

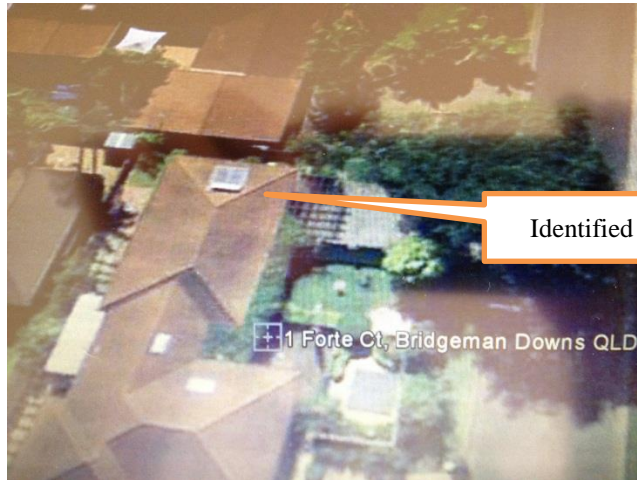
***shelter***

***An Independent Opinion***

Shelter Architects & Planners Pty Ltd

ABN 44 121 018 353 ACN 121 018 353

## 1 SAMPLE STREET 4035



### REPORTS PROVIDED

<a href="#">Independent Opinion Report</a>	<input checked="" type="checkbox"/>	<a href="#">Specialist Report</a>	<input type="checkbox"/>	Other	<input type="checkbox"/>
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### INSPECTOR DETAILS

Name:	Markus Pye	Phone:	00434631555	Email	markus@shelterarchitectsplanners.com.au
Architect's Registration No:	3165	BSA license No:	71249		

### CLIENT DETAILS

Name:	Mr & Mrs SAMPLE	Phone:	SAMPLE
Address:	SAMPLE	Email:	SAMPLE

### PROPERTY DETAILS

Roof finish	Concrete Tile	Storeys	Single	Inspection	15 9 12
Superstructure	Brick Veneer	Site	Gentle slope	Aspect	Easterly
Substructure	Concrete Strip	Age	30+	Occupied	Occupied
Floor structure	Concrete Slab	Additions	No	Weather	Fine

### DETAILS of INSPECTION PURPOSES

Inspect and provide report on:

- Extent of termite infestation to subject area of property - focusing on the north-east corner of residence above the Garage. The subject area was recently highlighted as being structurally compromised, due to termite infestation found during a recent pre-purchase building inspection;
- Scope the extent of structural and ancillary damage to the subject area;
- Offer advice on the scope of repairs and reconstruction strategy.

Both Owners and prospective Purchasers were present at inspection, and were provided significant visual access to the subject area to gain perspective of damage.

**The subject area of damage is considered a 'major structural defect' and requires repairs to be carried out without due delay.**

## Information Regarding the Scope of the Inspection and the Report

**Client Agreement:** This report confirms your instructions to undertake inspections and report on any significant items at the time of the inspection. The inspection shall be undertaken within the terms of the inspection and all statutory obligations. The following statements outline our observations and opinions in relation to the condition of the dwelling and complex as reasonably accessed. It should be noted that this report relates only to that which is readily viewable. No opinion or warranty is made on that which cannot be readily seen. The following notes form an integral part of the report. If there are any items that are not clear or legible or you do not understand, please contact the office for clarification before accepting the property.

### Purpose of Inspection

The Client has identified what is to be accomplished by the inspection by nominating the purpose of the inspection. Any changes to the scope, purpose or acceptance criteria shall be agreed to by all parties at the appropriate time.

### Scope of Inspection

The scope of the inspection covers the type, extent and boundaries of the inspection and shall be suitable for the defined purpose of the inspection. The inspection agreement shall include the defined purpose, scope and acceptable criteria. The inspection scope and acceptance criteria shall be defined by the Client and agreed to by the client and inspector.

### Access

The inspector shall inspect all area included in the scope of the inspection. The inspector shall not enter or inspect areas where safe unobstructed access is not available. The extent of accessible areas, as defined by the presence of safe and reasonable shall be determined by the inspector, based on the conditions encountered at the time of the inspection.

If in the opinion of the inspector, restrictions on access have compromised satisfaction of the purpose of the inspection, a recommendation shall be made as to the necessity to gain access to allow further inspection.

### Limitations

Limitations that are expected to be present, or that may occur, shall be identified where possible including deliberate concealment of defects and any other relevant factor restricting the inspection.

### Extent of Reporting

The extent of reporting shall be nominated and the extent comprises the significant item/s for the particular inspection.

### Significant item

An item/s that is to be reported within the scope of the inspection, which may be a feature that is either present or absent.

### Report content.

- Inspection details;
- Limitations;
- Observations;
- Significant items;
- Conclusions

## BUILDING DEFINITIONS

**Defect – Fault or deviation from the intended condition of a material, assembly, or component.**

**Major defect (xx)** – The Australian Standard 4349.1 defines Major Defect as: *“A defect of sufficient magnitude where rectification has to be carried out in order to avoid unsafe conditions, loss of utility or further deterioration of the property”*. Including **Structural defect**.

In addition, **QLD Building Services Authority** defines a major defect as: Category 1 defective building work that is faulty or unsatisfactory because it does one or more of the following:

*(a) adversely affects the structural performance of a building; (b) adversely affects the health or safety of persons residing in or occupying a building; (c) adversely affects the functional use of a building; (d) allows water penetration into a building.*

**Minor defect (x)** – A defect other than a major defect, and includes:

**Appearance Defects:** Where in the inspector's opinion the extent the decline in operational effectiveness, aesthetic appearance and general presentation is *below that of compared to the accepted standards appropriate to the building elements and services*.

**Serviceability Defect:** Fault or deviation from the intended serviceability performance of a building element, or where in the Inspector's opinion the expected consequence is unknown until further information is obtained.

## INSPECTION DETAILS, LIMITATIONS & OBSERVATIONS

Due to the limited roof space access due to framing obstructions, and day-lighting to the subject area – (north-east hip), an invasive inspection was conducted by 'opening up' the subject roofed area by the removal hip and adjacent roof tiles to the hip rafter. This was conducted with the approval of the Owner and was to allow visual access by interested parties to scope the extent of infestation and subsequent damage. The point of infestation is considered to be through the adjacent engaged brick pier core from ground level. The species of termite was considered to be *Schedorhinotermes intermedius*. The area has been closed temporarily with tiles and hip tiles re-laid under their own weight, but may be subject to weather ingress at times. Recommend fixing a waterproof member (tarp) across subject area. The subject area had been subject to concentrated foot traffic at time of inspection, but may suffer further damage through to partial collapse under extreme environmental conditions, making repairs a considered priority.

The extent of the noted damage appears isolated to the full length of the hardwood timber hip rafter, with minor damage to structural and ancillary timbers members abutting to hip rafter. Areas of hip rafter damage vary from 20% removal of structural timber through to 50% and beyond, leaving the hip rafter in an inadequate structural condition. It appears roof framing and support members offer structural support to the damaged member.

Note: Additional ancillary timber members have been installed where the lower hip lands on the wall framing top-plate, suggesting the area had previously suffered isolated termite infestation - given the timber plantings are modern softwood materials type, not those materials available at time of original construction. Refer Photo 3.

Photos 1, 2 & 3 demonstrate longitudinal extent of damage; Photo 3 notes sever damage in part to hip rafter. Photo illustrates visual extent of infestation does not extend to soffit area where inspected.



Photo1: Identified damaged area of hip rafter approaching full extent of member up to roof ridge.



Jack rafters offering support to damaged member.



Photo3: Hip rafter adjacent top plate has been severed by previous infestation. Note pine chock to support where it doesn't adequately land on top plate.

## OBSERVATIONS & SIGNIFICANT ITEMS



Photo 4: No visual evidence of infestation in the eaves soffit cavity. Note that the hip rafter tail is currently severed from main body of the member where it is 'birds mouthed' over top plate. The full extent of hip rafter to be replaced incorporating hip rafter tail to be re-fixed to new portion of member.



Severed hip rafter over top plate.



No apparent deflection.

Photo 5



No apparent deflection.

Photo 6

The soffit lining and framing did not appear to have suffered any noticeable deflection from inadequate support, however further determination as to adequate support, and fixings will be determined at time of full opening up reconstruction of area. Refer photo 5 & 6



## CONCLUSION

### RECOMMENDATION:

The extent of damage is considered to be concentrated and isolated, generally only requiring the full replacement of the north-eastern hip rafter as the major structural member. This will include portions of ancillary items, such as roof batten replacement to the subject area where broken, inadequate or trimming is required to gain access for removal & installation. It may also require to include the installation of alternative fixing mechanisms to abutting members e.g. jack rafters, where adequate surface mating material has been removed. These fixings may include to likes of framing anchors, strapping etc to re-instate nominal hold down points, before closing roof with the re-instatement of matching tiles and pointing with the inclusions of items considered necessary to 'make good' the area, and removal of builders rubble.

Installation of new hip rafter is considered to only require support to jack and common rafters as described on site – Refer photos 7 & 8 where required to be propped off existing steel and timber roof members.



Photo 7



Photo 8

***Opinion of Possible Cost would include 4 labour days on site plus materials and equipment.***