

HERITAGE ALTERATION PERMIT GUIDELINES

Heritage Conservation Area

Consideration has been given to the following guidelines as identified in Chapter 16 of the City of Kelowna Official Community Plan relating to Heritage Conservation Areas:

HERITAGE CONSERVATION AREA	YES	NO	N/A
Site Layout and Parking			
Are established front yard setbacks maintained within 10% of neighbouring building setbacks?			\checkmark
Are parking spaces and garages located in the rear yard?			
Are established building spacing patterns maintained?			
Does the carriage house complement the character of the principal dwelling?	\checkmark		
Are accessory buildings smaller than the principal building?	\checkmark		
Building Massing			
Is the established streetscape massing maintained?	\checkmark		
Is the massing of larger buildings reduced?			\checkmark
Roof Forms, Dormers and Chimneys			
Is the roof pattern in keeping with neighbouring buildings?	\checkmark		
Are skylights hidden from public view?			\checkmark
Are high quality, low maintenance roofing materials being used?			
Are the roofing materials similar to traditional materials?			
Are the soffit, overhang and rain water drainage features in keeping with the building's architectural style?			
Do secondary roof elements have a similar pitch as the principal roof?			\checkmark
Are chimneys in keeping with the building's architectural style?			\checkmark
Cladding Materials			
Are low maintenance building materials being used?	\checkmark		
Are the building materials similar to traditional materials?	\checkmark		
Are exterior colours in keeping with the traditional colours for the building's architectural style?	\checkmark		
Doors and Windows			
Are established window placement, style and window-to-wall area ratios maintained?	\checkmark		

HERITAGE CONSERVATION AREA		NO	N/A
Are established door placement, style and door-to-wall area ratios maintained?			
Is the main entrance a dominant feature visible from the street?	\checkmark		
Is the main entrance in keeping with the building's architectural style?	\checkmark		
Are the door and window design details consistent with the building's architectural style?	\checkmark		
Landscaping, Walks and Fences			
Are existing healthy mature trees being retained?			
Is the front yard landscaping consistent with neighbouring properties?			\checkmark
Is street facing fencing or screening landscaping no more than 1 m in height?		\checkmark	
Privacy and Shadowing Guidelines			
Are there clear sightlines from the street to the front yard and dwelling?	\checkmark		
Does the building location minimize shadowing on the private open space of adjacent properties?	\checkmark		





February 8, 2019

City of Kelowna Planning Department 1435 Water Street Kelowna BC, V1Y 1J4

To whomever it may concern,

RE: Sticks & Stones Rebuild Proposal at 1983 Abbott Street - Kelowna

This report is to comment on the appropriateness of the proposed rebuild at 1983 Abbott Street, a property within the Abbott Street Heritage Conservation Area. The below observations consider the proposal's alignment with both the <u>HCA's Guidelines</u> for new development as well as with the <u>Standards & Guidelines</u> for the <u>Conservation of Historic Places</u> <u>in Canada</u>.



left: Sticks & Stones Design Group architectural drawing of the proposed rebuild facade elevation at 1983 Abbott Street. Proposed colour scheme added by author.

Brief history of development and alterations

The subject house is one of a row of four identical single-storey cottages built in or just before 1914. As seen in the below May, 1914 fire insurance plan, the four cottages featured a single-storey height, full-width front verandas, and small single-storey extensions at the rear. They each also had a single-storey wood shed at the rear.

left top: Crop from sheet 16 of Goad's 1914 Atlas for Kelowna showing the subject block of Abbott Street (at the time the 700 block). Source: Library and Archives of Canada

left bottom: Crop from an aerial of Kelowna taken in April, 1946 showing the corner of Abbott and Beach Avenue. Source: http://vintageairphotos.com

The earliest photograph found of the cottages is this aerial from 1946. It shows that at the time, three of the four cottages (from Beach) featured hipped main roofs and gabled rear extensions, while the house at 1989 Abbott had a front gabled main roof. It is unknown whether the 1989 Abbott roof form was always different from the group or an alteration carried out in the three decades since construction. Over time all four cottages underwent alterations, most notably the application of stucco cladding and the full or partial enclosing of their verandas.











1979 and 1983 Abbott in May 2009. Source: google street view



1985 and 1989 Abbott in September 2011. Source: google street view

In the above photographs from 2009 and 2011, the four houses still retained their original cottage form and scale. 1985 Abbott (left side - lower photo) now also featured a low-pitch front gable roof like at 1989 Abbott (right side - lower photo). The facade window patterns and opening dimensions were consistent on all houses with the exception of 1983 Abbott. At the time of these photographs the veranda hipped roofs survived on all four. All these factors together illustrated that the four houses were linked to each other in design and age and the streetscape was integral.

Recent alterations at 1979 Abbott (2013) involved a new gabled roof, similar to 1985 and 1989 Abbott. In 2016, 1989 Abbott underwent a complete rebuild, diverting significantly from the historic cottage form and massing. This new build features a 'historic inspired' 1.5 storey front portion with a front gabled roof and a front gabled veranda.

At the current time, this historic streetscape consists of three 1.5 storey cottages with front gabled main roofs and one single-storey cottage with a hipped roof. The 1.5 storey cottages all



have partially enclosed verandas whereas the single-storey cottage has a fully-enclosed veranda. The veranda roofs are all still full-width hipped roofs except for at 1989 Abbott where the new veranda roof is gabled. From a traditional design perspective, the three most altered buildings (1979, 1985 and 1989 Abbott) no longer read as vernacular cottages but as Craftsman-inspired bungalows typical of the 1920s and 30s. These recent alterations have significantly altered the character of the original streetscape - to a character that is not related to the original development, nor to the design trends of the pre WWI era.

Below are two house models from early house plan catalogues, likely similar to those used by early Kelowna builders. The Sears Roebuck Kismet model, on the left, was first introduced in 1911. The original cottages in question would have been similar to this model. The Ray H. Bennett Lumber Co. York model, on the right, marketed as a 'suburban bungalow' in 1922, is more in line with the current appearance of the altered houses in the subject grouping.





Sears & Roebuck 20' wide 2-bedroom 'Kismet' model as marketed in 1912. Source: http://www.searsarchives.com

Ray H. Bennett 24' wide 2-bedroom York model. Source: <u>http://www.antiquehomestyle.com</u>

The only building still to retain its 1914 form and massing is the subject house at 1983 Abbott which, given the alterations on either side, now looks out of context and historically unrelated to its neighbours. A detailed structural report by KO Structural Engineering recommends that due to significant deterioration of the structure, rebuilding the house is the best approach. Additionally, due to the many alterations over the years, no original finishes are visible, so their condition, if they survive on the building, was impossible to assess.

New build design recommendations

With streetscape integrity an important priority in the Abbott Street HCA, and the HCA Guideline's encouragement to take inspiration from the 'dominant neighbourhood roof pattern'; and in an attempt to retain the appearance of a grouping of four cottages that share the same lineage and design - it was deemed that the best design approach for a new build at 1983 Abbott would be to adapt the street-facing roofline to a front-gabled form and enlarge the building to the general 1.5 storey height of its neighbours.



The proposed design take cues from adjacent/neighbouring houses in the following features:

- 1.5 storey height
- front gabled facade roofline
- partially enclosed veranda

The proposed design aligns with the original design from 1914 with:

- a separate hipped veranda roof which extends the entire width of the facade (still retained at 1979, 1983 and 1985 Abbott)
- vertical window openings with projecting sills upper and lower sashes of equal dimensions (still evident at rear of 1983 Abbott and on 1985 Abbott as well as on archival photos from 2009-2011 for all four cottages)

The proposed design applies the following finishes and architectural elements traditional to vernacular cottages of 1914:

- slim, square veranda posts roughly 5" wide but not wider than 6"
- smooth finish horizontal lap siding (6.5" width installed at 5" exposure)
- smooth finish window and door casings consistent everywhere at 5.5"
- smooth finish trim corner 5.5" boards
- historic (low) veranda railing height of 20"- 24"
- authentic Edwardian-era colour scheme and placement
- solid wood traditional front door, partially glazed

The above architectural elements are also found on comparable modest-sized Kelowna cottages of the same pre-WW1 era:

The Trench House - 1911 - 784 Lawrence Avenue, **The Knowles House** - 1907 - 865 Bernard Avenue, T**he Tutt House** - 1910 - 809 DeHart Avenue, **The DeHart House** - c. 1907 - corner of Ethel Street and Sutherland Avenue, **Dr. H.L.A. Keller House** - 1902 - 2005 Pandosy Street, **The Temple House** - 1910 - 356 Park Avenue, **The Reekie House** - 1907 - 429 Park Avenue

Historic Edwardian colour scheme:

A 1914 house would have had a contrasting colour scheme - typically a dark or mid-tone body, light trim and dark windows. The following colours and proposed placement reflect this:

siding/body (HardiePlank) Gray Slate window and door trim columns/corner & facia boards (HardiePlank) Sail Cloth windows & front door (Euroline) Charcoal Black can also be lacquered wood







It is my professional opinion that the thoughtful, and well-researched new build proposed here by Sticks & Stones Design Group and the property owners, achieves all of the above and meets the Objectives of Kelowna's Heritage Conservation Areas as listed in Chapter 16 of the Official Community Plan:

• *Maintain the residential and historical character of the Marshall Street and the Abbott Street Heritage Conservation Areas;*

• Encourage new development, additions and renovations to existing development which are compatible with the form and character of the existing context;

• Ensure that change to buildings and streetscapes will be undertaken in ways which offer continuity of the 'sense-of-place' for neighbours, the broader community; and

• Provide historical interest for visitors through context sensitive development.

Yours Truly,

Hang.

Elana Zysblat heritage consultant, CAHP President of the Board, BC & Yukon Chapter - Canadian Association of Heritage Professionals





Abbott Street Structural Assessment

Prepared for Bob Wall

Job Number: 18-04285 1983 Abbott Street Kelowna, BC

August 20, 2018



ATTACHM	ENT B		
This forms part of application			
# HAP18-0014	🕷 🔞		
	City of 💖		
Planner Initials BC	Kelowna		

August 20, 2018

Bob Wall 1868 Ethel Street Kelowna, BC V1Y 2Z4

Attention: Bob Wall

Subject: Structural Assessment of Existing Heritage House at 1983 Abbott Street, Kelowna, BC

1. INTRODUCTION

KO Structural Engineering Ltd. (KO) was contracted by Bob Wall in regards to the above residential property. Mr. Wall indicated that he would like to re-build this residential building, but has been denied permits from the local building authorities since this building's age could possibly designate it as a heritage building. Mr. Wall believes that a preliminary structural assessment of the property would be beneficial to the building permit process. Keith Ohlhauser, P.Eng and Breanna Martin of KO structural visited the site on August 16th, 2018 and were accompanied by Bob Wall (the home owner). The following constitutes the structural assessment.

2. OBSERVATIONS

All observations were limited to visual inspections only and only structural elements that were accessible from ground level. Those structural elements that were not visually checked, have been sized using the smallest typical structural element that would have been used at the time.

The house is a 1-storey house completed around 1915 – built upon a shallow crawl space, as was typical of the time. It appears that a few additions have been made to the main entrance





way and possibly the rear mud room as well.



Fig.1 – Front View of Property

The floor system has settled significantly with noticeable "dips" as you walk from the front through to the back of the house.

There is additional evidence of water staining on the ceiling and the owner has indicated that he has repaired the drywall ceiling in one of the bedrooms.

The bathroom ceiling also has some evidence of water staining and there is a lack of ceiling mounted fans, which does not allow moist air to ventilate to the exterior.

The exterior roof overhangs along the sides of the house do not have any eavestroughs attached.

The exterior roof has areas of "sagging" indicating some possible water damage.

The following structural elements were observed or are considered typical of construction during the time of build.





1. Floor joist system – 2x8 D.Fir joists, spanning 11'-0" and spaced 24" o.c.

2. Center crawl space support beam of 6x6 D.Fir timbers supporting the 11'-0" span floor joists on each side of the beam with 4x4 timber posts spaced approximately 5'-0" o.c.

3. The support posts for the main timber floor beams are approximately 24" high, and additional steel teleposts have been installed to reduce the spans to about 5'-0" lengths.

4. It unclear if the teleposts are installed over concrete pads.

5. The owner has indicated the the exterior foundation is a Permanent Wood Foundation type and is not sitting on any concrete footings.

6. The exterior wall thickness indicates that 2x4 construction was used in the framing of the load bearing walls. Typical spacings of 16" o.c. have been assumed.

7. The attic was unavailable for viewing, but typical roof construction of the time would indicate that 2x4 roof rafters and 2x6 ceiling joists would have been used with a maximum spacing of 24" o.c.

8. No window or door headers were observed, (2) ply 2x6 would be sufficient for a typical window header of 6'.

3. ANALYSIS AND DISCUSSION

Structural elements are analyzed for ultimate limit states (strength) and serviceability limit states (deflection) design. The following structural elements were analyzed and found to pass both ultimate and serviceability design requirements:

- 1. Floor Joists OK
- 2. Support Beam OK
- 3. Roof Rafters OK
- 4. Typical Headers OK
- 5. Wall Studs OK
- 6. Steel Telepost OK





Some items that have serviceability issues:

1. Steel Teleposts – There wasn't a lot of room to crawl into the crawl space to verify that all the teleposts were bearing on concrete pads.

2. Exterior Foundation – The exterior foundation wasn't exposed and it wasn't possible to verify that the foundation was constructed of permanent wood foundations. However, there were noticeable dips and drops in the floor system indicating possible foundation settlements along the exterior bearing points, possibly confirming PWF construction. PWF construction would likely be prone to wood rot after 100 years, especially since there are no eavestroughs visible on either side of the roof. This allows rain water to accumulate against the PWF. Frost protection and drain tile installations could not be verified and are most likely substandard which could also contribute to the uneven floor joist system.

3. Roof Joists – Although the roof joists pass the current ultimate and serviceability limit states design requirements, it is obvious that long term creep has resulted in serviceability failure as obvious dips are visible in the roof structure; as would be expected after 100 years of service. It was impossible to verify if this deflection failure is due to long term creep or damage from water penetration into the roof as KO was unable to access the attic areas. However, water staining of the ceiling indicates that these structural elements have been exposed to high amounts of moisture.

4. Wall Studs – Although the wall studs exceed the ultimate and serviceability limit stated designs; it's likely the the current energy and insulation specifications are exceeded.

These serviceability issues can all be repaired; however, the cost of repairing these would exceed the cost of rebuilding the structure.

For example, the wood studs could be replaced or sistered up with deeper 2x6 studs to meet the current energy codes. While the cost of the actual additional studs may be the same, the labour cost of framing around redundant 2x4 studs would exceed that of simply building 2x6 walls by themselves.





Likewise, the cost of leveling the floor system would require lifting the house structure to pour or replace a new level foundation. The crawl space height would most likely require increase to allow easier access. This cost would obviously be higher than new construction as well. The roof dips could also be fixed by sistering up new straight joists beside the sagging ones, but the cost of labour to do this, while maintaining the integrity of the current system, would be much higher than simply re-building.

Finally, even after repairing the structural, most of this structure would actually be new construction, except for the fact that the floor and roof layouts would still be the old residence. So, the owner would be paying for new construction without receiving the actual benefits of new, modern layouts and potential additional storeys.

4. <u>RECOMMENDATIONS</u>

KO Structural would recommend re-building this residence instead of repairing the deficiencies and bringing the existing building up to current codes.

While it's always possible to repair the structure, the cost of repair is too extravagant and the final result would be a poorly laid out residence.

5. <u>CLOSURE</u>

This report has been prepared by KO Structural Engineering Ltd. and is based upon visual inspections of the structure only. No physical samples were taken from the structure or analyzed. Should additional information become available, KO requests the opportunity to review the report. Our scope of work does not include verifying any other existing conditions (eg geotechnical conditions, fire separations requirements, setbacks, waterproofing, hand & guardrails, building envelope & environmental separation requirement).

Information gathered will be retained on file for future use. If you have any questions or concerns please contact our office at your earliest convenience.





Sincerely,

KO Structural Engineering Ltd.

Keith Ohlhauser, P.Eng (230) 420 – 3640 email: kohlhauser@kostructural.com





April 1, 2019

Bob Wall 1983 Abbott St Kelowna B.C.

Subject Property 1983 Abbott St Kelowna, B.C.

Contact: Bob Wall

Tree Protection Requirements:

Cody Tree Service was contacted to inspect the trees at 1983 Abbott St and provide a strategy for the protection of the trees during the construction of a new residence on the subject property. A Norway maple on the front, west side of the property, a locust on the north side, and an emerald maple on the south side of the property. The trees along the edge of the property will be very close to the building envelope of the project and a temporary fence will be required. It will need to be constructed along the trees to protect them from the furthest point that the excavation will take in relation the to trees proximity to the building.

The maple at the front of the property requires a temporary fence to be constructed around the perimeter drip line to ensure the trees roots are protected form the construction. Placement of the fence should be adequate to block all access to the root zone of the tree.







With temporary fence enclosures around the root zone of the trees, they will be protected from compaction damage and root destruction during the construction process.

The fences should include signs that have contact information for the client in the event disruption to the barrier for the trees is realized. Contractors should be made aware in the event of disruption or damage to the fence or the tree needs to be reported immediately and the fence restored and the tree inspected. If roots are disrupted in the course of the digging of the foundation, documentation of the root damage should be conducted and an arborist called in to inspect the root damage and provide recommendations for their remediation.

The fences should be constructed as outlined and the trees watered weekly throughout the construction process. A long deep watering of the trees will be required and mulch over the root zones to keep the moisture in the soil and to protect the roots from desiccation. Additionally, a circular well should be constructed prior to the mulch installation to retain the water around the root zone of the trees.

Inspection of the retained trees needs to be completed prior to construction and post construction, as well as one year after the construction of the home is completed. These inspections are to ensure the trees continue to be in good health after the project is complete. Inspections need to be carried out by a certified arborist and a report generated upon completion of the inspection to be retained by the client for his records and the City of Kelowna.

Jeff Judson Cody Tree Service ISA TRAQ Certified Tree Risk Assessor 1159



Letter of Rationale



1983 Abbott Street

We purchased the house located at 1983 Abbott in July 2017 with the intent of a forever home. Our goal was a home in a central location with convenient access for an older couple.

The house was built in 1915 as a seasonal rental. It has been tenant occupied for most of its life span. Over the years various renovations have been made to convert the home to a year around home. Unfortunately, these repairs have not kept pace with the deterioration of the home.

After a structural assessment by Keith Ohlhauser (P.Eng) of KO Structural Engineering it has been recommended "that the cost of repair would be too extravagant and the final result would be a poorly laid out residence". Listed below are the upgrades that are required to bring the house to current code standards.

- The house would have to be raised to gain access to the foundation. The existing wooden foundation would have to be completely removed and replaced with cement foundation etc. At the same time all the services would have to be replaced as they are all deficient based on current standards.
- Before the house is replaced, various rim joists and floor joists would have to be replaced to eliminate the rotten parts.
- The interior of the house would have to be completely removed to access the exterior walls. The exterior walls could then be repaired with 2X6 studs. This is necessary to support the rotten studs as well as provide additional insulation.
- The roof would have to be completely removed as the structural integrity of the trusses has been compromised over time. New engineered trusses would be required. Of course, new shingles etc.
- As the various repairs progressed, all new mechanical and electrical upgrades are required. Being built as a seasonal rental, services were minimal. As this house was primarily tenant occupied, upgrades were done on a as required basis only.

It is our desire to build a new home that would be in keeping with the neighbourhood. With that in mind we hired Ryan Esbjerg, a designer that has experience with heritage inspired homes. Our original instructions were to design a house that from outward appearances is a freshly painted heritage home. We feel this has been accomplished.

There are several mature trees on the property. The maple on the boulevard would be untouched. We have already started the process of bringing the hedge on the south west side back to a tailored hedge. An arborist has been consulted regarding the two trees close to the house. He feels that he can prune the trees to the point where they will not be damaged by the new construction. There was a pine tree on the north west corner, this tree was diseased and had to be removed. It will be replaced with a dog wood. There will be a curved walk approaching the house. The front of the house will have foundation planting in keeping with the neighbourhood. The balance of the lot will be landscaped as per drawings.



As part of the design process, the neighbours with a direct view of the home have been approached. Ted & Marilyn W. (1979 Abbott St, the home directly adjacent to the north), expressed concerns regarding the view into their hot tub. The choice and positioning of the windows were discussed. As all the first-floor windows on that side of the house are transom windows that are positioned above site lines this would hot be a concern. All the approached neigbours gave positive comments, were open to the change and felt that the home would be a welcome addition to the neighbourhood. The neighbours directly to south are away. The project has been discussed with them but unfortunately, we were unable to show them the images. At the time of discussion, they were excited about the project and were looking forward to seeing the finished result.

We feel that a significant amount of effort has been expended to make this home fit into the neighbourhood.

Bob Wall/Hilda Wall 250 317 5388

Attached:

- Structural Engineering Report (KO Structural Engineering)
- Energy Efficiency Analysis (Enforma Inc)
- Neighbours signatures and comments.

WALL RESIDENCE

CUSTOM HOME DESIGN





PROPOSED ELEVATION



1983 ABBOTT STREET EXISTING FRONT ELEVATION



1983 ABBOTT STREET EXISTING REAR ELEVATION



1989 ABBOTT STREET EXISTING FRONT ELEVATION



1989 ABBOTT STREET EXISTING REAR ELEVATION



1979 ABBOTT STREET EXISTING FRONT ELEVATION



1979 ABBOTT STREET EXISTING REAR ELEVATION





www.sticksandstones.ca

FEB 10 2019 (R8) REVISED PER ADVISOR COMMENT STREET, KELOWNA, BC ABBOTT

1983



FEB 10 2019 (R8) REVISED PER ADVISOR COMMENT 1983 ABBOTT STREET, KELOWNA, BC

WALL RESIDENCE, CUSTOM HOME DESIGN NOT FOR CONSTRUCTION



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1 PROPOSED MAIN FLOOR

PORCH

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LIVING ROOM

KITCHEN

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MASTER BEDROOM

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NOT FOR CONSTRUCTION PROJECT: WALL RESIDENCE, CUSTOM HOME DESIGN





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HAXIMUM BULDING

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1 SIDE (NORTH) ELEVATION



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WALL RESIDENCE, CUSTOM HOME DESIGN

ABBOTT STREET, KELOWNA, BC

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BUILDING SECTION



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WALL RESIDENCE, CUSTOM HOME DESIGN

ABBOTT STREET, KELOWNA, BC

1983

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