

Craig Zerk**Consulting Engineer**

Registered Professional Engineer of Queensland

General Manager
 Ballina Shire Council
 PO Box 450
 BALLINA NSW 2478

27 April 2018
 Ref No. 914108

Dear Sir,

Further Assessment of Damage to Property at 7 Castle Drive, Lennox Head

This is to advise that inspections of 7 Castle Drive, Lennox Head were conducted by the undersigned on 23 February and 27 April 2018. The purpose of the inspections was to investigate and report on any changes to the tree root damage to the dwelling and associated concrete pavements and masonry walls that has occurred since April 2017.

This report should be read in conjunction with the previous report dated 20 April 2017.

1. Site Observations

The observations are described in the Photographs No. 1 to 12 attached and are summarised in the table below.

Building Element	Observed Change Since 6 April 2017
Leaning pillar at the dwelling entry door	None evident
Driveway slab	Slab has lifted a further 10mm at the garage entry
Masonry screen fence next to the garage	This wall has lifted by an additional 10mm and rotated a further 4mm away from the dwelling
Path on the western side of the house	None evident
Diagonal crack in the brick wall at the south-eastern corner of the house	None evident

2. Conclusions

It can be concluded that between 6 April 2017 and 27 April 2018 the extent of damage to the driveway and masonry screen fence at the front of the dwelling at 7 Castle Drive has increased. This has most likely resulted from the continued growth of the root system of the adjoining fig tree. However no other significant increase in movement within the structure of the dwelling was observed.

Yours faithfully,



Craig Zerk
Consulting Engineer

Encl.:

1. Photos. No. 1 to 12

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Photo No. 1 – Leaning brick pillar at the entry to the house as photographed on 6 April 2017.

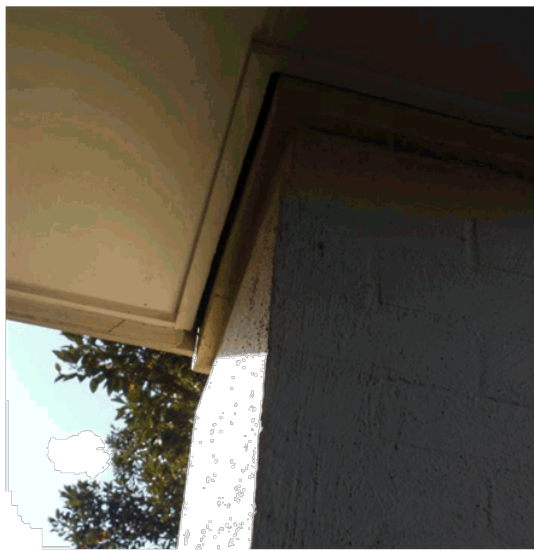


Photo No. 2 – The leaning in the brick pillar at the entry as photographed on 27 April 2018. The lean does not appear to have deteriorated over the past 12 months.

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Photo No. 3 – Lifted concrete driveway slab abutting the garage floor slab as photographed on 6 April 2017. At the time the step at the joint was measured at 25mm high.



Photo No. 4 – Lifted concrete driveway slab abutting the garage floor slab as photographed on 27 April 2018 when the step at the joint was measured at 35mm high.

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Photo No. 5 – A step in a contraction joint in the driveway slab at the property boundary as photographed on 6 April 2017.



Photo No. 6 – The step in the contraction joint in the driveway slab at the property boundary as photographed on 27 April 2018 did not exhibit any significant change over the past 12 months.

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Photo No. 7 – As photographed on 6 April 2017, lifting and rotation of the brick privacy wall on the western side of the garage had opened up a gap in the vertical joint with the house.



Photo No. 8 –The vertical joint between the brick privacy screen and the house as photographed on 27 April 2017. This joint has widened by about 4mm and the privacy screen has lifted by about 10mm over the past 12 months.

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Photo No. 9 – Separation of the 1.3metre wide path from the wall on the western side of the house as photographed on 6 April 2017



Photo No. 10 – Separation of the 1.3metre wide path from the wall on the western side of the house as photographed on 27 April 2018. The does not appear to have been any significant change since April 2017.

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Photo No. 11 – Cracking in the brick wall at the south-eastern corner of the house as photographed on 6 April 2017.

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Photo No. 12 – Cracking in the brick wall at the south-eastern corner of the house as photographed on 27 April 2018. This crack does not appear to have deteriorated over the past 12 months.

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