

COACH HOUSE TO THE REAR OF 1 RECTORY ROAD, PENARTH

1.0 INTRODUCTION

- 1.1 The above premises were inspected on Tuesday 20th January 2015 at the request of Mr David Courtney, Architect.
- 1.2 Our inspections were specifically directed at the condition of the principal structural elements prior to works being carried out to convert and extend the premises for domestic use.
- 1.3 The building was unoccupied at the time of our visit. Elements of the structure which were covered up or inaccessible were not inspected and it cannot be said that they are free from defect.
- 1.4 The timbers to the premises were not inspected for timber disease, rot, etc, and it cannot be said that they are free from such defects.
- 1.5 The premises has not been inspected for asbestos containing materials.

2.0 DESCRIPTION

- 2.1 The premises comprises a single storeyed semi-detached coach house building with a part mezzanine first floor built circa late 1800's.
- 2.2 The walls are of traditional random rubble limestone construction laid in a lime based mortar and partially repointed with cement:sand.
- 2.3 There is a vehicular door opening to the north wall to Rectory Road Lane which is formed with a brickwork arched head and quoins. The small ground and first floor openings to Rectory Road Lane also have a brickwork arch.
- 2.4 The full width ground floor opening at ground floor level to the west wall is formed with structural steelwork beams. The first floor window opening has an arched brickwork head.
- 2.5 The roof is duo pitched and is covered with natural slate. The roof has a single line of purlins per slope and these are normally propped off the mezzanine floor structure. High level ceiling joists are provided to the east portion of the roof.
- 2.6 The mezzanine floor is of timber joisted construction.
- 2.7 The ground floor is solid.

3.0 OBSERVATIONS

- 3.1 The south side elevation wall to the coach house is very badly twisted and distorted. Thrust from the coupled roof structure has spread the head of the wall and the wall construction as a whole has moved laterally to the south.

Relative movement was noted between the mezzanine floor structure and the wall.

The south west quoin is particularly distorted and has fractured. The chimney flue is distorted and unsafe.

- 3.2 The east portion of the north elevation wall around the vehicular entrance door and above appears to have been rebuilt in the past. Internally the head of the wall is laterally displaced and distorted.

The west portion of the wall is however very poor and twisted and distorted and has spread.

- 3.3 The line of the west gable elevation wall is relatively straight and true. The masonry is however supported off an unprotected steelwork beam which is carried by the poor and distorted north west and south west quoins of the flank walls.

- 3.4 The roof structure is structurally poor. A token propping arrangement has been provided off the end of the mezzanine floor structure to the roof purlins. The roof however appears to be acting as a coupled roof and is exerting lateral pressures at the head of the north and south walls.

4.0 **RECOMMENDATIONS**

- 4.1 The external walls of the structure are in a very poor structural condition.

The distorted south elevation wall should be demolished up to the party wall line with the adjoining element of the coach house and rebuilt to a suitable structural standard off new foundations.

- 4.2 The west portion of the north elevation wall is in a very poor structural condition and is very badly distorted and distressed. This element should be demolished and rebuilt to a suitable standard off new foundations.

- 4.3 The west elevation wall, which is supported off the north west and south west quoins of the flank walls will also need to be taken down and rebuilt. A suitable corrosion protected structural steelwork support beam should be introduced to support the new wall.

- 4.4 The roof structure is unstable and requires replacement. The structure should be reconfigured and a suitable purlin and rafter construction provided.



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