

SUPPLEMENTARY REPORT



Building Consultants & Engineers

Insured: James Dobbin
Loss Address: 16 Aaran Close, Endeavour Hills, VIC 3802
Claim Number: 6210287371
Client Reference: 1670192
CRD Reference: 1678899
Prepared By: Harry Giofkou
Date: 7 March 2022

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CRD Building Consultants and Engineers

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1.0 INTRODUCTION

- 1.1 Further to our initial Causation Report dated 30 April 2020, this Supplementary Report has been prepared on the basis of the Insured claiming that cracking to the north-west corner of the residence has worsened since the Causation Report.
- 1.2 The Causation Report stated that cracking and movement to the residence evident at the time of the initial site inspection was not related to the reported flooding from a storm event that occurred in February 2020.
- 1.3 The Causation Report also stated that some movement may occur in the months following the storm event as the moisture content of the foundation material stabilises, and should this occur, a reinspection should be carried out.

2.0 INSTRUCTIONS

- 2.1 As requested by Emma Morgan of Crawford & Company, reference 1670192; the writer has undertaken an inspection of the residential premises situated at 16 Aaran Close, Endeavour Hills, VIC 3802.
- 2.2 In accordance with your instructions, the purpose of the inspection was to:
 - 2.2.1 Determine the reason for the claimed worsening of the cracking;
 - 2.2.2 Determine if problems with the stormwater drains are contributing to the damage;
 - 2.2.3 Determine if the unit paving re-laid as part of the claim is uneven due to faulty workmanship or some other cause.
- 2.3 The additional inspection was carried out on the 17 February 2022 in the presence of the Insured.
- 2.4 The property is insured by Allianz Australia Insurance Ltd, reference number 6210287371.

3.0 PLUMBING INVESTIGATION REPORT

- 3.1 The following are relevant findings and conclusions stated in the Plumbing Investigation Report by Project Plus Services following their plumbing investigation on 9 December 2021.
 - 3.1.1 Stormwater drain at the north-west corner of the property is blocked by tree roots and is broken causing water to seep out of the cracks.
 - 3.1.2 Sewer pipe is cracked at the end of the line before the boundary.
 - 3.1.3 Poor site drainage at the north-east corner of the property.

4.0 OBSERVATIONS AND DISCUSSION

- 4.1 Internal inspection of the residence found the following:
- 4.1.1 Numerous hairline cracks to the wall linings and the mitre joints of ceiling cornices (Refer Appendix A – Photographic Supplement, Photos 2 & 3).
 - 4.1.2 Cracking and deterioration to the grout of the wall tiles in the bathroom (Photo 4).
 - 4.1.3 Separation of the sides of the vanity unit from the underside of the bench top (Photos 5 & 6), with no similar movement at the floor / wall junction below the vanity unit (Photo 7). As there is no similar movement at the floor / wall junction, the separation at the sides / bench top junction is not related to footing movement.
 - 4.1.4 Separation of the bedroom 1 built in robes from the wall, as previously observed by our office at the time of the initial site inspection (Photos 8 & 9).
 - 4.1.5 A number of awning windows along the west side elevation open and close with difficulty.
 - 4.1.6 The west facing entry door opens and closes with difficulty.
- 4.2 External inspection of the residence found the following:
- 4.2.1 Cracks to the brickwork along the east side elevation, the most severe above the sub-floor access door where a steel lintel has not been provided to support the brickwork (Photos 10 & 11), as previously observed by our office at the time of the initial site inspection.
 - 4.2.2 Cracks to the rendered brickwork below the porch slab at the north-west corner of the residence (Photos 12 & 13), as previously observed by our office at the time of the initial site inspection (Photos 14 & 15 – site visit 15 April 2020).
- 4.3 Inspection of the sub-floor space was only able to be carried out from the sub-floor access door which could not be fully opened due to being obstructed by the unit pavers. The limited inspection of the sub-floor space found no readily observed damage (Photo 16).
- 4.4 The location of the broken and leaking stormwater drain is downhill of the north-west corner of the residence (Photo 17). Therefore, water escaping from the broken and leaking drain would not drain to and concentrate adjacent the residence.
- 4.5 Inspection of the two downpipes closest to the broken and leaking stormwater drain found no evidence of water backing up and overflowing from the downpipes (Photos 18 & 19). This indicates that collected stormwater is not building up upstream of the broken and leaking stormwater drain and overflowing from the downpipes.
- 4.6 Inspection of the property overall found foundation maintenance works recommended in the CSIRO - Guide to Foundation Maintenance and Footing Performance: A Homeowner's Guide, provided in the Causation Report have not been carried out.

4.7 Floor Level Survey

- 4.7.1 A floor level survey was carried out and the results are shown in Appendix D – Floor Level Survey.
- 4.7.2 The floor level survey found the floor is relatively level and does not indicate movement related to the flooding in February 2020 or the broken and leaking stormwater drain at the north-west corner of the property.

4.8 Unit Pavers

- 4.8.1 The Insured stated during the inspection that the unit pavers along the east side of the residence were removed and re-laid from adjacent the strip drain to the south, the timber retaining wall to the east and north, the concrete paving and adjacent the east side wall of the residence including at the sub-floor access door (refer Appendix B – Photos B1 – B3).
- 4.8.2 The Insured also stated that prior to the units pavers being removed and re-laid, the sub-floor access door could open fully, but now scrapes along the re-laid pavers preventing access to the sub-floor space (Photo B4).
- 4.8.3 The Insured also stated that the pavers adjacent the retaining wall have been incorrectly re-laid with the edging mismatched (Photo B5).
- 4.8.4 Perusal of documentation on file found the following:
- 4.8.4.1 Numerous photos of the paved area prior to works commencing showing localised lifting of the pavers, a substantial amount of contents preventing a full view of the paved area, and no pavers adjacent the sub-floor access door.
- 4.8.4.2 Scope of works specifying 45 square metres of unit pavers to be removed and re-laid including sand bedding as needed (which covers the area indicated in 4.8.1 above).
- 4.8.4.3 Quote by Townsend Building Services dated 3 March 2020 based on the scope of works.
- 4.8.4.4 Photo of Completion Certificate dated 25 August 2020 signed by the Insured stating the works have been completed to the satisfaction of the Insured.
- 4.8.4.5 Invoice by Townsend Building Services dated 28 August 2020 for works completed as per the scope of works.
- 4.8.5 Inspection of the paved area found, in addition to 4.8.2 and 4.8.3 above, undulations to the level across the surface, and misaligned bedding joints (Photos B6 & B7).
- 4.8.6 In the writer's opinion, the condition of the unit pavers is a result of poor workmanship. Unit pavers laid to an acceptable standard would not have undulations to the level across the surface, misaligned bedding joints and mismatched edging.

4.9 Verandah Roofing

- 4.9.1 The writer noted by coincidence during the inspection that water was dripping down onto the paved area from the verandah roofing during light rain that was falling during the inspection.
- 4.9.2 The Insured stated the verandah roofing was reinstated by Townsend Building Services as part of the scope of works as the pre-loss roofing was damaged by the storm event.
- 4.9.3 Inspection found that the roof sheets have been laid incorrectly with the side laps facing the prevailing wind direction (face south), not away from the prevailing wind direction (refer Appendix C – Verandah Roofing Photographic Supplement, Photos C1 & C2).
- 4.9.4 The timber purlins are sagging causing the roof sheets to sag (Photos C3 & C4). The timber purlins are 23 x 75 treated pine and the Insured stated they were supplied by the Insured and not by Townsend Building Services.
- 4.9.5 The timber purlins supplied by the Insured are undersized.

5.0 CONCLUSIONS

- 5.1 The cracking and movement evident has not noticeably worsened since the Causation Report, and has resulted neither from the reported flooding that occurred in February 2020 nor from the broken and leaking stormwater drain at the north-west corner of the property.
- 5.2 The cracking and movement evident has resulted from normal and expected thermal expansion and contraction of building materials and the quality of the original construction as stated in the Causation Report, and from differential footing movement. The differential footing movement is a result of long-term and on-going variations in the moisture content of the foundation material due to seasonal and climatic factors, contributed by the soil drying effects of a nearby tree, and inadequate surface drainage.

6.0 RECOMMENDATIONS

- 6.1 The Insured consider undertaking works in order to improve adherence to the CSIRO – Guide to Foundation Maintenance and Footing Performance: A Homeowner’s Guide previously provided.
- 6.2 The responsible party should remove and re-lay the unit paving as per the scope of works, quote and invoice and to an acceptable standard.
- 6.3 The responsible party should remove and re-lay the verandah roof sheets on structurally adequate timber purlins and in accordance with manufacturer’s recommendations.

7.0 LIMITATIONS TO REPORT

- 7.1 Our inspection was carried out on 17 February 2022 and was limited to a visual and walkover examination of the site. This report has been prepared within the limitations imposed by visual access and walkover around 16 Aaran Close, Endeavour Hills, VIC 3802, and the findings are relevant to the dates of inspection.
- 7.2 Unless otherwise stated, the following matters are specifically excluded from assessment:
- 7.2.1 insect attack on timbers;
 - 7.2.2 safety and condition of electrical wiring;
 - 7.2.3 plumbing work, including water services, sewers, roof gutter and gas plumbing;
 - 7.2.4 any subsurface or otherwise hidden aspects and;
 - 7.2.5 fire & health regulations and requirements.
- 7.3 Interpretations of this report beyond the above-mentioned limits should not be made.
- 7.4 It should be noted that this report does not reflect the full extent of our investigations nor does it include the complete record of digital images of the damage, but seeks only to define the principal data relating to this matter.
- 7.5 This report represents our findings in relation to the specific matters defined in this report only and is not to be construed to represent a comment on the structural integrity or otherwise of any other area(s) of the property that is/are not directly commented on in respect to adequacy of condition.

Should you have any further enquiries regarding this matter, do not hesitate to contact me.

Yours faithfully,



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Appendix A – Photographic Supplement
Appendix B – Unit Pavers Photographic Supplement
Appendix C – Verandah Roofing Photographic Supplement
Appendix D – Floor Level Survey

APPENDIX A

PHOTOGRAPHIC SUPPLEMENT



Photograph 1. View of front of residence.



Photograph 2. Typical hairline crack to wall lining (in rear south-east bedroom).



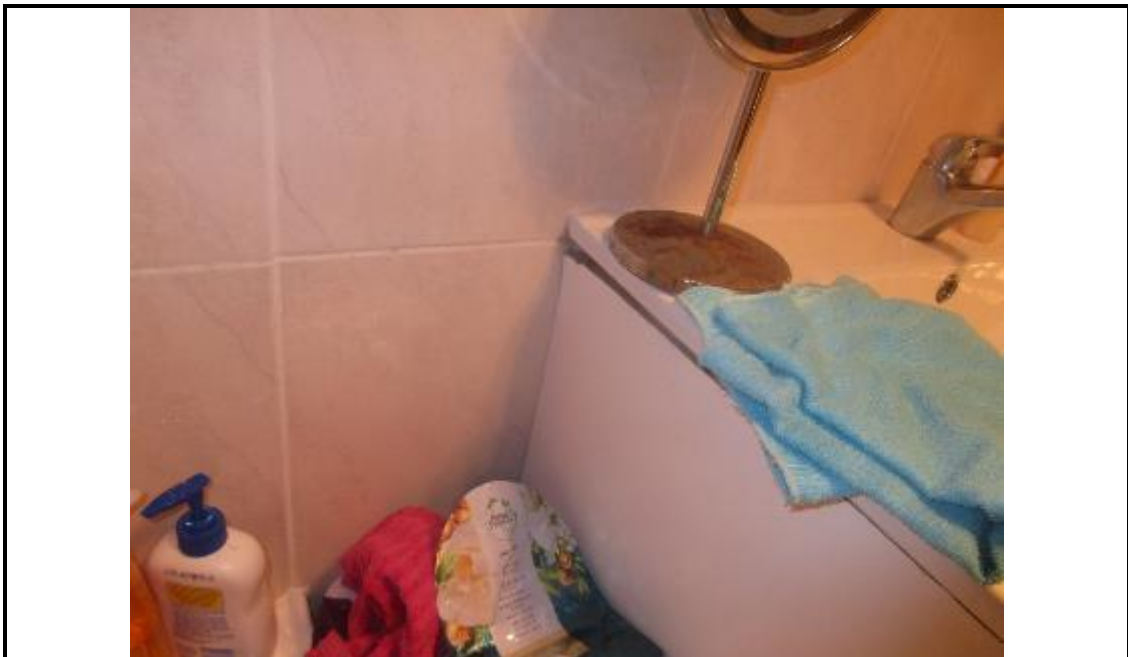
Photograph 3. Typical hairline crack to mitre joint of ceiling cornice.



Photograph 4. Damage to tile grout in bathroom.



Photograph 5. Separation along vanity unit side / bench top junction.



Photograph 6. Separation along vanity unit side / bench top junction.



Photograph 7. No movement at floor / wall junction below vanity unit.



Photograph 8. Separation of bedroom 1 built in robes from the wall.



Photograph 9. Separation of bedroom 1 built in robes from the wall.



Photograph 10. Crack above sub-floor access door, note no steel lintel above door to support brickwork.



Photograph 11. Crack along east side elevation.



Photograph 12. Crack below porch slab.



Photograph 13. Crack below porch slab.



Photograph 14. Crack below porch slab (site visit 15 April 2020).



Photograph 15. Crack below porch slab (site visit 15 April 2020).



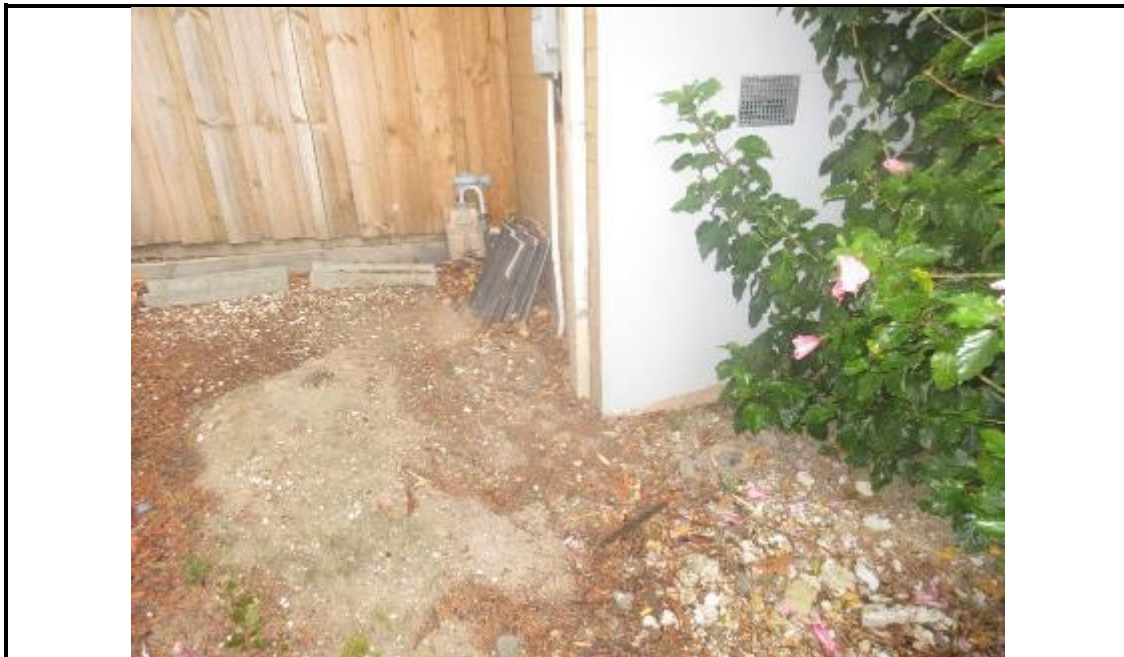
Photograph 16. View of sub-floor space.



Photograph 17. Broken and leaking stormwater drain located downhill of north-west corner of residence.



Photograph 18. Downpipe along west side elevation upstream of broken stormwater drain.



Photograph 19. Downpipe at north-east corner upstream of broken stormwater drain.

APPENDIX B

UNIT PAVERS PHOTOGRAPHIC SUPPLEMENT



Photograph B1. View of unit pavers.



Photograph B2. View of unit pavers.



Photograph B3. View of unit pavers.



Photograph B4. Sub-floor access door no longer opens fully.



Photograph B5. Mismatched edging to unit pavers.



Photograph B6. Undulating level across the surface of the paved area.



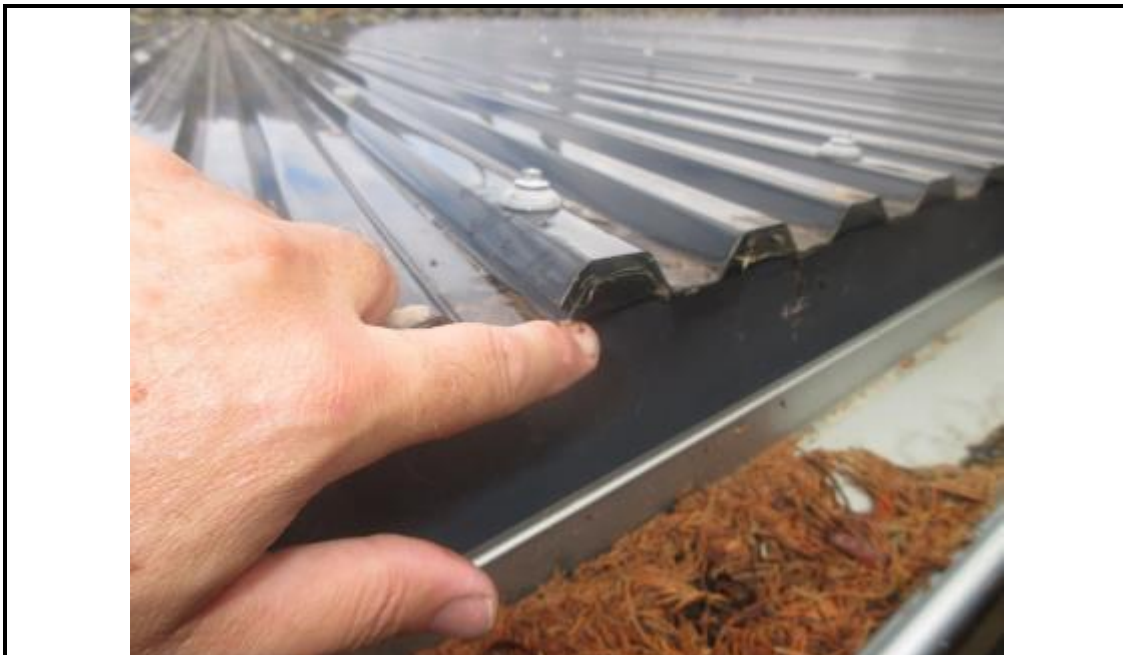
Photograph B7. Bedding joints misaligned.

APPENDIX C

VERANDAH ROOFING PHOTOGRAPHIC SUPPLEMENT



Photograph C1. View of verandah roofing.



Photograph C2. Side laps facing south, i.e. into the prevailing weather.



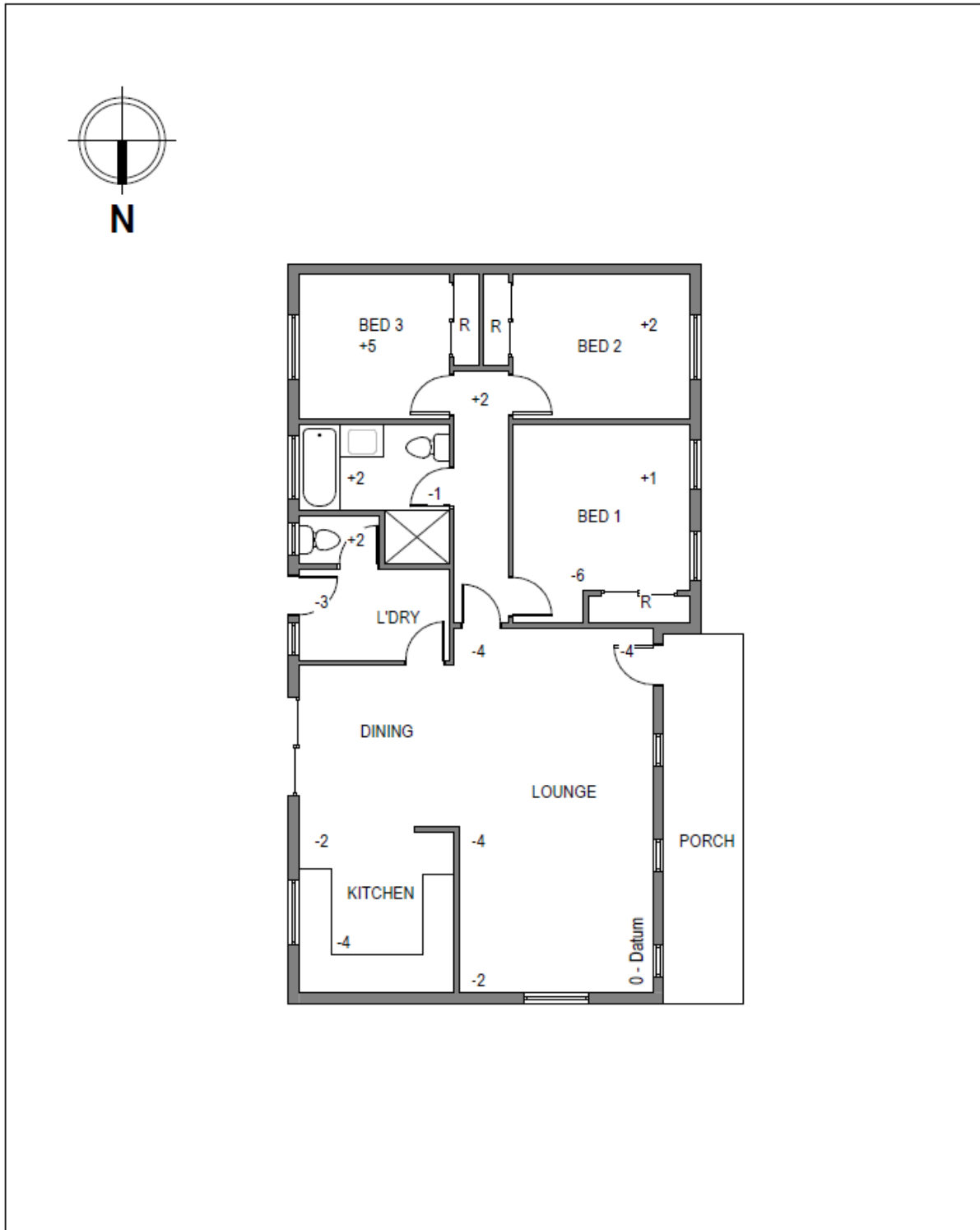
Photograph C3. Sagging to timber purlins.




Photograph C4. Sagging to timber purlins.

APPENDIX D

FLOOR LEVEL SURVEY



 <p>CRD Building Consultants & Engineers</p> <p>LEVEL 3, 324 St Kilda Road Southbank VIC 3121</p>	Title: FLOOR LEVEL SURVEY - AS AT 17/2/2022	
	Insured: James Dobbin	Sheet: S01
	Address: 16 Aaran Ct, ENDEAVOUR HILLS, VIC, 3802, AU	
	CRD Ref: 1678899	Crawford Ref: 1670192
	Claim No: 6210287371	Drawn By: KG
		Checked By: HG