BEFORE COMMISSIONERS APPOINTED BY NORTHLAND REGIONAL COUNCIL

UNDER the Resource Management Act 1991 (**RMA**)

<u>AND</u>

IN THE MATTER of an application for a resource consent to

build a replica of the Mangawhai Wharf

BY THE MANGAWHAI HISTORIC WHARF

TRUST

Applicant

STATEMENT OF EVIDENCE OF ROY ALFRED FARIS FOR THE MANGAWHAI HISTORIC WHARF TRUST

(CONSTRUCTION)

Dated: 4 September 2020

BROOKFIELDS LAWYERS

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1. INTRODUCTION

- 1.1. My full name is Roy Alfred Faris and I am a resident of Mangawhai.
- 1.2. I am now retired after spending over 60 years in the New Zealand construction industry, initially as a certified carpenter and joiner, then construction foreman, Ministry of Works Building Overseer, the Dunedin City Council Clerk of Works and since 1973 my own Consultancy Practice as a Clerk of Works, Building Surveyor, Arbitrator, Project Manager, Designer, BRANZ Advisor and Construction failure expert and assisting MBIE as a Weathertightness assessor and expert Determinations investigator.
- 1.3. I am a Fellow of the New Zealand Institute of Clerks of Works and past national President, Founder and Past first national President of the New Zealand Institute of Building Surveyors and a Justice of the Peace since 1983 undertaking judicial duties in Dunedin and Central Otago Courts.
- I have been involved in the design and project management of floating pile driven marina structures in Central Otago
- 1.5. I confirm that the evidence I present is within my area of expertise and experience. I am not aware of any material facts which might alter or detract from the opinions I express. I have read and agree to comply with the Code of Conduct for expert witnesses as set out in the Environment Court Consolidated Practice Note 2014. The opinions expressed in this evidence are based on my qualifications and experience and within my area of expertise.

2. MY EVIDENCE

- 2.1. My role was to assist in the practical on site investigations in the area of the now de-constructed historic wharf, to establish the original wharf footprint and to investigate and record the exact original wharf dimensions and its location in and relationship to the upper estuary channel.
- 2.2. As well I have assisted in the establishment of the proposed wharf reconstruction being a replication of the original historic wharf. This proposed re-construction is designed and will be built of materials best suited to today's construction systems and general construction compliance. I have photographically recorded the site evidence of the remaining original wharf

- structure and taken measurements to confirm the structure remains support the original plans.
- 2.3. My findings and conclusions are contained in Appendix 2 to the application and cover the following matters:
 - a) The original wharf structure;
 - b) The water levels example at low/high tide at the main wharf section into the channel:
 - c) Details of the proposed wharf rebuild design;
 - d) The proposed wharf rebuild construction; and
 - e) The proposed on-going management of the wharf covering health and safety, security, insurance and finance.
- 2.4. We are fortunate to have to hand plans and remnants of the original wharf that enable us to accurately replicate the design of the original wharf serving the community of Mangawhai and its surrounding areas. Any variations will simply reflect modern materials, building standards, and safety requirements and, in response to a concern raised by one party in the course of consultation with respect to visual impact, a reduction in the mass of the wharf shed. The removal of two walls mean that the shed will also have better utility for recreational use and provides for better visual security.
- 2.5. The nature of the construction as described means that it will have minimal impact on the coastal environment and we can proceed without destroying the stub remnants of the original wharf.
- 2.6. The location means that the operation of the wharf its use by residents and visitors will have minimal impact on the surrounding environment, while remaining visible which counters any possible safety and security concerns. Its location and construction together mean that maintenance by the Mangawhai Historic Wharf Trust (the Trust), if and when required, will be straightforward and unobtrusive.

3. REBUTTAL EVIDENCE

- 3.1. My rebuttal focuses on the matters raised in the submission by Mr Aaron McConchie.
- 3.2. Safety: I do not accept the view that the proposed wharf re-construction provides an unacceptable risk to the public. The construction includes ladder access positions, lifebuoy rings at 2 locations, safety lighting, warning notices and the potential for CCTV coverage.
- 3.3. Wharves in estuary harbours generally require long finger sections to access channels at lower tides. Typical construction for these fingers which stand in no water at low tide are above the seabed by 2 or 3 metres and have a handrail or 2 only. By way of example, two of the closest estuary upper reaches wharfs being Port Albert and Shelly Beach are constructed in this manner as was the original Mangawhai wharf (as shown in the attached photos of Mr Colin Leach's rebuttal statement). I am not aware of any health and safety public concern about these wharf structures which have little or any of the safety requirements or installations that this proposal has.
- 3.4. Construction Standard: I do not accept the view that the structure will not be in compliance with all construction and safety standards. There is a direct requirement to comply with all relevant New Zealand standards through the processes of the Building Consent.
- 3.5. Tidal Conditions: I do not accept the view that the tidal movement causing current pressures at the wharf location is in any way excessive or dangerous. The lower harbour areas are used extensively for swimming and paddling by the public where the tidal movement and current is much greater.
- 3.6. I spent time in and around the channel when surveying for the current proposal and can affirm that there are no untoward currents in the vicinity. Older Mangawhai residents tell of the original wharf being a popular place for swimming and boating activity and family gatherings in their youth.
- 3.7. **Navigation Issues**: Of interest from the on-site investigations undertaken the channel is in the exact same location and depth as it was during the original 1880 construction and 1920 subsequent upgrade. The project proposes no alteration to the existing channel or dredging so I reject the view that the

reconstruction of the wharf will attract large boats in numbers and cause navigational dangers and congestion. Even at high tide the upper harbour and estuary has considerable natural restrictions for large craft. With the 5 knot restriction controlling water skiing and jet skis, boating activity to the upper reaches will be of a more passive nature.

- 3.8. Timber Treated Wharf Poles and the matter of CCA leaching: One of the fundamental elements of the project to re-construct the wharf to match as best we can the original structure within the limitations of compliance and today's materials. Therefor the use of timber treated poles is a basic requirement for both the design and compliance.
- 3.9. Minimising leaching of the treatment can be done by ensuring in the first instance that the treatment process is certified and robust and that no sludge remains on the poles after treatment. We will ensure that the supply of the poles is from a certified plant and clean on dispatch.
- 3.10. Michael D Hedley in his 1997 paper (*An Assessment of Risk with the use of CCA treated timber*) comments in part:

Copper-chrome-arsenate (CCA) preservatives have been in use world-wide for some 60 years and in New Zealand since the mid 1950s. They are demonstrably the most effective of all wood preservatives.

- 3.11. An important proviso to these observations is that material must be treated to conform to treatment standards and specifications and in accordance with prevailing quality assurance requirements, to ensure that the preservative is properly fixed within the wood before it is used and that it is free from any extraneous surface deposits ("sludge").
- 3.12. There is a very large body of data on the environmental impact of use of CCA treated wood (inter alia Arsenault, 1975; Webb and Gjovick, 1988; Comfort,1993; Brooks, 1993) which suggests that use of CCA-treated timber either in soil or in fresh or salt water will have little significant effect on raising these background levels and consequently will not affect eco-systems supported within these environments.

4. Section 42A Report

4.1 Section 6.1 (20 of the Section 42A report reads in part:

"To further mitigate potential adverse effects on water quality conditions of consent can be imposed to install floating silt screens around the construction area"

- 4.2. In my view, the installation of floating silt screens around the construction site is both unnecessary and impractical. The action of pile driving which is the only construction activity to the sea bed. It is a punching of the sea bed and not an excavation. Any disturbance when this action is carried out in water will be minor, in my opinion, compared to the discolouration caused to the estuary from a typical storm water discharge in rain periods. Vehicle movement alongside the boat ramp area at low tide on the sea bed during construction will be out of the water and therefore less than minor.
- 4.3. Construction of any silt screen around the construction area will need to include the boat ramp area, taking it out of use to the public. Also, to surround the main wharf structure the channel will be severely restricted raising quite serious navigational risks for no practical benefit.
- 4.4. Section 6.3.3 (34 of the Section 42A report reads in part:

"Consent conditions can also require any exposed portions of the wharf to be recessively coloured"

4.5. The timber structure of piles, beams, planking handrails are naturally recessively coloured and will naturally weather and blend into the colours of their surroundings and it has never been a consideration to paint these components. Typically, this is the case with any wharf in New Zealand. The only painting proposed was the weatherboarding and roof sheathing of the shelter building. There may also need to be some protective paint coating to metalwork of the lighting poles, the ramp and on the pontoon. The Trust is open to accept as a condition, a recessive colour pallet as recommended by the NRC for the shelter building and metalwork.

Roy A Faris