The Coach House

Structural Appraisal
Job No. 11178
November 2009

The Old Rectory – Coach House

The coach house is a separate building adjacent to the rectory. We understand some conversion work is contemplated, though a full structural assessment has not been carried out. We give below some comments on the conditions.

There is a coach house in the rear yard. This has a pitch tiled roof which is supported on timber rafters on square timber purlins. The roof is hipped and the purlins are supported onto hipped members and also onto internal brickwork, which are continuations of wall below.

There is a limited height to the underside of the purlins, some 1.6 metres and these purlins coincide with the ridge of the dormer window in the end wall and the gable of the hatchway in the elevation facing the courtyard. These are built into the brickwork around the perimeter. It was noted that there is an outward lean of the brickwork where the raft has pushed onto it, and there is a crack at the junction of the internal walls which carry the roof purlins, and on the main front elevation a crack has opened to a width which varies up to 20mm on the centre support wall.

There is cracking at the base of one of the internal dividing walls at first floor level. This sits onto a timber beam at ground floor.

The yard elevations of the coach house have two garage sized doors facing the main property. These are covered with timber beams some three courses deep to 215mm. Above one of the doorways is a hatchway which gives access to the first floor area which has a small gable above. Deterioration of the mortar joint has occurred. There is a raking crack in the brickwork above the timber beam adjacent to the doorway at first floor level and some bricks are loose and a section of brickwork requires rebuilding. There are two lines of crack, one some three to four courses above the other.

The other leg of the cottage has small openings at ground and first floor which are covered by brick arch windows. The brickwork is solid, one brick thick in Flemish garden wall bond. There is some distortion of the brickwork with age and the mortar joint has deteriorated.

The floors of all the units are brick paviours and are not level. However, there is significant height in the main wing at ground floor only, and it may be possible that in any conversion works, the level of the first floor could be realigned to give more acceptable heights at first floor level.

The timber staircase which exists is not to acceptable standards in terms of rises and goings and the building would need complete remodeling to be converted to habitable accommodation.

At the first floor in the cottage it was noted that there is cracking to the rear wall, which may be related to outward movement at eaves level. There is also differential movement of the inner dividing wall and the rear wall with raked cracks in the wall by the stairway. These cracks are up to 10mm wide and possible underpinning and restraint to this section of the building is required.

A M Dyer B.Eng C.Eng MIE
For and on behalf of ABA Consulting