



2 Row  
Slaithwaite  
Huddersfield  
HD7 5XA

Mr K Ryall  
3 Two Gates  
Slaithwaite  
HD7 5UG

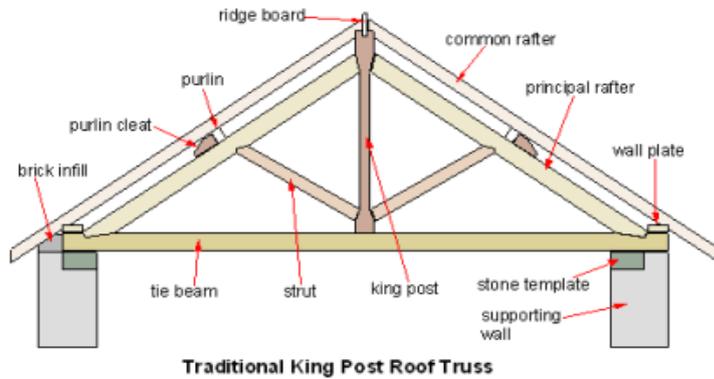
Dear Mr Ryall,

Thank you for the opportunity to attend site to inspect the existing roof structure. Please find enclosed our findings and recommendations. We are a company that specialises in Oak structures including roofs.

If you require a site meeting/visit to discuss this in more detail please don't hesitate to contact us,

Yours faithfully

James Bamforth  
Bespok structures Ltd  
07901 678 436 / [bespokstructures@gmail.com](mailto:bespokstructures@gmail.com)



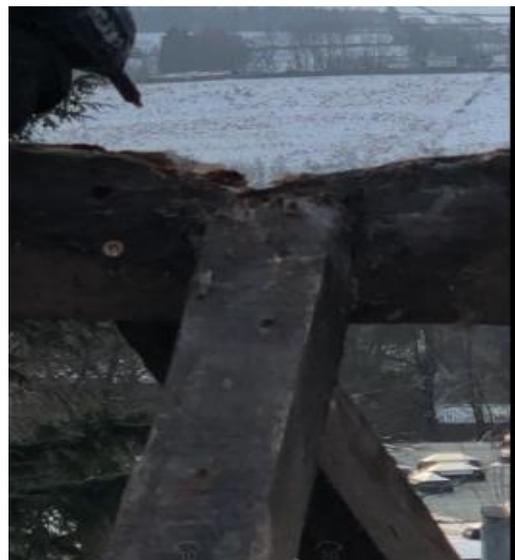
### Existing Structure

Unfortunately, the existing structure is in incredibly poor condition and has received a number of repairs and alterations over a period of time leaving a lot of the structure in a poor state and un-original.

#### 1. Ridge Board



**Ref 1.** Ridge board is not original and has been replaced using an off cut of T&G floorboard. This is also rotting due to an infestation of woodworm

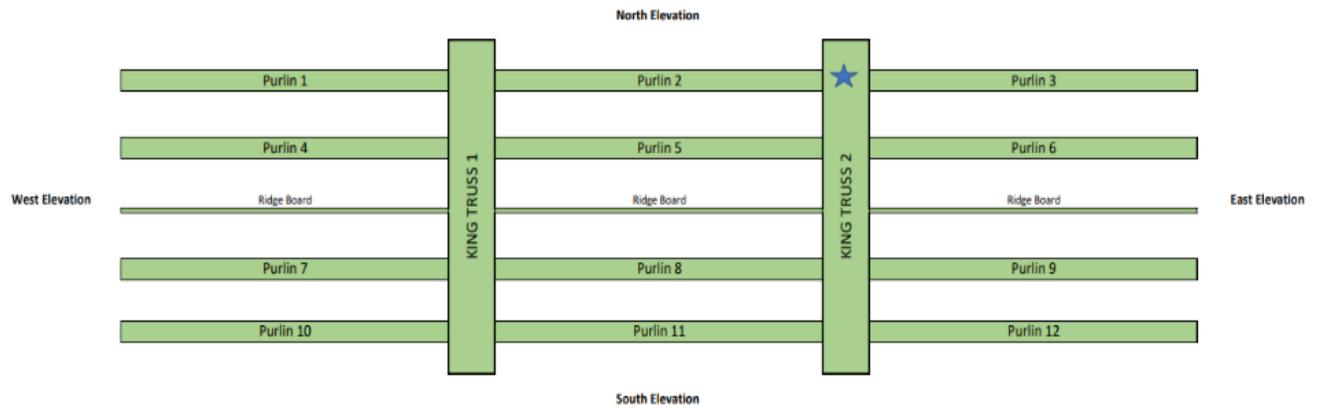


## 2. Common Rafters

Rafters are not original and have been replaced over time with the addition or replacement purlins and the installation of felt. These are in poor condition due to the woodworm infestation (as picture in item 1) and recommend replacing with new during the works.

## 3. Purlins

The customer has provided a detail of the existing presence of original materials which we have included within our report FYI.



|           |  |
|-----------|--|
| Purlin 1  | Assume existing oak purlin removed during strengthening works. Sawn timber present. Will be replaced with new oak to match existing  |
| Purlin 2  | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 3  | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 4  | Assume existing oak purlin removed during strengthening works. Sawn timber present. Will be replaced with new oak to match existing  |
| Purlin 5  | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 6  | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 7  | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 8  | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 9  | Assume existing oak purlin removed during strengthening works. Sawn timber present. Will be replaced with new oak to match existing  |
| Purlin 10 | Assume existing oak purlin removed during strengthening works. Sawn timber present. Will be replaced with new oak to match existing  |
| Purlin 11 | Present however accompanied by new sawn cut timber presume to add structural strength. Full inspection of existing however if defected will be replaced with new oak to match existing |
| Purlin 12 | Assume existing oak purlin removed during strengthening works. Sawn timber present. Will be replaced with new oak to match existing  |

In addition to the information above where original purlins and completely missing the one that are present are suffering from poor repairs and infestations of woodworm.



Ref 2. Picture across and below of the poor condition of the roof purlins. Wood worm and brittle damaged ends meaning that these timbers cannot be re-used



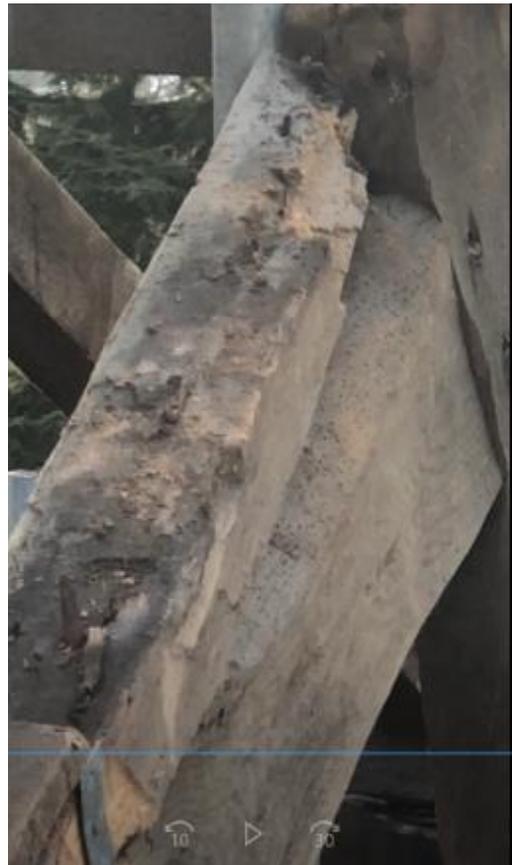


Ref 3. More examples of poor repairs and wood worm infestation. Also additional packers to purlins due to movement which isn't an issue however main points of fixing are damaged



### **3. Principal Rafters**

Show signs of woodworm infestation but generally okay in condition.



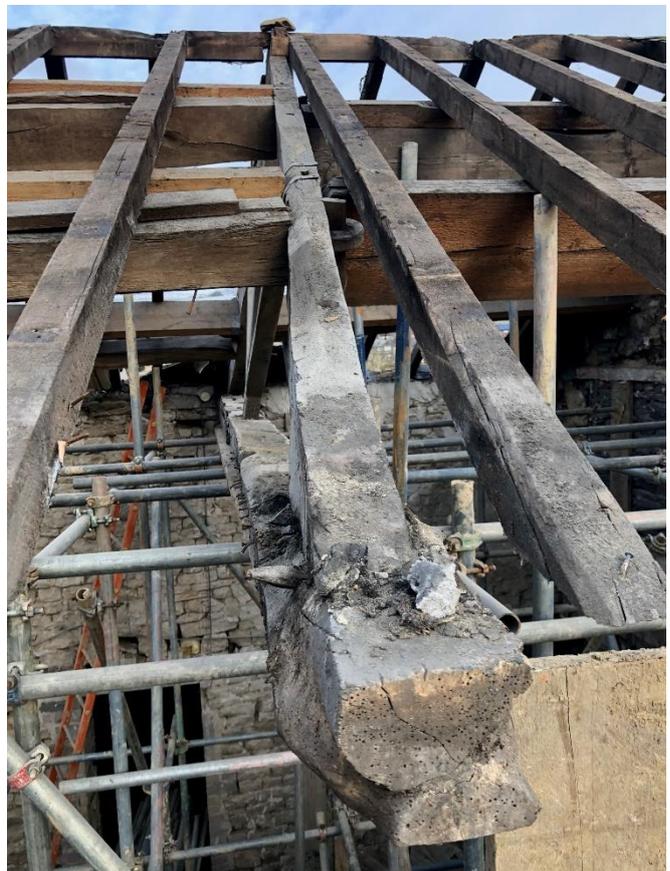
#### **4. King Posts / Struts**

Both posts including struts are showing signs or extreme warping (bow type). Otherwise in generally ok condition.

#### **5. Tie Beams**



Ref 4. Tie beams showing signs of woodworm infestation and damage





Ref 5. Tie beams showing signs or cracking with previous metal work repair that appears to be defective

### **Proposals / Recommendations**

Following our survey and findings we make the following recommendations.

Due to the high amount of damage and poor state of the roof in general we propose that the structure is dismantled. Returned to the workshop for further investigation.

Areas where non existing timber is present, we propose to replace with new structurally graded oak such as purlins 1,4,9,10,12.

Where areas of timber are beyond repair which in our opinion is all areas apart from some areas of the king trusses, we would replace with reclaimed oak to match existing. If the tie beams were unable to be reused we would also propose to re-use these as purlins to assist in keeping some original items in the roof. All new/reclaimed timber used would be traditionally jointed.

In addition we believe the roof timbers used are not to the correct size and strength which has resulted in the ongoing repairs and maintenance clearly taken out on the roof and believe that these size timbers would NOT meet building regulation approval.

In our experience of a few similar undertaken projects on Grade 2 listed buildings in the area, we have been able to use bigger section reclaimed oak beams (particularly on the trusses) to match the existing as best possible. This is the approach we feel that is need on 3 Two Gates.

Listed buildings have worked to give us the approval to do this, using firstly any beams that are salvageable and then supplying carefully picked reclaimed that is structurally graded.

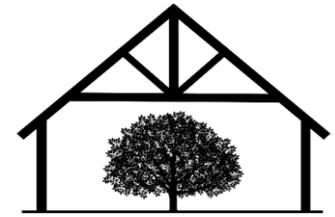
We pride ourselves as a company in keeping these historical buildings looking original and on completion of the work the beams would maintain the character of the building.

The aim is to provide you with a roof which meets building regulations yet maintaining all the character of the property re-using existing or reclaimed timber.



Please see below some work recently undertaken in the local area.





BESPOAK STRUCTURES  
HANDCRAFTED GREEN OAK STRUCTURES

