother Harry, owned three breweries in British Columbia. Undeterred by the 1917 Prohibition Act, Henry and George took their distillery skills to Japan where established a successful brewery. George Reifel married Alma Lucy Barnes in 1917 and the couple had three children, Audrey, George, and Alma Jane. By the 1920s the Reifel’s brewery empire had grown significantly, resulting in the ownership of the ‘Breweries and Distilleries Corporation’, which was presided over by Henry Reifel until his retirement in 1933. Aside from the brewery business, George was actively involved in Vancouver’s music scene; he built and owned the successful Commodore Block on Granville Street in 1929 as well as the Vogue and the Studio Theatres, constructed in the 1940s. George hired architect Ross Lort to design his estate along Southwest Marine Drive, in close proximity to his father’s house on Angus Drive and his brother’s house, Rio Vista, also located on Southwest Marine Drive. An involved and active citizen, George owned a 500-acre farm on Westham Island, was vice-president of the Alberta Distilleries, and was an avid outdoorsman and hunter; he died in Vancouver in 1958; the Reifel family remained at Casa Mia until 1965. The Reifel family legacy lives on today in the George C. Reifel Bird Sanctuary on Westham Island, which was donated to the Canadian Federal Crown by George’s son, George Henry Reifel, in 1972.

Casa Mia is additionally significant as a residential masterwork of prolific local architect, Ross Anthony Lort (1889 – 1968). Born in Birmingham, England, Lort immigrated to Victoria, and in 1907 began work in the thriving architectural practice of Samuel Maclure. Lort would go on to a fruitful sixty-year career in architecture, designing some of British Columbia’s most familiar houses, apartments, institutions and places of worship, as well as playing a significant role in the arts in British Columbia. Celebrated as a creative and talented architect and artist, Lort’s design of Casa Mia is the crowning jewel of his long and successful career.

Character-Defining Elements
The key elements that define the heritage character of Casa Mia include its:
- prominent position on a large lot along Southwest Marine Drive in the Kerrisdale neighbourhood;
- views of the Fraser River from both the house and grounds;
- situation within a manicured garden setting;
- continuous residential use over time;
• exterior architectural design relevant to architect Ross Lort’s original design, including such elements as the asymmetrical, volumetric form; axial entry; two-storey scale with third storey turret space; the porte-cochère with pointed-arches; four-car garage; and the perimeter wall, concrete balustrades, and wrought-iron entry gates;
• Spanish Colonial Revival style exterior details that relate to Lort’s original design, including: the unbroken expanses of roughcast stucco cladding; curved exterior walls and soffits; the terra cotta pantile roofs; wrought iron work; cast-stone colonnettes between windows; decorated porcelain tiles on the exterior elevations and the arcades of the porte-cochère; balconies; variety of window types including multi-paned with leaded glass, double hung, and casement windows; and the terra cotta quatrefoil louvres in the multiple gable-ends;
• original wooden fenestration and doors; and
• internal stucco-clad chimneys.
STATEMENT OF SIGNIFICANCE

Original Casa Mia Architectural Drawing, 1932, Ross Anthony Lort
4. CONSERVATION GUIDELINES

4.1 STANDARDS AND GUIDELINES

Casa Mia is an “A” listed building on the Vancouver Heritage Register, and is a significant historical resource in the City of Vancouver. Parks Canada’s Standards and Guidelines for the Conservation of Historic Places in Canada (2010) is the source used to assess the appropriate level of conservation and intervention. Under the Guidelines, the work proposed for Casa Mia 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 Casa Mia should be based upon the Standards outlined in the Standards and 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 element 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 element 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.

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.
The proposed work entails the preservation and rehabilitation of the exterior of Casa Mia. The following conservation resources should be referred to:

*Standards and Guidelines for the Conservation of Historic Places in Canada, Parks Canada, 2010.*


**Preservation Briefs:**

http://www.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm

http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm

http://www.nps.gov/tps/how-to-preserve/briefs/10-paint-problems.htm

http://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm

http://www.nps.gov/tps/how-to-preserve/briefs/22-stucco.htm


http://www.nps.gov/tps/how-to-preserve/briefs/30-clay-tile-roofs.htm

Preservation Brief 32: Making Historic Properties Accessible.
http://www.nps.gov/tps/how-to-preserve/briefs/32-accessibility.htm

4.3 GENERAL CONSERVATION STRATEGY

The primary intent is to preserve as much of the historic exterior fabric as possible, while undertaking a rehabilitation that will upgrade its services to increase its functionality for community health care use. As part of the scope of work, character-defining elements will be preserved, while missing or deteriorated elements will be restored. Stuart Howard Architects Inc. has prepared the proposed design scheme, which features a new adjacent structure connected to the historic house. The building may also require structural upgrades, and an initial review by Fast + Epp Structural Engineers suggests three north-south sheer walls are required to be built within existing interior walls of the house.

The major proposed interventions of the overall project are to:

- Preserve the majority of exterior of the historic structure.
- Build an adjacent structure to the west side of the historic building, and adjoining the two together.
- Rehabilitate parts of the site to accommodate the new structure and underground parking.

Due to the proposed construction of an adjacent new structure to the historic building, all new visible construction will constitute a modern, distinguishable addition to the historic structure. The Standards and Guidelines lists 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.

4.4 SUSTAINABILITY STRATEGY

Sustainability is most commonly defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Common Future. The Bruntland Commission). The four-pillar model of sustainability identifies four interlinked dimensions: environmental, economic, social and cultural sustainability, the latter including the built heritage environment.

Current research links sustainability considerations with the conservation of our built and natural environments. A competitive, sustainable economy requires the conservation of heritage buildings as an important component of a high quality urban environment.

“We need to use our cities, our cultural resources, and our memories in such a way that they are available for future generations to use as well. Historic preservation makes cities viable, makes cities liveable, makes cities equitable.”

(Economic Benefits of Preservation, Sustainability and Historic Preservation)
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 (reduced impact on landfills and their expansions);
- Saving embodied energy (defined as the total expenditure of energy involved in the creation of the building and its constituent materials);
- Conserving historic materials that are significantly less consumptive of energy than many new replacement materials (often local and regional materials, e.g. timber, brick, concrete, plaster, can be preserved and reduce the carbon footprint of manufacturing and transporting new materials).

As the proposed project is targeted to be LEED gold certified, the following considerations for energy efficiency in historic structures are recommended in Parks Canada’s Standards and Guidelines for the Conservation of Historic Places in Canada (2010) and can be utilized for Casa Mia.

**Sustainability Considerations**
- Add new features to meet sustainability requirements in a manner that respects the exterior form and minimizes impact on character-defining elements.
- Work with sustainability and conservation specialists to determine the most appropriate solution to sustainability requirements with the least impact on the character-defining elements and overall heritage value of the historic building.
- Comply with energy efficiency objectives in a manner that minimizes impact on the character-defining elements and overall heritage value of the historic building.

**Energy Efficiency Considerations**
- Identifying the historic place’s heritage value and character-defining elements — materials, forms, location, spatial configurations, uses and cultural associations or meanings.
- Complying with energy efficiency objectives in such a manner that character-defining elements are conserved and the heritage value maintained.
- Working with energy efficiency and conservation specialists to determine the most appropriate solution to energy conservation problems that will have the least impact on character-defining elements and the overall heritage value.
- Weighing the total environmental cost of energy saving measures against the overall environmental costs of retaining the existing features or fabric, when deciding whether to proceed with energy saving measures.

**Buildings: Insulation**
- Exercising caution and foreseeing the potential effects of insulating the building on the envelope system so as to avoid damaging changes such as displacing the dew point and creating thermal bridges.
- Installing thermal insulation in attics and in unheated cellars and crawl spaces to increase the efficiency of the existing mechanical systems unless this could adversely affect the building envelope.

**Buildings: Windows**
- Utilizing the inherent energy conserving features of a building by maintaining character-defining windows in good operating condition for natural ventilation.
- Improving thermal efficiency with weather-stripping, storm windows, interior shades or, if historically appropriate, blinds and awnings.
4.5 HERITAGE EQUIVALENCIES AND EXEMPTIONS

As an “A” listed building on the Municipal Heritage Register, Casa Mia is 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 VANCOUVER BUILDING BY-LAW

Building Code upgrading is the most important aspect of heritage building rehabilitation, as it ensures life safety and long-term protection for the resource. It is essential to consider heritage buildings on a case-by-case basis, as the blanket application of Code requirements does not recognize the individual requirements and inherent performance strengths of each building. 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.

This is recognized in the Vancouver Building By-Law (VBBL), in which a number of equivalencies have been developed and adopted that enable more sensitive and appropriate heritage building upgrades. The heritage equivalencies available under the VBBL are available for this project as required. In addition to the equivalencies offered under the VBBL, 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.

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 and Guidelines for the Conservation of Historic Places in Canada (2010) for further detail about “Energy Efficiency Considerations.”
5. EXTERIOR CONSERVATION RECOMMENDATIONS

The following chapter describes the materials, physical condition and recommended conservation strategy for Casa Mia based on Parks Canada’s Standard and Guidelines for the Conservation of Historic Places in Canada (2010).

5.1 SITE

Casa Mia is situated in its original prominent position within a manicured garden setting on a large lot along Southwest Marine Drive in the Kerrisdale neighbourhood, with views of the Fraser River from both the house and grounds. The house features a side garden and backyard with terra cotta tiled porch area and pool. All above noted site features are character-defining elements of the historic building and should be preserved, if possible. The grand circular driveway configuration and bridge structure should also be retained throughout rehabilitation work.

Most site features appear to be in good condition due to continued maintenance of the property. However, the terra cotta tile on the rear porch appears to be in slightly degraded condition, with broken tiles in a number of locations around the perimeter of the porch and moisture damage and staining is visible within a number of the mortar joints. It is also unclear if the exterior light fixtures are in working condition, as they were not tested during site review.

Due to the proposed construction of a new building adjacent to Casa Mia, the historic site may require rehabilitation or alteration. Careful attention should be paid to ensure character-defining elements are not damaged or drastically altered. The proposed work includes rehabilitation of the western half of the site to accommodate the new structure and underground Port-cochere

Wrought iron gate and fixture
CONSERVATION RECOMMENDATIONS

parking, and excavation to the east of the main entryway to allow for a new external stairway to the basement level. The bridge and balustrade entry feature, the porte-cochère and the 4-car garage will be retained, and the circular driveway will be rehabilitated to accommodate a wider laneway to meet access requirements, but will retain its overall character. The entry gate, fence and associated features are not within the property lines, but should be retained if possible. Any site features that require removal to accommodate the new structure and rehabilitated site scheme should be carefully salvaged and relocated on site or moved to storage for future use in repair work. Refer to Section 7: Salvage Plan for further recommendations on salvaging historic elements.

Conservation Strategy: Preservation and Rehabilitation

- Preserve the original location of the building. All rehabilitation work should occur within the property lines.
- Preserve the front entry features, circular driveway configuration, lighting fixtures, wrought iron and cast stone elements and mature vegetation, if possible.
- Any site features to be removed during rehabilitation work should be carefully salvaged. Relocation or storage of items can be further discussed with Heritage Consultant.
5.2 OVERALL FORM, SCALE AND MASSING

The overall form and exterior architectural design relevant to architect Ross Lort’s original design are character-defining elements, and include such elements as the asymmetrical, volumetric form, axial entry, two-storey scale with third storey turret space, curved walls, the porte-cochère with pointed-arches and four-car garage. In order to maintain the original integrity of the overall form, scale and massing of Casa Mia, these elements should be preserved.

The proposed design scheme by Stuart Howard Architects involves integrating a new adjacent structure with the existing house and garage. The proposed design of the new structure differentiates it significantly from the historic building. The majority of the integrity of the form, scale and massing will be retained, and will be preserved in-situ.

Conservation Strategy: Preservation

- Preserve the overall form, scale and massing of the building, as possible.
- All new construction should generally be sensitive to the residential scale of the building, and should follow the recommendations outlined in the Standards and Guidelines for new additions to historic places, as noted in Section 4.3: General Conservation Strategy.

5.3 ROOF

Casa Mia features a variety of roof configurations, including front and side gables, pyramidal hipped roofs, turret roofs and shed roof structures. The roof configuration is a character-defining element, and should be preserved. Terra cotta pantiles cover all roof surfaces, and terra cotta quatrefoil louvres are seen in the multiple gable-ends. The pantiles are specifically in the shape of barrel or mission tiles, which are semi-cylindrical clay tiles that overlap each other, alternating from a column of concave and a column of convex tiles over top. All noted terra cotta materials are character-defining elements of the historic building, and should also be preserved.

An initial ground review suggests the terra cotta pantile roof generally appears to be in good condition, with no initial detection of extensive moisture damage, cracking, or rain water retention. The flashing and gutter system also appears to be in good condition. However, the review was done on a sunny day after a number of days without rain. Further review under rainy conditions is suggested. The review revealed a light amount of moss and organic growth on the roofs above the north elevation, with accumulated debris having been collected on the tiles from nearby trees. This debris should be cleaned out, to ensure it does not encourage rainwater retention on the roof. If gutters and downspouts are allowed to fill with debris, water can back up and seep under roofing tiles, causing deterioration of roofing battens, sheathing and fastening system.

The most common failure often seen on clay tile roof systems is due to the breakdown of the fastening system. As mission pantile roofing material can be fastened in a number of ways, the fastening system used for Casa Mia should be inspected prior to any potential roofing repair. Fastening system and roof sheathing cover should
be noted in a maintenance file once determined. Further investigation is required to determine the full condition of the roof structure and covering system. Broken or missing tiles, or leaks on the interior of the building, are obvious clues that a historic clay tile roof needs repair. If garage structure is to be removed, salvage the terra cotta tiles for future repair use in the remainder of the building.

**Conservation Recommendation: Preservation**

- Preserve the overall roofing configuration and pantile roof cladding.
- Clear all debris and build-up off the tile roof, including in the valleys, gutters and downspouts.
- If garage structure is to be removed, salvage all terra cotta pantiles and store for use in future repair work of remaining roof structure.
- If tiles become deteriorated or break to a degree of requiring replacement, replace with salvaged tiles from the garage structure in a similar colour as the original. If no tiles are salvaged, then repurpose base tile for use as a surface tile, and replace the base tile in kind with physically and visually compatible material. Substitution with concrete pantiles, profiled steel decking or plain tiles is not appropriate.
- Preserve the terra cotta louvres in the gable-ends.
- Roof tiles should not be painted.
- Investigate the fastening system of the terra cotta tiles prior to repair work. Note all observations in maintenance file.
- When repairing the clay tile roof, ensure sheathing or other protective covering is installed over the fragile roof tile prior to anyone mounting the roof. This will ensure the weight is distributed more evenly, and will reduce the chance that the terra cotta tiles will break during repair work.
5.3.1 CHIMNEY

The large projecting internal stucco-clad chimneys are character-defining elements of the historic house, and should be retained. Each chimney is topped with two or three red coloured round chimney pots, and the uppermost part of each chimney is set back to create a recessed rectangular form. The chimneys appear to be in good condition, and should be retained if possible. There is evidence of light soil build-up and straining on some external surfaces, but they appear to be cosmetic only. Further investigation is required. Gas inserts may be installed for functional reasons, but the general appearance of the exterior of the chimneys should be preserved.

Conservation Strategy: Preservation
- Retain the internal stucco-clad chimneys.
- Gas inserts may be installed, if desired. External appearance should not be altered.
- Clean stucco work on external chimney faces where staining and organic build up has occurred due to the use of the fireplaces and rainwater runoff. Cleaning recommendations are listed in Section 5.4: Stucco Walls.
- Repaint stucco on chimneys as required.

5.3.2 RAINWATER DRAINAGE SYSTEM

Casa Mia features a visually dominant drainage system, which connects the perimeter roof gutters to round metal downspouts. The gutters and pipes appear to be in good condition, with minor evidence of rainwater splash back in specific connecting joints. In a number of locations, the downspouts do not connect directly with the drainage basin, which allows water to splash on the face of the exterior stucco. There is evidence of the fastening mechanisms that connect the downspouts to the stucco walls deteriorating the downspouts possibly due to mechanical abrasion or corrosion, which has resulted in cracks and openings in the downspouts, notable on the south elevation. In addition, there is organic debris and build-up seen throughout some of the gutters, which should be cleaned out immediately. All rainwater drainage system elements should be inspected to determine if their connections are sealed, and if the pipes are continuous from the gutters to the drainage basins. Repair as required.

Conservation Recommendations: Preservation and Maintenance
- Preserve the rainwater disposal system in its existing configuration.
- All gutters should be inspected regularly to ensure they are kept free of debris.
- Ensure gutters and drains are not clogged or blocked by organic debris.
- Repair damaged downspouts, gutters or drainage basins as required. Ensure all rainwater leaders are directly connected to the drainage basins, to protect from rainwater splash back.
- Repaint drainage system, including gutters, pipes and attachment mechanisms, as required.
5.4 STUCCO WALLS

*Casa Mia* is clad in stucco on all exterior elevations, including the internal chimneys. The unbroken expanses of roughcast stucco cladding and the curved exterior walls are character-defining elements of the historic house and should be preserved. The curved stucco soffits with flush integrated rectangular lights and vents, and stepped stucco detailing should also be preserved. The stucco is currently painted buff, and is continuous through to the interior faces of the front porte-cochère. Staining and possible light moisture damage is evident on the stucco walls at locations where rainwater is allowed to pool on horizontal elements, such as sills and roof-wall interfaces. The secondary front entryway demonstrates damage to the exterior stucco or plaster material at the underside of the beam. This should be patched up to its original profile using appropriate restoration material, which should be reviewed by Heritage Consultant.

An initial review suggests that the roughcast stucco appears to be in good condition. Due to the integrity of the historic stucco, it is not required to rain screen the building. As such, the stucco should be preserved and repaired in kind wherever necessary.

**Conservation Recommendation: Preservation and Restoration**

- Preserve the stucco walls on all elevations and internal chimneys. Curved walls and soffits should also be retained.
- The stucco appears to be in good condition, but may require cleaning in specific locations such as where drainage water splashes back on the face of the stucco. Cleaning should be done in the gentlest means possible, ideally with low-pressure water and scrub brushes. Harsh chemical cleaners or any abrasive cleaning methods should be avoided to ensure stucco is not damaged.
- Any small hairline cracks are often not a serious concern, and should be sealed with a thin slurry coat before moisture gets a chance to penetrate the cracks and make them worse. The slurry coat should consist of the same ingredients found in the topcoat of the stucco. All repair work should be finished with a coat of paint, consistent with the paint schedule.
- Caulking compounds should not be used for patching hairline cracks, and are an unsuitable repair method. The physical and aesthetic characteristics of caulking compounds are incompatible with stucco, and will weather differently and attract more dirt.
- Larger cracks, if any, should be cut out, and prepared for more extensive repair. A professional plasterer may be required if the stucco requires extensive repair work. Any existing holes or openings should be patched. All patch work and repairs should be made with a visually and physically compatible stucco material.
- All repair methods should be carried out in an inconspicuous sample location, to ensure all repairs are compatible with the historic stucco.
- Repaint historic stucco as required.
5.5 DECORATIVE PORCELAIN TILE

*Casa Mia* features decorated porcelain tiles on a rear exterior elevation, within the pointed arches of the porte-cochère, on the rear turret and within a stepped stucco wall structure on the front façade, which are character-defining elements of the building and should be preserved.

The tiles located on the tiered stucco on the north elevation are of a floral motif, with central yellow flower, four red flowers in the corners with four blue flowers situated between each red. Green stems and leaves project from the central yellow flower. The tile base colour is white, and each tile is set flush with the external stucco of the building separated from one another by about an inch of stucco. The tiles located within the arches of the porte-cochère are directly adjacent to each other, forming a long band of tiles, two wide, which spans nearly the full length of the arches. The patterns on the tiles are continuous throughout the full span, and feature abstracted floral and foliage motifs with blue and pink circles, connected with black trim. The tiles on the rear elevation are spaced farther apart and enumerate only ten, and feature a white background with central red flower and projecting blue abstracted daffodil profiles within each corner with blue and yellow beaded shapes in between. The rear turret that houses the main floor breakfast room features porcelain tile siding stacked 7 tiles high on either side of the windows and three high below, which forms a continuous band along the full exposed perimeter of the structure. The tiles feature a central small yellow flower, with four projecting yellow and red daffodil profiles with green foliage in each corner of the tile, surrounded by four circular bands that knot together; two blue and two red. The tiles are separated by about a quarter of an inch of exposed mortar, and consistent with all exterior tile work on *Casa Mia*, is flush with the stucco siding. There is also decorative tile work within the rear yard pool, but is proposed to be removed during rehabilitation work of the site. These tiles can possibly be salvaged for reuse as a feature in the new construction, or for repair work if required.

The tiles appear to be in good condition, with no evidence of cracking or deterioration. Further investigation is required to determine the full condition of the decorative tiles and their method of attachment to the building. Porcelain clays are dense and have low porosity, which makes porcelain tile hard and highly impervious to moisture damage. Due to the weather resistant characteristics of the decorative porcelain tiles on *Casa Mia*, their long term preservation is viable with minimal intervention or repair.
5.6 WROUGHT IRON EXTERIOR FEATURES

Decorative wrought iron grilles are located over a number of windows on Casa Mia on both the main and second storey. Decorative wrought iron is also seen as balcony railing, exterior windowless opening grilles, gates that are located within the grounds, exterior lamp post and lantern light fixtures and the entry gate at the front of the site. The wrought iron elements feature a number of different decorative details, including twisted and scroll motifs. An elegant wrought iron finial is also located over a rear turret that houses the main floor breakfast room and second floor circular bathroom. All wrought iron elements should be retained in-situ and preserved. Any elements that require removal due to the proposed adjacent structure and rehabilitated site work should be salvaged. Refer to Section 7: Salvage Plan for further information on salvaging historic features.

Wrought iron is a fairly weather resistant material, as it does not rust when exposed to air or submerged in water. However, the continuous exposure to both air and moisture alternately may result in rusting or corrosion of exterior wrought iron elements. As exterior wrought iron elements are exposed continuously to the rainy Vancouver weather, they may be susceptible to damage. However, due to the painted finish on the wrought iron surfaces, the material appears to be in good condition. The condition of all surfaces should be monitored to ensure the prolonged protection of the substrate.

Conservation Recommendation: Preservation
- Preserve all decorative porcelain tiles on the exterior elevations of Casa Mia.
- If tiles are damaged during rehabilitation work, repair or replace in kind if required to match original.
- Porcelain tiles should not be subjected to the action of strong or abrasive cleaners. Only gentle water rinses and mild detergent should be used, if necessary when cleaning.
- The durability of the porcelain wall tiles largely depends on the soundness of the mortar bed and mortar joints. Weakened mortar may be a result of weathering, improper cleaning techniques or mechanical damage. Investigate the mortar bond of the decorative tiles by gently tapping on the tiles and noting if any movement occurs. If movement does occur, the mortar bed or joints may be inadequately bonded to the tile and required repair. Careful attention should be paid to ensure decorative tiles are not damaged during rehabilitation work.
- Ensure stucco seal around tiles is intact, so as to protect the tiles from damaging moisture that may leak behind the tiles and degrade the structural backing.

Decorative tile on rear turret

Conservation Recommendation: Preservation
- Preserve all decorative porcelain tiles on the exterior elevations of Casa Mia.
- If tiles are damaged during rehabilitation work, repair or replace in kind if required to match original.
- Porcelain tiles should not be subjected to the action of strong or abrasive cleaners. Only gentle water rinses and mild detergent should be used, if necessary when cleaning.
- The durability of the porcelain wall tiles largely depends on the soundness of the mortar bed and mortar joints. Weakened mortar may be a result of weathering, improper cleaning techniques or mechanical damage. Investigate the mortar bond of the decorative tiles by gently tapping on the tiles and noting if any movement occurs. If movement does occur, the mortar bed or joints may be inadequately bonded to the tile and required repair. Careful attention should be paid to ensure decorative tiles are not damaged during rehabilitation work.
- Ensure stucco seal around tiles is intact, so as to protect the tiles from damaging moisture that may leak behind the tiles and degrade the structural backing.
5.7 CAST STONE DECORATIVE FEATURES

Cast stone colonnettes are located on exterior faces of the house, located between a number of windows, and also throughout the site on exterior feature walls. The colonnettes located between a number of main floor windows on the south elevation and second floor windows on the front façade feature a crisscross spiral pattern with floral motifs, complete with capital and base. The colonnettes located throughout the site feature a single recessed spiral up their full length, and are partially recessed within their supporting walls. Five cast stone planter boxes are located within the porte-cochère, and feature a scrolled foliage pattern on their exterior faces. One planter box each is located within the east and west arch of porte-cochère, and the remaining three are located side by side within the front facing north arch and feature low grown shrubbery. Decorative cast stonework is also noted on the south elevation around the main rear entryway, and includes block pilasters, chalices on either side of the doorway, wall medallions and brackets.

Cast stone was a popular building material in the early 20th century, as it was widely accepted as an economical substitute material for natural stone. It was often used for decorative elements surrounding windows, door and lintels, as well as cornices, balustrades and sculptural ornamentation. Cast stone could be manufactured to mimic a specific type of stone such as granite or limestone. The masonry material was cast in molds of wood, plaster, sand glue or even gelatin, depending on the intricacy of the desired product. Common deterioration problems of cast stone, particularly when located outside, include the deterioration of the aggregate, as well as deterioration or erosion of the cementing matrix and iron or steel reinforcement, including the anchors used in installation. All cast stone elements should be carefully monitored to ensure any deterioration is detected at an early stage. A simple means to help protect this material from future damage is to ensure the protective paint layer maintains its integrity.

Conservation Recommendations: Preservation and Restoration

- Preserve the cast stone site features in their original locations.
- If cast stone elements are to be removed due to proposed rehabilitation work, salvage all pieces that require removal. Reference Section 7: Salvage Plan for further information on the salvage of heritage features.
- If cast stone colonnettes are damaged, retain and repair in-kind with physically and visually compatible restoration mortar. If elements are too damaged or deteriorated to repair, and there are no salvaged elements that match the original, a cast of the existing elements may be taken in order to accurately replicate any pieces that are too damaged to repair. The aggregate should be close enough to the original so as to replicate the historic original cast stone elements in appearance and physical characteristics.
- Ensure protective paint maintains its integrity. If paint is blistering or delaminating from surface, repair and repaint immediately.
- Repaint cast stone surfaces as required.

Cast stone colonnettes between windows on rear elevation
5.8 FENESTRATION

Windows and doors ... 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.

5.8.1 WINDOWS

Casa Mia has maintained its original wooden fenestration, which include a variety of window types including multi-paned with leaded glass, double-hung, and casement windows. These windows are all character-defining elements of the historic place, and should be preserved. There is evidence of paint cracking and delamination on the exterior of a number of the windows, which require repair. Further investigation is required to determine if there is moisture damage to the wooden window elements. A number of windows also feature diamond shaped window lites, and others are protected with exterior wrought iron window grilles with decorative detailing. The window sills are projecting masonry material. The windows and door on the rear elevation of the central stair room contain leaded glass, and some of the leading has warped or delaminated. One window pane within the main storey breakfast room is cracked and requires repair. Further investigation is required into the full condition of the leaded windows.

The windows within the entryway, on either side of the door, are not painted but rather stained in a dark tone to match the entryway door. These window frames are particularly detailed, and covered with wrought iron grilles. A large carved wood lintel spans above the two windows and door, and is stained. Windows should be inspected on a case-by-case basis, as a number of the windows feature broken opening mechanisms, missing hardware, and varying degrees of operability. All windows should be repaired to good working condition.

Conservation Strategy: Preservation and Rehabilitation

- Inspect for condition and complete detailed inventory to determine extent of recommended repair or replacement.
- 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.
- Overhaul, tighten/reinforce joints. Repair frame, trim and counterbalances.
- Each window should be made weather tight by re-puttying and weather-stripping as necessary.
- Retain historic glass, where possible. Where broken glass exists in historic wood-sash windows, the broken glass should be replaced. When removing broken glass, the exterior putty should be carefully chipped off with a chisel and the glazier’s points should be removed. The wood where the new glass will be rested on should be scraped and cleaned well, and given a coat of linseed oil to prevent the wood from absorbing the oil from the new putty. The new glass should be cut 1/16-1/8th smaller than the opening to allow for expansion and irregularities in the opening, to ensure the glazing does not crack due to natural forces. Window repairs should be undertaken by a contractor skilled in heritage restoration.
- Replacement glass to be single glazing, and visually and physically compatible with existing.
• Inspect rear leaded windows, and repair as required.
• Prime and repaint as required in appropriate colour.

5.8.2 DOORS
Casa Mia features original doors, which are character-defining elements and should be preserved. The grand front entry doors are finished with oversize stained wood trim. The front door also features original hardware, including doorknobs, peephole and small window with covering. The rear doorway from the vestibule off the central stairway features leaded glazing, which is continued through the two side lites. The leading has failed in a number of locations, and should be investigated and repaired.

Conservation Strategy: Preservation
• Retain the door openings in their original locations, and preserve and repair all original doors.
• Investigate the condition of the glazing within all doors. If glazing required repair, refer to Section 5.8.1: Windows for further recommendations.
• Repair any damaged leaded glazed door panels.
CONSERVATION RECOMMENDATIONS

Front entryway with double wood doors and flanking windows with wrought iron grilles
6. SALVAGE PLAN

In the event that parts of the building or site are to be demolished, or historic features are removed as part of rehabilitation, salvage measures should be undertaken. All salvage work should comply with Parks Canada’s *Standards and Guidelines for the Conservation of Historic Places in Canada*, 2010.

6.1 SALVAGE OF HERITAGE ELEMENTS

There are a number of features both on the interior and exterior of Casa Mia that are significant to the historic house. In the event that future rehabilitation work may require the alteration or removal of specific elements, a comprehensive salvage plan should be developed in discussion with the Heritage Consultant. The removal of the exterior and interior heritage elements would need to be undertaken by a Qualified Restoration Contractor. The work should be supervised by the Heritage Consultant. All salvaged elements are to be carefully documented before removal, including interior and exterior photographs and measurements. Each item is to be labelled and numbered, and carefully packaged in protective materials, then crated for storage. An inventory should be prepared that lists all salvaged elements. The salvaged elements should be stored in a safe and dry environment that provides protection from weathering with sufficient air ventilation to prevent rot, rust or other deterioration. When installation occurs in the new location, each heritage item should be carefully restored by a Qualified Restoration Contractor. The work should be supervised by the Heritage Consultant.

6.2 PROTECTION DURING RELOCATION AND STORAGE

The following checklist will help to ensure the security of items being protected or stored during the period of construction. Important elements to ensure safeguarding the items are protection from the environment, security and fire precaution measures, and regular monitoring.

**Moisture**
- Is the roof watertight?
- Are windows and doors and their frames in good condition except for salvaged windows?
- Are openings of salvaged windows sufficiently protected with plywood?
- Is the site of the storage location properly graded for water run-off?

**Ventilation**
- Have steps been taken to ensure proper ventilation?

**Pests**
- Are adequate screens in place to guard against pests?
- Has the location been inspected and treated for termites, carpenter ants, rodents, etc.?
Security

- Are smoke and fire detectors installed and in working order?
- Are they controlled remotely or on site 24/7?
- Are the exterior doors and windows securely fastened? Are window and door hoardings being kept in good repair?
- Are plans in place to monitor the building on a regular basis?
- Are the grounds surrounding the building being kept clear of rubbish and vegetation?
- 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?
- Are spray-paintings or other signs of vandalism being removed immediately?

6.3 SALVAGE LIST

The following section lists important elements that should be carefully salvaged, should they be removed for storage or repair.

SITE FEATURES

- Decorative cast plaster columns
- Exterior light fixtures
- Masonry balustrade on bridge
- Wrought iron entry gate, railings, lighting features
- Porcelain and terra cotta tiles

BUILDING EXTERIOR

- Terra cotta roof tiles
- Light fixtures
- Wrought iron elements
- Decorative tiles
- Leaded windows in servant wing
- Original door and window hardware

INTERIOR FEATURES

- Original plumbing fixtures
- Original light fixtures
- Original door and window hardware
- Any specific woodwork or plasterwork that may facilitate in the repair of other original detailing. This should be assessed on a case-by-case basis.
CIVIC ADDRESS: 1920 Southwest Marine Drive, Vancouver
LEGAL ADDRESS: Lot 1 + 8, Block 12, District Lot 317
HISTORIC NAME: Casa Mia
ORIGINAL OWNER: George C. Reifel
ARCHITECT: Ross Anthony Lort

REFERENCES:
City of Vancouver Building Permit:
- February 15, 1932; 1920 S.W. Marine Drive; Lot 1+8, Block 12, District Lot 317; Owner: George C. Reifel; Architect: Ross A. Lort; Builder: D. M. Currie; $45,000; “Purpose for which the building is to be used: Dwelling + 4 car garage.”

Vital Events:
- Birth Registration: George Conrad Reifel; May 15, 1893; Nanaimo; Reg. Number: 1893-09-050472; B.C. Archives Microfilm Number: B13810
- Marriage Registration: George Conrad Reifel and Alma Lucy Barnes; October 23, 1917; Vancouver; Reg. Number: 1917-09-088859; B.C. Archives Microfilm Number: B11380
- Death Registration: George Conrad Reifel; July 20, 1958; Age: 64; Vancouver; Reg. Number: 1958-09-008100; B.C. Archives Microfilm Number: B13238
- Death Registration: Alma Lucy Reifel; January 25, 1982; Age: 86; Vancouver; Reg. Number: 1982-09-002235; B.C. Archives Microfilm Number: B13617
Publications:


APPENDIX A
STRUCTURAL REPORT
May 9, 2013

STUART HOWARD ARCHITECTS INC.
Suite 405
375 West 5th Avenue,
Vancouver, B.C.
V5Y 1J6

Attention: Ms. Nan Legate

Dear Nan,

RE: Structural Assessment of Casa Mia Community Care Centre

1. Introduction

Fast + Epp has been retained to conduct a review of the existing structure of Casa Mia located at 1920 S.W. Marine Drive, Vancouver, BC with a view to renovating and upgrading the structure for use as a new community care centre.

Our knowledge of the building is based on one site visit and a review of existing architectural drawings. We have no structural drawings of the existing building. The site visit consisted of a walk through the house and did not include any selective demolition or testing. The structural assessment in this letter is performed based on the best knowledge obtained during the site visits, and past experiences on reviewing old residential properties.

This report includes a review of the capacities of the existing structure to resist both gravity and lateral forces as per the 2007 Vancouver Building By-Law and the NRC publication “Guidelines for Seismic Evaluation of Existing Buildings”.

This report does not address nonstructural aspects of the building such as roofing, glazing, mechanical and electrical systems, equipment and any other non-structural elements.

2. Existing Building Structural Description

The existing building has concrete walls along the perimeter of the basement supporting the loads from the floors and roof above. The basement walls also function as retaining walls to resist soil pressures.
It is expected that the existing floor system consists of timber joists supported on timber columns and/or stud walls. The expected roof framing is nailed timber trusses with timber decking on roofing battens.

The existing Seismic Force Resisting System (SFRS) may include the floor sheathing/decking functioning as floor diaphragm, and sheathed exterior and interior stud walls as shear walls. Site investigation will be required to confirm the actual SFRS.

Chimneys are found around the house and they are assumed to be constructed with bricks.

The existing entry foyer, the circular stairs, the play room, the library, the Ball room with stage are the proposed designated heritage spaces of the house. No renovation work will be anticipated in these areas.
3. Analysis of Existing House

With limited structural information available for the existing house, further structural investigation and analysis will be required prior to the demolition of the existing structures. Structural investigation may require to open up the small areas of existing ceiling / stud walls to identify load bearing walls, existing conditions and sizes of structural members and connections. Then, further structural analysis will need to be performed based on the structural information obtained to check the structural capacities under gravity and later forces.

Preliminary analysis was mainly done for seismic forces as per the NRC publication “Guidelines for Seismic Evaluation of Existing Buildings”. The analysis results indicated that the seismic forces can be safely resisted by utilizing/upgrading the existing load bearing walls and by upgrading the existing partition walls to structural shear walls.

Chimneys are assumed to be of bricks which have shown poor performance in the past earthquakes if the bricks are un-grouted or un-reinforced. Site investigations and further evaluation of the existing chimneys are required to finalize the upgrade procedure.

4. Proposed changes and Upgrade Requirements

Once further structural information is obtained, upgrade requirements can be further identified. The upgrade may include the followings;

1. **Seismic upgrade around heritage areas:** No structural upgrade will need to be done within the heritage areas, and if seismic upgrade is required, the upgrade can be safely done to the adjacent stud walls. Timber stud walls can be seismically upgraded by adding framing clips, hold downs, and plywood sheathing on either one or both sides of the stud walls.

2. **Existing Chimneys:** The existing chimneys can be reinforced using either Fibre Reinforced Polymer (FRP) or using conventional steel straps connected to the brick and roof framing to resist tension forces.

3. **Removal of Existing Load Bearing Walls at New West Wall (See Seismic Gap):**
   a. Temporarily shore the existing floor joists
   b. Install new timber beams and columns to support the existing joists
   c. Use joist hangers to connect the existing joists to the new beams
   d. Remove temporary shoring

4. **Demolition of Existing Garage:** Once the existing garage is removed, the end wall will also need to be demolished. The end walls can be replaced with new elevator shaft walls by connecting the new walls to the existing building so that the seismic forces are resisted without reinforcing the adjacent stud walls. These new elevator shaft walls will become a new SFRS of the existing building in both N-S and E-W directions.

5. **Seismic Separation:** A seismic gap will need to be provided along the joint where new building is attached to the existing structure. The seismic gap will separate the existing and new buildings so that no additional loads from the new building are transferred to the existing structure under earthquake.
Regards,

Fast + Epp

Julien Fagnan, Ph.D., P.Eng.
Associate