

Date 08.10.2024
 Project No 22026
 Client Jimmy and Mel Campbell
 90 Harbord Rd Freshwater 2096

Re: 90 Harbord Rd – Walls on boundary

A development application is being prepared for a detached dual occupancy on the property at 90 Harbord Road. As part of the new development it is proposed to retain some existing walls of original buildings. SRHA Has undertaken a structural review of the walls slated for retention.

Development Application Proposal

The proposed dual occupancy development is outlined in a set of preliminary DA documents by James Campbell dated 3/10/2024. A portion of drawing SK100 is reproduced below.

Indicated on this plan are two walls proposed to be retained. These walls sit within a few hundred millimetres of the north and west boundaries of the property.

The DA documents show that proposed new Level 1 floors above are to be set in from the north and west boundaries by at least 1500mm.

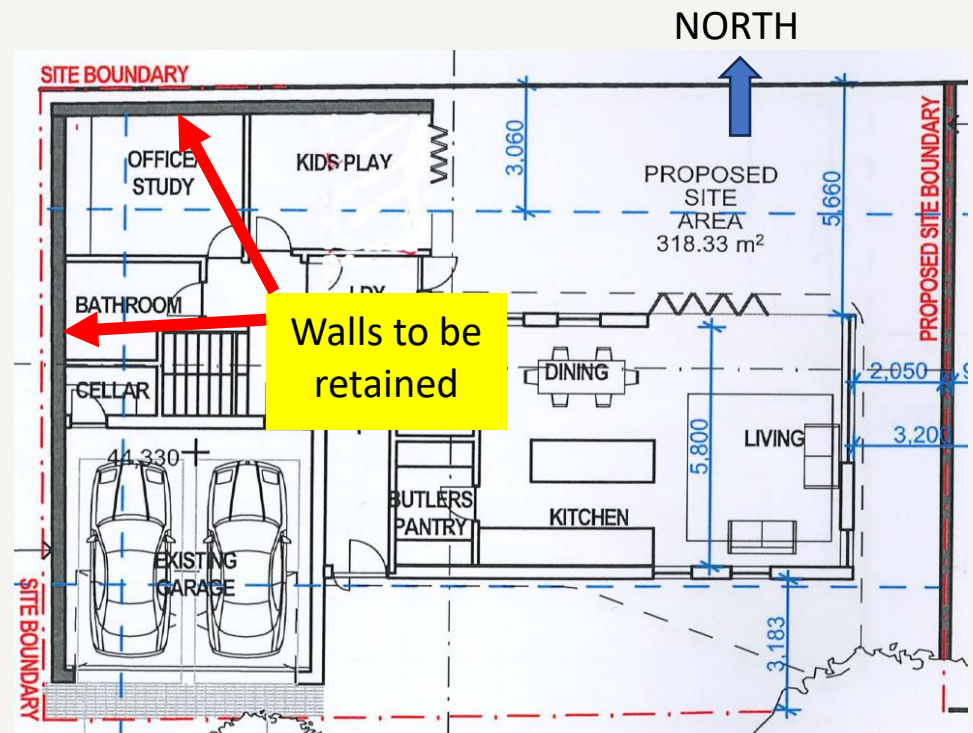


Fig.1. Ground Floor plan – Part SK100

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Site Inspection

Inspection of the property was undertaken by Richard Barnes on 4 Oct 2024.

The existing building on the western portion of 90 Harbord Rd site is a garage. Typically, the floor is concrete, walls brick and roof timber. It appears to have been built in two stages, so there is a construction joint between the southern and northern halves, and distinct roofing arrangements between each half.

The two subject walls are both single skin brickwork. The thickness was validated by the thickness being evident at multiple wall ventilators. Some of the brickwork has been rendered whilst other parts are exposed. There are multiple engaged piers on the internal face.

It is unclear whether the brickwork sits on the edge of the garage slab, or on separate strip footings below the slab edge. Direct viewing of this junction is obscured by a topping slab.

Externally, along the western boundary, the neighbour has a low wall running parallel to the garage wall. There is a gap approx. 200mm wide between facing walls. Dirt has partially filled the gap, so the lowermost portion of the garage wall currently acts as a retaining wall. Along the northern boundary, the neighbour ground level is slightly above garage level, so again the garage brick wall partially retains soil.

The two boundary brick walls visually appear to be in sound condition, with no significant cracking and sound mortar.

Structural Engineering Perspective

The two existing boundary brick walls appear structurally sound. If the existing garage remained in action, these two walls might be expected to continue to provide sound support in their current configuration.

The proposed modifications as part of the DA dual occupancy proposal may add additional load to the subject existing boundary brick walls. However the offset of Level 1, plus new internal ground floor walls will mean this load increase is limited. It is our assessment that the existing brick walls will have adequate design capacity to support the new loads.

The new levels in the proposed building are aimed to be equal to or above the existing garage floor levels. Consequently the existing floor can be retained, and the foundations of the subject boundary brick walls can be retained unaltered.

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Conclusion

SRHA conclude that the observed structural condition of the north and west garage brick walls permits their retention. From our visual observations, the brickwork in the walls, its current condition, and the assumed founding likely arrangements for the walls are all structurally adequate to allow the existing walls to be incorporated into the proposed new building.

Kind Regards,



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