



**mikegrantconsulting**

**STRUCTURAL ENGINEERS REPORT**

**13 NORMANTON AVENUE**

**BOGNOR REGIS**

**PO21 2TU**



Ref 2620/MJG  
1 May 2026

**Mike Grant Consulting Ltd**

10 Barton Drive Hamble Southampton SO31 4RE

Co Reg no 11582822

## 1 INSTRUCTIONS

- 1.1 Instructions were received via email from Mr A Khail of Tescon Development Ltd , the owners no 13 Normanton Avenue, Bognor Regis, PO12 2TU to undertake a Structural Engineers inspection of the walls and other relevant features so as to report on
- A large Oak tree adjacent to house
  - Whether there are any signs that this has or could cause damage to the building including the foundations
- 1.2 No other aspects or elements of the building have been considered.

## 2 TERMS

- 2.1 The client's attention is drawn to the Terms of Appointment contained in the Appendix and especially to Section 15 relating to a Structural Engineers inspection.

## 3 INSPECTION

- 3.1 The inspection was carried out by M J Grant BSc CEng FIStructE, on the 28<sup>th</sup> April 2026.
- 3.2 The weather at the time of the inspection was clear.
- 3.3 The property was vacant at the time of inspection and was undergoing stripping out prior to refurbishment.
- 3.4 In the Observations which follow it is not intended to describe every small crack or separation which was present, especially where these are not structurally significant. However, the primary items of significance will be described, together with a selection of others.
- 3.5 Observations of floor surfaces for level and squareness of door/window openings were made using a large vertical and horizontal spirit level.
- 3.6 Abbreviations used
- |                               |                                   |
|-------------------------------|-----------------------------------|
| • LH = Left Hand (as viewed)  | • UC = Upper Corner               |
| • RH = Right hand (as viewed) | • LC = Lower Corner               |
| • GF = Ground floor           | • Str = straight                  |
| • FF = First Floor            | • Diag = diagonal                 |
| • V= Vertical                 | • NSEW = north, south, east, west |
| • H = Horizontal              | • HL = hairline                   |
| • d.p.c. = damp proof course  | • est= estimated                  |

References to left or right-hand are as viewed.

Measurements given of individual cracks are of the max est width.

#### 4 GENERAL DESCRIPTION

- 4.1 The property comprises a 4 -bedroom, 2-storey, detached house, the exact age of which is not known, however it is estimated that it was probably built in the 1930's.
- 4.2 For the purposes of orientation, the front elevation which faces the road will be termed the North Elevation.
- 4.3 The property is in an individual style. L-shaped on plan with a short front projection containing a large open entrance porch.
- 4.4 The external walls appear to be built in cavity construction and are rendered throughout.
- 4.5 There is a single detached garage which appears to be built in rendered single skin brickwork.

#### 5 BACKGROUND INFORMATION

- 5.1 The house has clearly been unoccupied for some time and is derelict.
- 5.2 The Geological drift map for the area indicates the sub-soil to be of River Terrace Deposits which are described by the British Geological Survey as undifferentiated Sand, Silt and Clay in this area.
- 5.3 I understand that the Oak tree in question is subject to a TPO (tree preservation order).

#### 6 EXTERNAL OBSERVATIONS - SITE

- 6.1 The site is approx. level with gardens to the front and rear. The gardens are overgrown and strewn with debris, although some clearance had been undertaken at the time of my visit.
- 6.2 The tree in question is an English Oak (*Quercus Robur*) which is very large and dominates the site and surrounding area. Measurements and estimates of size are as follows
  - Bole (trunk) diameter 1.2m
  - Height estimated 15-20m
  - Spread approx. 20-21m
  - Distance from house 1.7m
- 6.3 Other trees are also present including

| <u>Species</u> | <u>Height estimated</u> | <u>Distance from house</u> | <u>Direction</u> |
|----------------|-------------------------|----------------------------|------------------|
| Sycamore       | 8-9m                    | 1.0m                       | N                |
| Lime           | 6-8m                    | 2.0m                       | N                |
| Maple          | 8-10m                   | 3-4m est                   | N                |
| Hawthorn       | 8-9m                    | 5-6m est                   | E                |
| Sycamore x2    | 6-10m                   | 0-1m                       | S                |

## 7 EXTERNAL OBSERVATIONS GENERAL

- 7.1 The Oak tree envelopes the house with the crown above the roof and spreading across to the rear garden. Some of the smaller trees noted are completely beneath the canopy of the Oak.
- 7.2 The branches of the oak tree lay onto the roof in several places and damage has occurred as a result to the ridge line running N-S, with ridge tiles broken and lost and other tiles damaged/dislodged.
- 7.3 The branches appear to have penetrated through the roof felting in places. Damage has also occurred to guttering.

## 8 EXTERNAL OBSERVATIONS – FRONT ELEVATIONS

- 8.1 There are numerous cracks in the front elevations including

| <u>Position</u>                  | <u>Width</u> | <u>Direction</u> |
|----------------------------------|--------------|------------------|
| LH section below window centre   | 3mm-0mm      | V                |
| UC RH window to porch            | HL – 1mm     | H                |
| Around UC LH porch beam          | 1-2mm        | V/diag           |
| UC LH porch entrance             | 0-2mm        | V/diag           |
| Inside porch, RH door            | HL           | H/diag           |
| RH section, several below window | HL – 1mm     | V                |

## 9 EXTERNAL OBSERVATIONS – OTHER ELEVATIONS

- 9.1 There are numerous fine cracks in the other elevations, most not structurally significant.
- 9.2 In a few locations cracks are present where old metal fixings of drain-pipes etc are present and corroding.
- 9.3 Some sections, at the rear particularly were obscured by overgrown shrubbery.
- 9.4 At the rear SE corner high level the corner is displaced with some noticeable cracking above the window

## 10 INTERNAL OBSERVATIONS – GROUND FLOOR

- 10.1 The internal walls at ground floor appear to be mostly of solid masonry construction
- 10.2 The building was undergoing stripping out at the time of my inspection.
- 10.3 The internal face of the front external wall has numerous fine cracks present.

## **11 INTERNAL OBSERVATIONS – FIRST FLOOR**

- 11.1 The internal walls at first floor appear to be mostly of solid masonry construction.
- 11.2 The internal face of the front external wall has numerous fine cracks present.
- 11.3 There is a larger V crack at the LC RH of the window over the stairs and also V cracks over doorways from the landing into the bedrooms
- 11.4 In both the rear bedrooms there are V full height cracks of 6mm width tapering to 0, to the S side of the chimney breast.
- 11.5 The door head of the rear SW bedroom dips out of level.

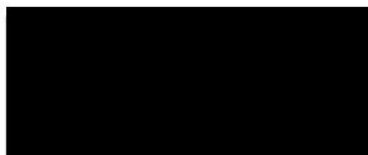
## **12 OBSERVATIONS – GARAGE**

- 12.1 It was not possible to enter the garage, and external observations were very limited by overgrown shrubbery and debris.
- 12.2 The construction is of single brickwork with a tiled pitched roof.
- 12.3 Damage is evident to the roof from the overhanging branches of the oak and other trees with tiles broken and dislodged.
- 12.4 Cracking to the East flank wall was visible to the LC RH, this is H across to the front corner, est at 3-4mm
- 12.5 Also, a V/diag crack from the front corner V /diag 3-4mm.

### 13 CONCLUSIONS & RECOMMENDATIONS

- 13.1 There are numerous cracks present throughout the building. The house is in a dilapidated condition and is currently at the beginning of a refurbishment process. This makes it difficult to analyse which cracks are caused by foundation movement or age/deterioration.
- 13.2 The Oak tree at the front is extremely large and engulfs the entire house. It has damaged the roof by the overhanging branches. It has also damaged the garage and possibly the house internal walls also.
- 13.3 Trees in general represent a risk to foundations where the soil is clay. Here the soil may be clay or clayey and if so, the Oak tree particularly represents a significant risk of further foundation movement/ damage.
- 13.4 If the house were being constructed today, current guidance would normally be taken from the NHBC Standards and these would require the house to have special foundations designed by an engineer in order to cope with the possible root effects of this tree. The house currently is expected to have traditional foundations which are therefore prone to damage.
- 13.5 The cracking of the garage appears to have been caused probably by the action of the tree roots, possibly causing shrinkage of clay or by direct growth effects causing movement of the sub-soil and foundations.
- 13.6 I recommend that all trees very close to the house should be removed. The approval of the Local Authority will be required for any trees subject to TPO's
- 13.7 For the large Oak this should be done over a period of several years in order to minimise risk of heave (swelling) of the soil. When a tree is removed the soil will recover moisture causing the clay element to swell and this could damage the house.
- 13.8 The input of an Arboriculturist may be helpful. I would recommend that the tree should be taken down gradually. The overhanging crown should be reduced as soon as possible to prevent further roof damage etc and the bulk of the tree should be reduced by say one third during the months of Jan – Mar when the water demand will be at it slowest.
- 13.9 This should then continue each year until the tree is removed completely.

Signed



**Michael J Grant** BSc CEng FStructE

For Mike Grant Consulting Ltd

Date 1<sup>st</sup> May 2026

## APPENDIX 1 - PHOTOGRAPHS



**Front Elevation, mostly obscured by Oak**



**View looking West**



**Roof damage from Oak**



**Crack in front elevation**



**Cracking in garage East Elevation**



**Cracking in rear bedroom**

## **APPENDIX 2**

### **TERMS OF APPOINTMENT**

#### **MIKE GRANT CONSULTING LTD**

#### **1 Mike Grant Consulting Ltd**

1.1 Mike Grant Consulting Ltd is constituted as a limited liability company in accordance with the Companies Act 1989 with registered number 11582822 and with its registered office at 24 Park Rd South, Havant, PO9 1HB

#### **2 Services**

2.1 The services provided to you and the contract under which those services are provided is with Mike Grant Consulting Ltd. Acceptance of our commencement of the provision of services to you shall be deemed to be acceptance of these Terms of Appointment

#### **3. Definitions**

3.1 In these Terms "you" and "your" refer to our client; "we", "us" and "our" refers to Mike Grant Consulting Ltd the Consultant. In the event of inconsistency or conflict, these Terms will prevail over any other document forming part of the contract between us.

#### **4 Advice and Instructions**

4.1 We will work for you on the basis of these standard terms. The scope of work which we will carry out for you is as set out in correspondence from us to you. As the project develops our brief may change and we will confirm this to you in writing. We will be

entitled to assume that our understanding as set out in correspondence is correct unless you immediately respond to correct it.

4.2 Where you instruct us by post, email or by other electronic means, these regulations give you the right to terminate your instructions to us within 7 days of our being appointed, unless, within that period, we have already started providing you with our services.

#### **5 Liability**

5.1 We shall not be liable to you for any failure or delay or for the consequences of any failure or delay in performance of your instructions if it is due to any event beyond our reasonable control including without limitation acts of God, war, industrial disputes, protests, fire, flood, storm, tempest, explosion, acts of terrorism and national emergencies.

5.2 Our total liability of whatever nature, whether in contract, tort (including, without limitation, negligence), under statute or otherwise to you for any and all loss (which in these Terms means all losses, damages, costs and liabilities whatsoever) arising from or in any way in connection with this contract shall not exceed an amount equal to 5 (five) times our fee

5.3 Our liability to you shall be further limited to that proportion of your loss which it is just and equitable for us to pay, having regard to the extent of our responsibility for it and on the basis that we will assume that all other consultants and contractors engaged in

relation to the project will owe you a duty of care and have the benefit of no exclusions or limitations of liability, nor joint nor co-insurance provisions, between you and them, and will be deemed to have paid to you such proportion of the loss as it would be just and

equitable for them to pay having regard to the extent of their responsibility.

5.4 You agree not to bring any claim in respect of loss suffered by you arising out of or in connection with our engagement against any of our directors, employees or agents even where our directors, employees or agents have been negligent. This restriction will not

operate to exclude any liability which cannot be excluded at law or to exclude the liability of Mike Grant Consulting Ltd for the acts or omissions of any of our directors, employees or agents. It is agreed that each of our directors, employees and agents will have the right to enforce this paragraph pursuant to the Contracts (Rights of Third Parties) Act 1999.

5.5 Nothing in these Terms of Engagement shall affect any liability which we may have to you in respect of any personal injury or death resulting from our negligence, any loss caused by our fraudulent misrepresentation or reckless disregard of our professional obligations or any other situation where the law prohibits us from excluding or limiting our liability to you. The provisions of this paragraph shall continue to apply notwithstanding the termination of our engagement for any reason.

5.6 You may not assign this contract or any benefit arising from it without our prior written consent and payment of a further fee in an amount to be agreed. Where we give our consent to an assignment or where by any other means any other person is entitled to rely on our work under this contract they are to have no greater rights against us than you have.

5.7 We will have no liability to you for loss of profit, loss of business opportunity, increased operating costs, loss of goodwill, consequential or economic loss or any matters related to asbestos

#### **6. Fee Estimates and Quotations**

Please note the following:

6.1 An estimate is our indication of a likely fee for carrying out the work specified. It is given on the basis of the information available to us at the time the estimate is supplied and is based on our experience and our assessment of the tasks you ask us to perform. There are many factors beyond our control that can result in our estimate being exceeded. For example: changes to your instructions, the requirements of third parties, lack of timely responses from others, and unexpected developments. If we have provided an estimate our final fees will be calculated on a time basis plus expenses in accordance with the rates advised

6.2 A Quotation is our proposal to carry out the specified work for a stated fee. If you accept that proposal, it then becomes a contractual commitment on your and our part. All quotations supplied by us will remain open for acceptance for a period of sixty days from

the date of the quotation.

6.3 Any quotation or estimate which we have given is based on the information made available to us at the time. Should we have to do more work than we anticipated (or in the case of a quotation more work than we ought reasonably to have anticipated and allowed for) due to changed circumstances or the discovery of additional relevant facts we will notify you and we reserve the right to charge additional fees for the extra work. We will also charge additional fees where you instruct us to do extra work or we are otherwise required to do extra work (for example due to changes in relevant regulations). Additional fees will be charged at our standard rates applicable at the time for the relevant grade of staff – we will confirm these rates to you at any time on request.

#### **7 Payment Terms**

7.1 All fees for quotations are normally due in advance

7.2 For estimates all sums invoiced by us are due on the date of invoice and the final date for payment is 30 days afterwards. If any sum is not paid by the final date for payment we reserve our right to charge interest from that date at 3% above National Westminster Bank plc's base lending rate.

7.3 We reserve the right not to complete the project until we receive payment of the invoice.

7.4 Unless we specifically agree with you otherwise, you will be responsible for paying our fees and expenses even if the transaction or other work is for any reason not concluded. In these circumstances, our charges will be calculated to reflect a fair and proper rate for the work we have carried out, whether or not a fixed rate was agreed for the successful completion of the whole work.

7.5 Any complaints or queries in relation to an invoice must be received by us not later than 25 days after the date of the invoice. After that period, the invoice must be paid in full. Where the sum due under an invoice is not paid in full by the final date for payment and no valid reasons for withholding payment have been received by us within the 25 day period, we may suspend work until full payment is made and any timescales for our work will be extended to reflect the suspension and a reasonable remobilisation period.

7.6 Where we are acting on behalf of a company, invoices will be addressed to the company. However, in your capacity as a director or shareholder, you agree to guarantee personally the payment by the company of all our costs and disbursements. In the event that your company defaults on payment, you agree that we are entitled to look to you for all or part of the sums outstanding.

## **8 Termination of Instructions**

8.1 Design work - We expect to continue to act for you until we have finished the work concerned. Either you or we may bring these instructions to an end at any time by notifying the other in writing giving 14 days notice. We reserve the right to cease work and terminate our agreement should you fail to provide us with adequate instructions or to pay any amount due to us. If the instructions are terminated by either of us you must pay us all fees and disbursements incurred before termination, together with any further fees and disbursements for any work that is necessary to transfer our files to another advisor of your choice.

8.2 Report work – for Reports, if a date has been agreed for the inspection and is then cancelled or access is not available for any reason the following cancellation periods and refunds/discounts will apply

- Less than 48 hrs notice of cancellation – no refund/discount
- If access is not available at the time of inspection and a re-visit is necessary, an additional fee of +50% will be payable
- If the appointment is cancelled with 7 full days or more notice, a full refund/discount will be given
- For cancellations of between 2 and 7 days a pro-rata refund/discount of 0 – 100% will apply

## **9 Quality of Service**

9.1 We will perform our obligations under this contract with reasonable skill and care. We will not accept any liability howsoever arising for “fitness for purpose” and “fitness for use”.

9.2 You agree that we are entitled to rely upon you to respond promptly to our requests for information or instructions, and to notify us promptly of any change in circumstances relevant to the work we are doing for you, including but not limited to any matters which you agree directly with any other party involved in the matter to which our work relates.

## **10 Storage of Documents**

10.1 We will retain project documentation electronically only for a time after the file has been closed, normally 12 months

10.2 We reserve the right to charge a handling and administration fee for any retrieval or re-issue of documents

## **11 Intellectual Property**

11.1 The copyright and all other intellectual property rights in all documents (in whatever form) produced by us will remain vested in us but subject to payment of all fees due to us you shall have an irrevocable, royalty free, non-exclusive licence (including the right for you to grant sub-licences) to use such designs and documents for the purpose for which they were prepared and for all other purposes of constructing, using, maintaining and marketing the property concerned. We will have no liability whatsoever in respect of any use made of our documents for any purpose other than that for which they were originally prepared.

## **12 Communications**

12.1 We shall communicate with you by post, telephone, and email. The use of email may not be as secure as other forms of communication; however, unless you instruct us to the contrary, we shall be entitled to assume that you have no objection to our communicating with you, and sending attachments to you, by email whether in general or for the communication of specific information. E-mail will constitute ‘writing’ As referred to above in these Terms

12.2 So far as is permitted by law our liability in relation to the transmission of computer viruses, worms, Trojans and other harmful code or programs is excluded. You agree that it is your responsibility to scan e-mails and attachments to detect and eliminate any harmful attachments which include those noted above.

## **13 Third Party Rights**

13.1 No one who is not a party to this contract is to have any right to enforce any part of it pursuant to the Contracts (Rights of Third Parties) Act 1999.

## **14 Law and Jurisdiction**

14.1 The terms of our appointment (including these Terms of Business) are governed by and shall be construed in accordance with English and Welsh Law.

## **15 Structural Engineers Reports**

15.1. The report will be a record of a visual inspection carried out by, or under the direction of a Chartered Structural Engineer and must not be misinterpreted as a Structural Survey such as would be carried out by a Chartered Surveyor. The report will not be a Valuation Survey.

15.2. The inspection is strictly limited to the items requested and these will be detailed in the report. No consideration will be given to any other aspects or parts of the building.

15.3. The report is confidential to you, the Client(s), and has been prepared to your instructions for your own purposes only and it is not permitted to disclose this report to any other parties (except your own Solicitors, Surveyors, Mortgage Provider, Insurance Company or Estate Agents) without the prior consent of Mike Grant Consulting Ltd

15.4. No liability for the contents of the report is accepted to any parties other than the Client(s). No parties other than the client should rely upon the report.

15.5. Unless specifically stated otherwise:-

- a) Trial holes will not be excavated prior to the preparation of the report and the depth and construction of the foundations and type of sub-soil will not be inspected.
- b) All external observations will be carried out by eye from the ground level only. Internal inspection is made within the limits of ready accessibility and it is not normal practice to lift floor coverings or floor boards, remove fixtures, panels or plaster, or move heavy items of furniture or bulky goods or materials.

- c) No inspection will be made of any roof voids, floor joists, wall cavities, drainage pipework or any other hidden or inaccessible parts.
  - d) No timbers will be checked for damp, rot, infestation by wood-boring insects or other defects.
  - e) It should not be construed that any parts of the construction comply with the requirements of the Building Regulations Act or standard practice either current or as current at the time of original construction. No enquiries to any Authorities will be made.
  - f) No testing or enquiries into the presence of or susceptibility to pollution, contamination, radiation, methane, radon or other gases or hazardous substances will be carried out.
  - g) No consideration will be given to the presence or absence of asbestos
  - h) Unless specifically noted in the report, outbuildings, garages, sheds, garden or boundary walls and similar structures will not be inspected
- 15.6. Unless specifically stated otherwise in the report, any recommendations or estimates of cost for works given in the report are outline only and should be confirmed or modified as appropriate at a later stage.
- 15.7. Where trial holes are specifically included in our instructions the condition of the footing and the founding soil relates only to the point of excavation and does not necessarily confirm a continuation of the same conditions throughout the non-inspected areas of the structure. Whilst such trial pits will usually provide a reasonable indication as to the general state of the foundations and ground conditions, these cannot be determined with complete certainty.
- 15.8. Under the Construction (Design & Management) Regulations latest edition, the Client has obligations for ensuring Health and Safety arising from any construction work. If it is proposed to proceed with construction work based upon information or recommendations contained in this report, these regulations apply. Further details of any issues arising from our report or the Clients obligations generally are available on request.