

## SITE INVESTIGATION REPORT

Overview from removal of cement render which had been applied to metal lath which is badly corroded and is losing its fixity to the timber frame.

The sleeper wall is of brickwork and lime mortar, this has all become loose below the soleplate which itself has rolled and moved outwards. Previous attempts to repair this has consisted of in-filling the gap internally with concrete and lining with a timber stud wall between ground and first floor level.

Due to the positioning of a rain water hopper just below the first floor window and the cement render having cracked, water penetrating the structure at this position has rotted out the mid timber studs and also the sole plate. The soleplate has suffered severe decay.

The structure is temporary propped with accrows and a shear wall internally to secure the structure. Further propping will also be put in place along with temporary sheeting to protect from further water ingress. On opening up, water could be seen running within the fabric, this has now been stopped to prevent further decay.

### RECOMMENDED REPAIRS

The remains of the existing sole plate should be removed to allow for circa 4 courses of brickwork to be rebuilt and consolidated to allow for a new sole plate to be re-inserted. A damp proof membrane should be inserted under the new sole plate (sole plate to be in oak) and either shaped, or half lapped, to take account of the line of the wall.

Where timber studs have been lost due to decay, or are missing, these studs should be replaced like for like. If suitable section remains, these are to be splice connected.

Where section size is inadequate, studs can be partnered up with new treated softwood timber studs. Stud bases can be fixed with S/S angle cleats on both sides of the stud bottoms. We suggest that a breathable insulation is inserted to fill between the studs before cladding over with Savolite Board, or similar, prior to re-rendering in a lime render (warm coat, or similar).

Internal lime render and lath is likely to be lost at ground floor level in order for the structural timber repairs to be undertaken. This should be replaced like for like.

Cement render above the gable pentice board should also be removed and repairs with the same method as previously highlighted, once the structural sole plate and stud repairs have been completed.