IStructE **ANDREWS NEWBY PARTNERSHIP**

STRUCTURAL & CIVIL CONSULTING ENGINEERS

L.E. ANDREWS, CEng, MIStructE
H.J. NEWBY, CEng, FIStructE, FFB
C.N. BEAVIS, CEng, MIStructE

Forder House,
High Street, Buriton,
Petersfield, Hampshire,
GU31 5RX
Tel: (01730) 266944
Fax: (01730) 265836
e-mail: enquiries@andrewsnewby.co.uk

Our Ref. 2844

Your Ref. GEN/72816/002 & 08/72816/000

Mr. D. Eaves
Senior Planning Officer
Havant Borough Council
Civic Offices
Havant
Hampshire PO9 2AX

27th April 2010



Dear Sir,

Re: **86 West Street, Havant, Hampshire.**
Existing Front South Elevation.

We are now in receipt of a Digital Topographical Survey of:-

- The ground floor footprint of the building.
- The front elevation street scene.
- A 3D Survey of the front elevation internally and externally.

Copies of these drawings are enclosed herewith together with photographs of the front wall from West Street.

We have converted the 3D Survey into internal and external A3 drawings about the 3 axes; in order to show the distortion in each direction relative to a single origin. (You are most welcome to a digital copy of the Survey to consider on screen, if you have the compatible software.)

We are very concerned about the Health and Safety issues of endeavouring to retain this particular fragile and distorted elevation.

Verticality.

(Ignoring any lack of alignment at ground level, which is relatively small over the length of the building.)

The external distortion over the height in relation to the base of the wall is at its worst at the west, varying from 44mm at the east to 86mm at the western window-head externally and 93mm at plate level, internally at a similar location.

Defects/Weaknesses in the Existing Front Wall Construction.

- The existing western ground floor window is housed within an original large square opening, (possibly an earlier shop front) that has been infilled.

  The bricks and coursings to the infill do not match the original Flemish bonded work and are straight jointed at the abutments. **(See Photo Nos:- 06.03.09/005, 7465 & 7466.)**

  These unconnected straight vertical joints occur, not surprisingly, at the positions of worst vertical distortion and where the first floor joists have completely lost their bearings as a direct result.

  There are buried timbers over the window-head internally, which are suspect and which require to be replaced.

  This will temporarily remove 50% of the wall thickness. **(See Photo No. 09.30.09/48.)**

- The brick pier between the existing ground floor western window reveal and the adjacent door is only 215mm wide. **(See Photo No. 7466.)**

  Internally, it abuts, but is no longer connected to, a returning timber framed corridor wall.

  The separation at this point is 66mm maximum internally.

  The pier leans outwards at first floor level by 70mm.

  The lintel over the present door is horizontal soldier coursed brickwork externally, which then adjoins the previous crown of a soldier coursed segmental brick arch at the east to a previous doorway.

  The eastern bearing is only 102mm wide brick on end and straight jointed to the previously infilled opening. **(See Photo No. 7467.)**

  The inference is that the two doors may originally have formed a single larger opening or that the present doorway is an addition. **(See Photo Nos. 06.03.09/005 & 7472.)**

  (*Derek,*
  Could you check the lintel over the main entrance door, over the shop front window (including under the lead flashing) and over lounge window. I need to know whether these are deflecting/decayed, in order to reinforce the problem of disturbance to the wall.)

  Internally, the infilled doorway has a buried timber lintel above and timber plates within the panel; all of which are suspect. **(See Photo No. 09.30.09/045 which shows the infilled panel and timber plates and see Photo No. 09.30.09/044, which shows the abutting 100mm infilled stud wall to the corridor and the outward lean to the front wall at the junction.)**

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED

Defects/Weaknesses in the Existing Front Wall Construction (Cont'd).

- The old infilled doorway is to be re-opened to provide access to a separate dwelling, which will dictate widening of the opening to accommodate the party wall construction between the two doorways and the replacement of the existing lintel and partial segmental brick arch.

  This will also reduce the abutting pier to the east to approximately 550mm maximum width.

- A small trial pit undertaken internally adjacent to the infilled doorway and abutting the corridor wall **(see Photo No. 07.15.09/039)** though curtailed due to the fragility of the wall, suggests that there is very little by way of a foundation to the front or internal corridor walls.

  Consequently, the whole front elevation will require a new foundation and dpc to suit the ground floor construction.

  This would dictate underpinning over the complete wall length.

  Obviously, the pronounced outward lean, particularly at the western side and the weakened ground floor storey due to the earlier straight jointed infills and decayed timber plates; make underpinning a serious Health and Safety risk, which should be avoided/designed out.

First Floor Level (Internally).

- Bedrooms 1 & 2 timber window lintels show pronounced deflection and are both suspect.

- Bedroom 2 shows a considerable length of loose/missing masonry below the window at first floor level. **(See Photo No. 9.30.09/037.)**

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED

Conclusions.

Whilst this building is not Listed, we recognize the importance of this front (south) elevation in relation to the street scene.

Our Clients, have not unreasonably, requested that you give due consideration to the Technical and Health and Safety issues now very much apparent from the latest survey data and look to allow the careful dismantling of the existing wall, the cleaning and storage of all brickwork and the replication of the wall vertically on new foundations.

The brick bonding, arches, vertically jointed openings and lime mortar jointing can all be faithfully reinstated.

We would naturally have to adjust the entrance doorway as was always the case and, if acceptable, would maintain the replicated wall in the "re-used" 102mm facing brick, but with insulated cavity construction behind. This would then not only achieve a matching street scene using the original materials, but would also provide a lasting construction on new foundations with a dpc and thermal insulation compliant with the current Building Regulations.

Conclusions (Cont'd).

Our opinion is that this building has suffered a history of total neglect and the distortion and instability of the front elevation renders it bordering on dangerous, (hence inclusion of the present scaffold shoring).

There should be no reason why the original brickwork cannot be cleaned of lime mortar and then re-used to replicate the south elevation using the Digital Survey and photography already in hand.

We shall be most grateful to receive your considered opinion with regard to acceptability of this proposal.

Should you wish to discuss any aspect of this approach, then please do not hesitate to contact us and we shall be pleased to assist.

Yours faithfully,

[redacted]

H.J. NEWBY, C.Eng., F.I. Struct. E., F.F.B.
On behalf of
ANDREWS NEWBY PARTNERSHIP

Encs.

c.c. Mr. J. Townsend - Conservation Officer (Havant Borough Council)
Mr. & Mrs. D. Willetts
Mr. M. Gillings
Mr. D. Johnson - Elderwood Construction Ltd

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED



Photo No. 06.03.09/005

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED

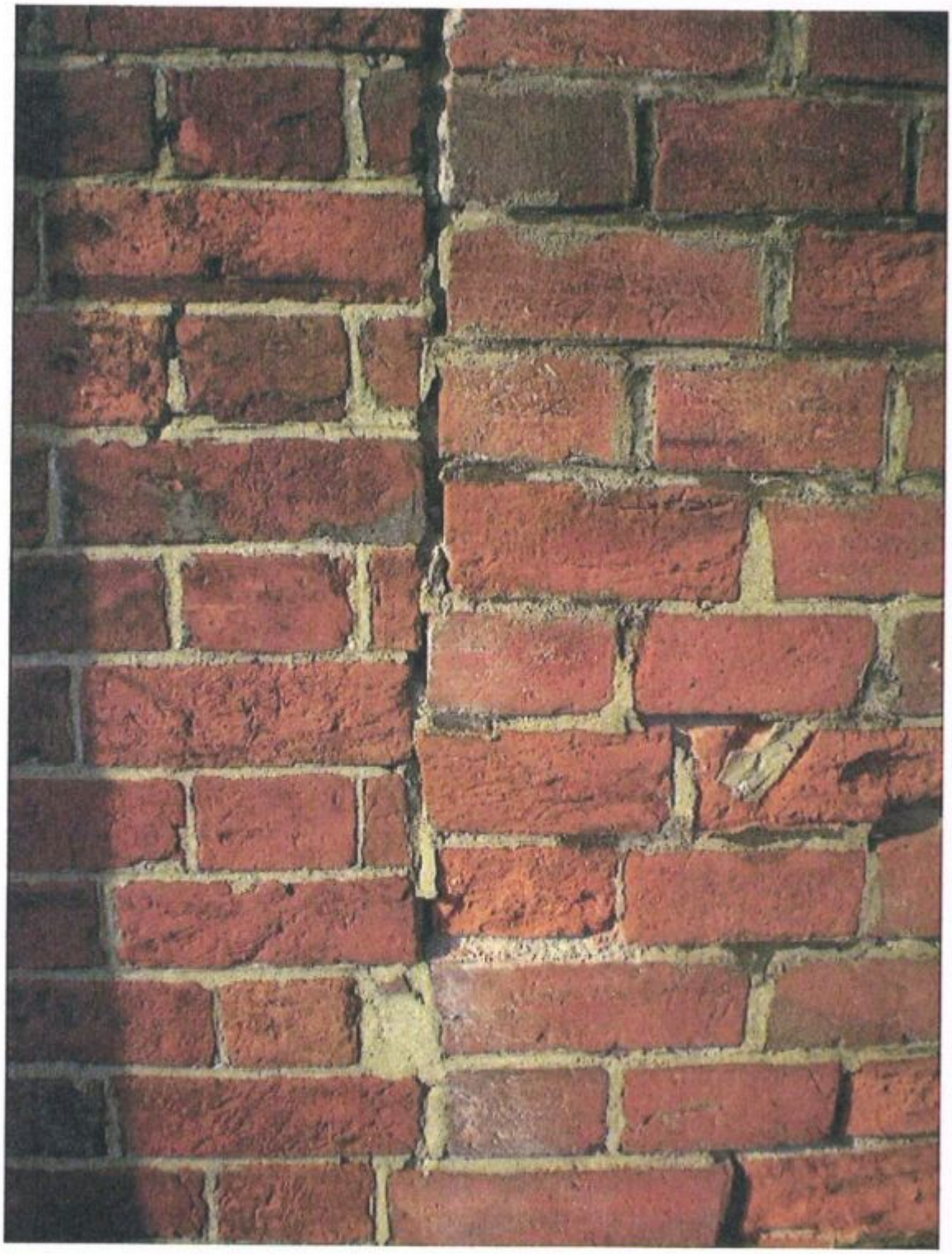


Photo No. 7465

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED

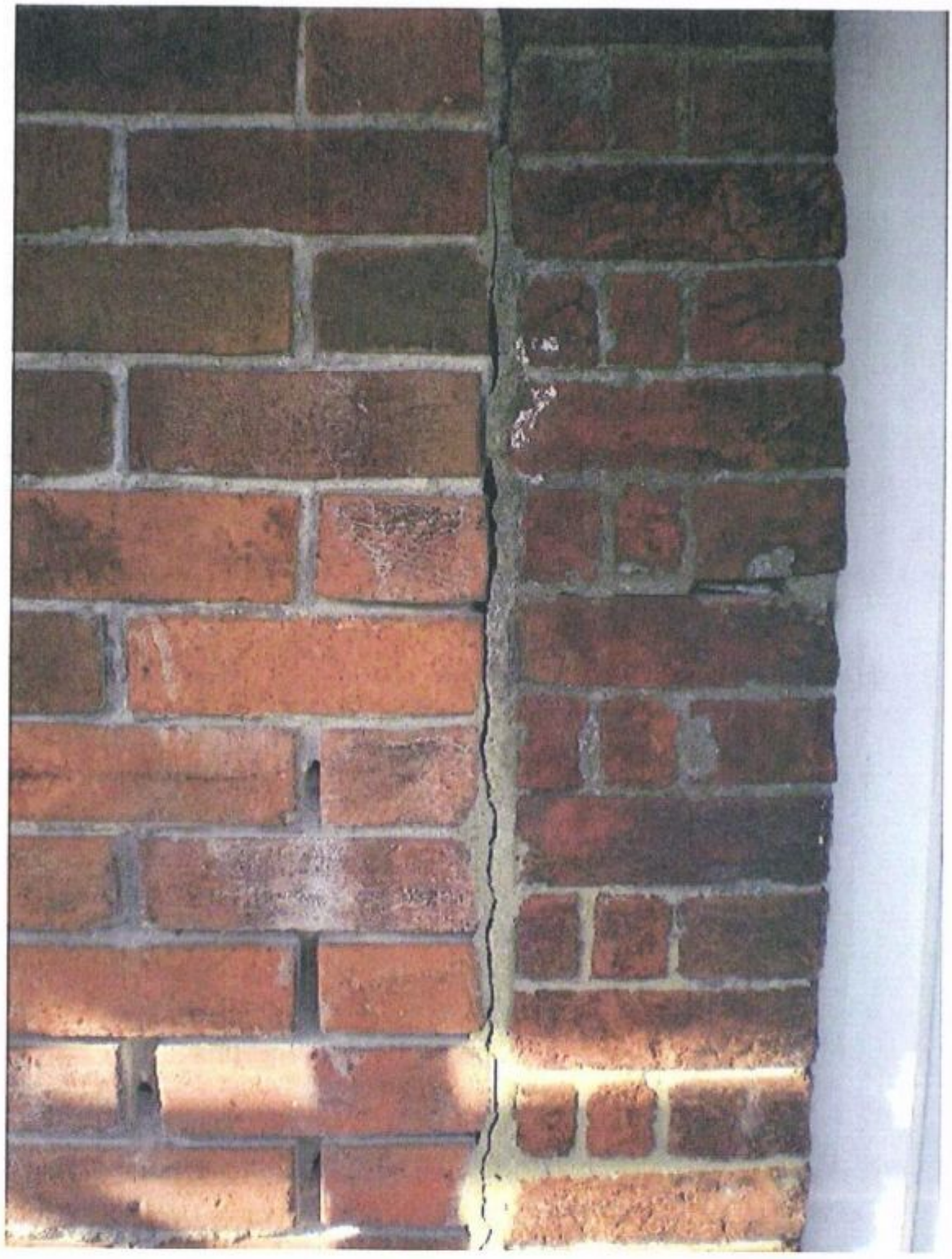


Photo No. 7466

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED



[redacted]

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED



Photo No. 7467

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED



Photo No. 7472

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED

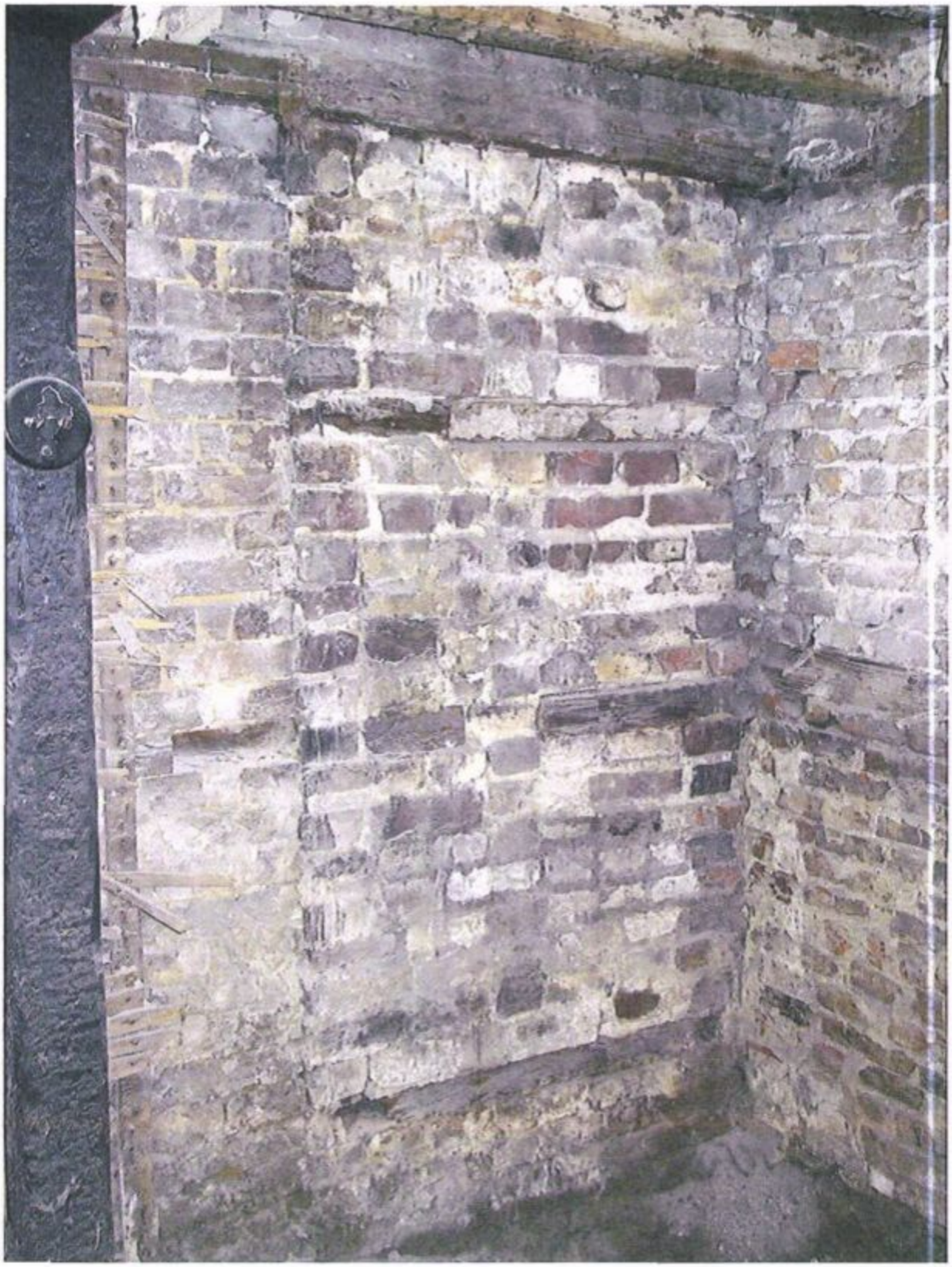


Photo No. 09.30.09/945

HAVANT BOROUGH
COUNCIL
24 MAR 2011
RECEIVED

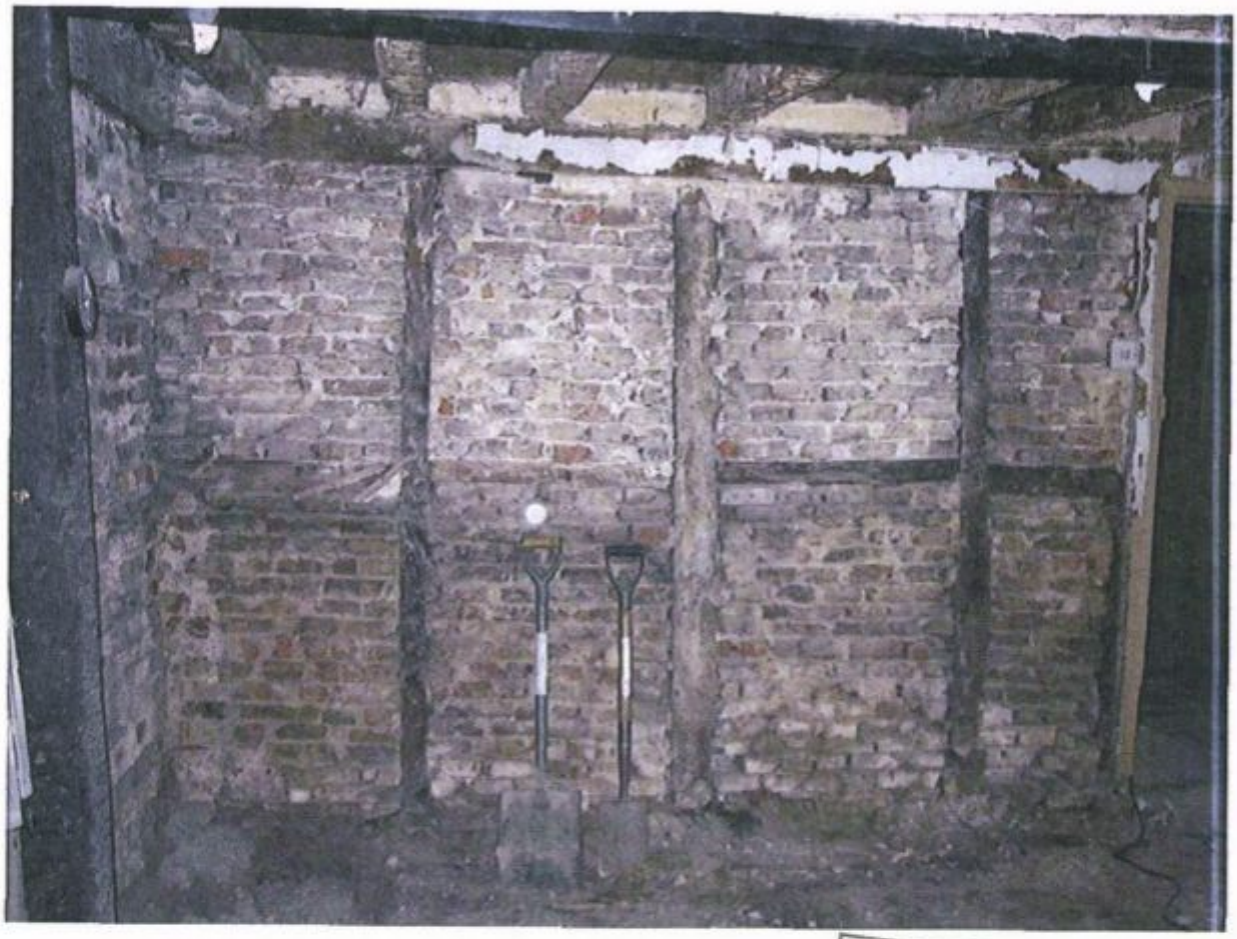


Photo No. 09.30.09/044

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED



Photo No. 07-15-09/039



Photo No. 09-30-09/037

HAVANT BOROUGH COUNCIL
24 MAR 2011
RECEIVED