



### 33 CHALCOT SQUARE, LONDON NW1 8YA

#### PRELIMINARY SITE INVESTIGATIONS 20.05.09 (Refer to 3245/EX10 (PI) A)

Opening up carried out in conjunction with Planning and Listed Building Applications Ref 2009/1108P & 1112L

#### **Site 1 External trial hole on north side to the rear extension, to examine the depth of footings and quality of brickwork**

- 1.1 Excavation revealing the rear wall and footing at a depth of approx 1.5m at +34.07.
- 1.2 Single stepped footing. Wall of 9" roughly laid soft reds and flettons in lime mortar, built overhead.
- 1.3 Water table (probably road rain leakage water) is at level of footing approx +33.86 (i.e. at level of u/s of main room floor slab) see photos 1.1 – 1.4.

NOTE: Refer to the Design and Access Statement 3245/03/B/P80 20.05.09

This extension is probably a built-on scullery of 1860 date constructed by cutting the rising ground away and building from inside over head – hence the rough brickwork. Subsequent metering of Berkley Road and public drainage have made the very poor construction vulnerable to damp penetration and structural movement (see photo 5).

#### **Site 2 Wall plaster removal.** To examine the type of plaster and the brickwork.

- 2.1 In the west room (photo 2.1) lime plaster direct brickwork (see above).
- 2.2 In the east bathroom (photo 2.2) carlite bonding on 100mm blockwork (dividing partition across one room) built in 1984 in cement mortar jointing. No damp membrane against the outer wall.

NOTE: There is no internal water proofing/tanking on the walls. The inner skin of brickwork is fairfaced showing that the 9" wall was built from inside. Damp is drawn across into the block wall as there is no vertical DPC.

#### **Site 3 Ceiling Plaster and Lathe removal.** To examine the floor timbers

- 3.1 In the west room. 2" square joists spanning north/south ends housed in the walls. Timber is damp. Probably condensation and also leaks from bathroom over.

3.2 In the east room 2" square joists – all as above. Machine sawn lathe and plaster to both ceilings.

NOTE: The joists are very thin. It may be that there was once a roof and not a floor until the additional storey was built over. The date of the basement extension must be after 1880 on the lathe type.

Site 4 Floor slab. To examine subfloor construction in main house.

4.1 In the dining room. The slab is concrete and the finish is 50mm clay 'quarry' tiles. The base slab is 100mm thick with a DPC of 500g polythene and a topping of 50mm concrete. There is no insulation below the slab. Photo 4.1 and 4.2.

4.2 In the living room. Ditto above.  
This slab was laid in 1984.

NOTE: The slab DPM does not dress up the walls and is therefore not continuous with the wall water proofing. This accounts for the damp in the walls.

## 5 Damp readings to the walls.

A check on the damp readings using a Protimeter on the surface plaster.

As the spaces are unoccupied and very humid this may not be a very accurate indication of the actual damp in the walls but there is visible evidence of plaster decay and wetness coming from the walls in addition to the readings above 30% moisture content shown on 3245/EX10 (PI) A.

## 6 Conclusions

- Although the walls are not all damp about 40% by length are damp.

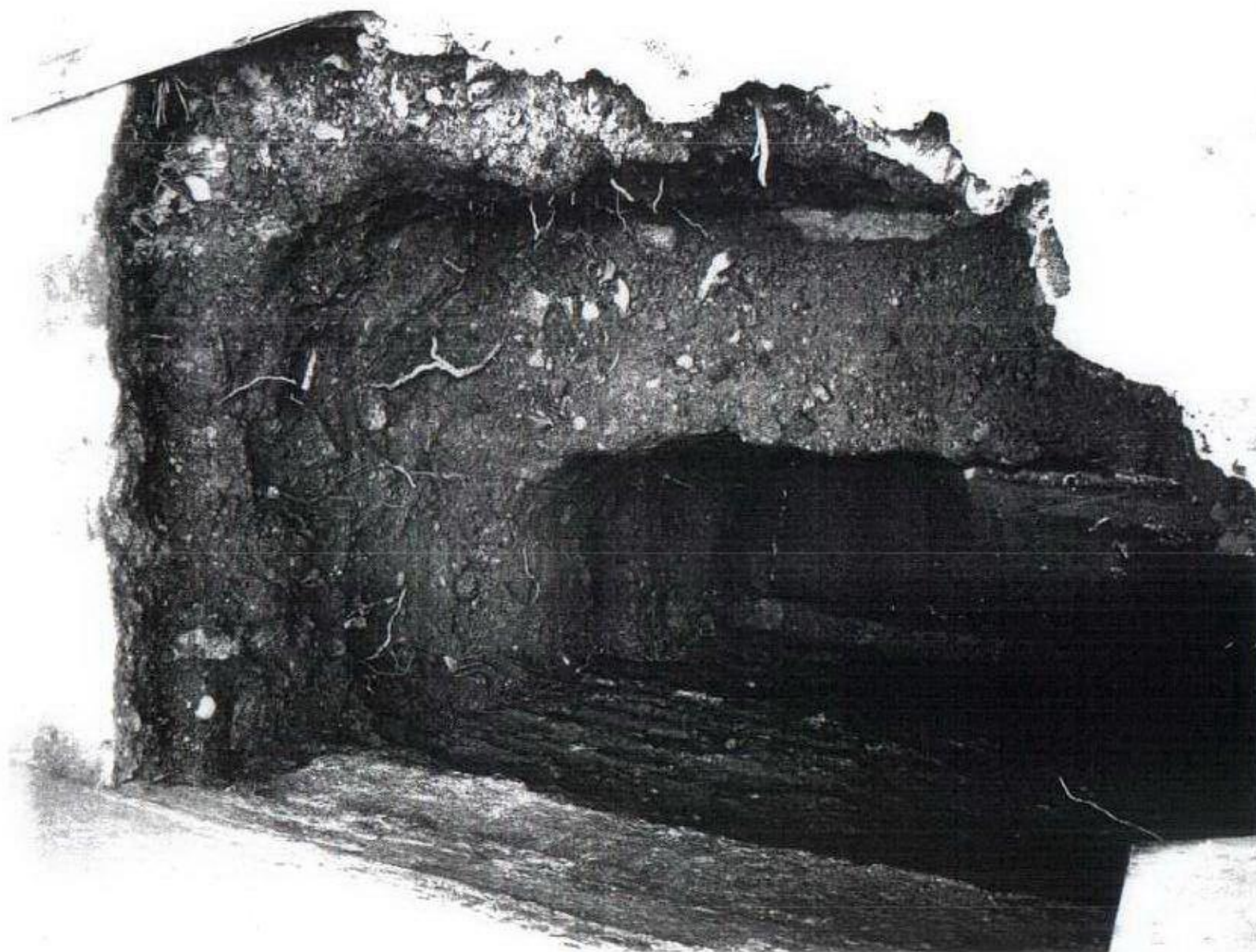
Some, like the rear extension and below the garden in the 'en-suite' are below ground level and very wet from penetrating ground water.

- These walls must be made waterproof by adequate tanking. In the case of the rear extension this, ideally, means rebuilding the extension together with a retaining tanking wall holding back the garden earth.
- The rear extension render shown on photo 5 is detaching from its brick backing and cracking indicates that movement caused by inadequate construction of roof and retaining wall at basement level are causing unacceptably large structural movement.



33 CHALCOT  
SQUARE, NW1

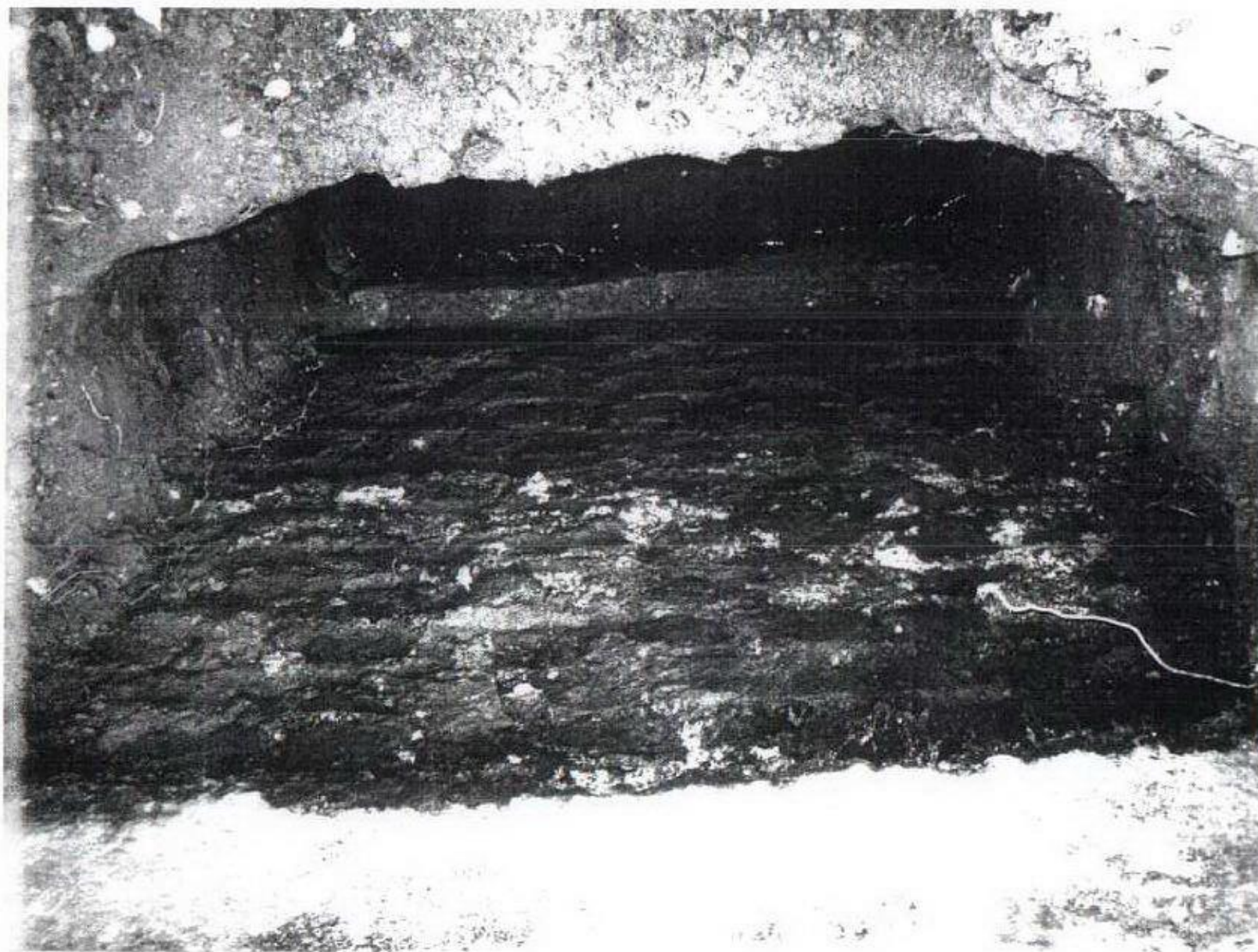
PHOTO 1.1





33 CHALCOT  
SQUARE, NW1

PHOTO 1.2





33 CHALCOT  
SQUARE, NW1  
PHOTO 1.3

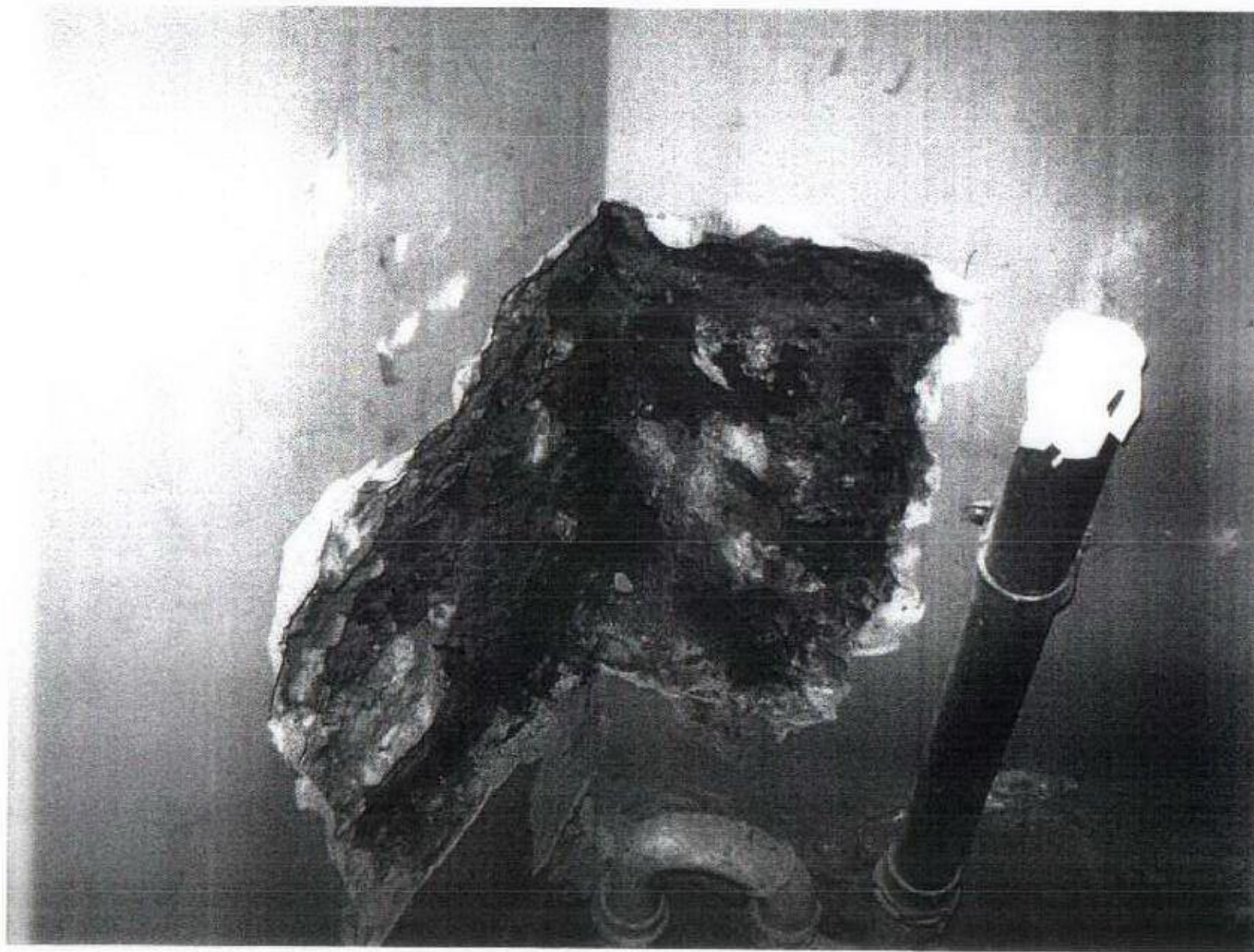


33 CHALCOT  
SQUARE, NW1

PHOTO 1.4





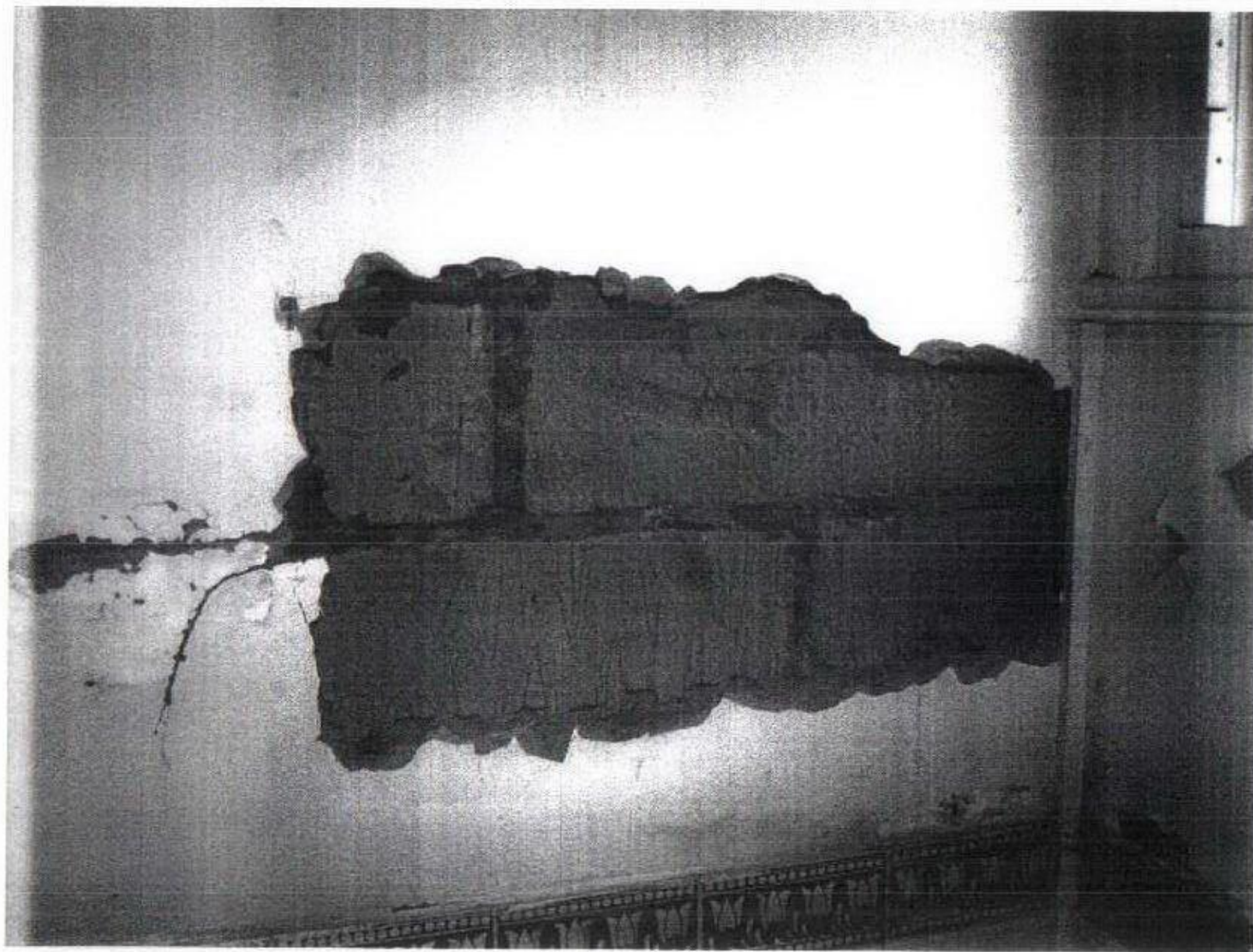


33 CHALCOT  
SQUARE, NW1

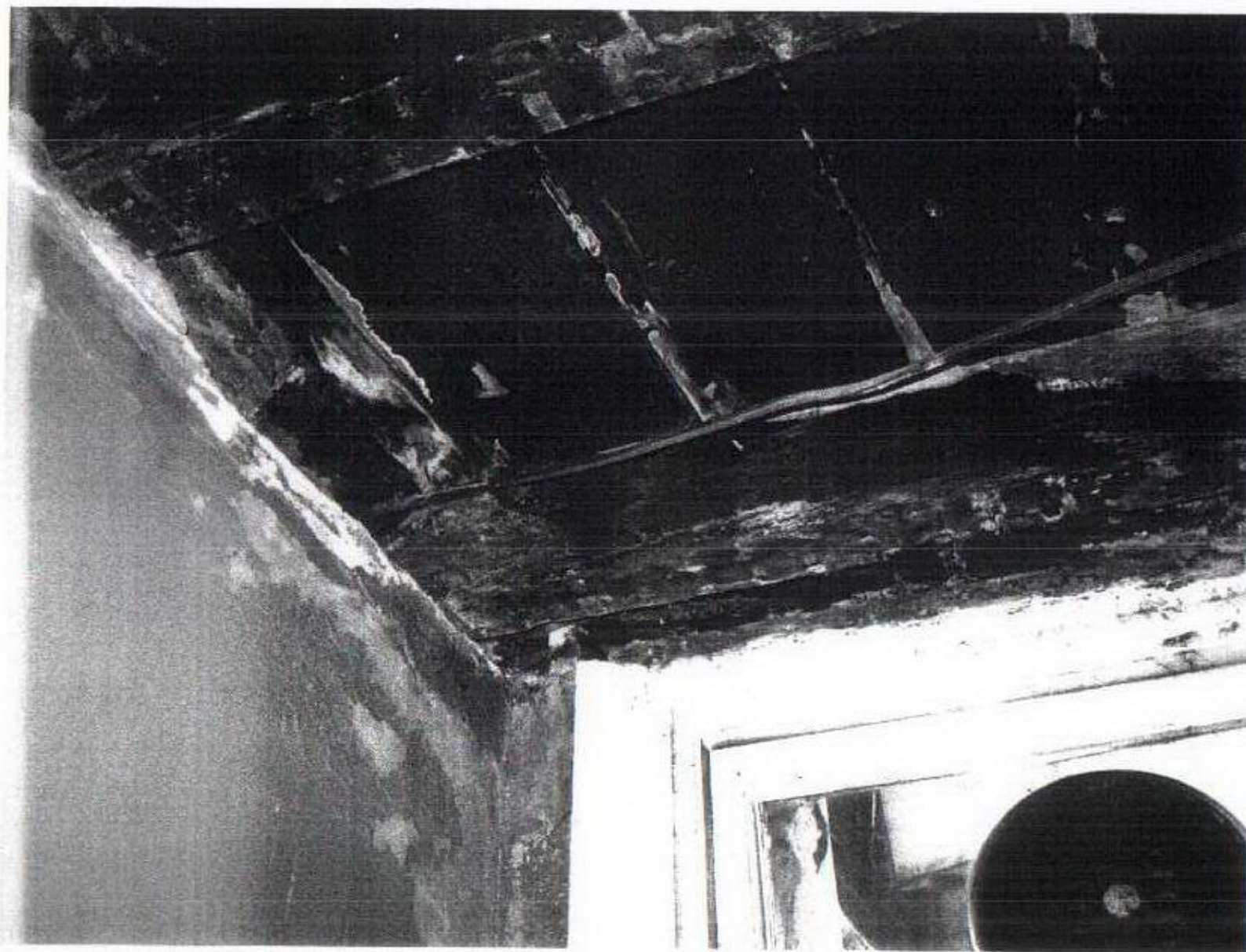
PHOTO 2.1

33 CHALCOT  
SQUARE, NW1

PHOTO 2.2







33 CHALCOT  
SQUARE, NW1

PHOTO 3.1



33 CHALCOT  
SQUARE, NW1

PHOTO 3.2



33 CHALCOT  
SQUARE, NW1

PHOTO 4.1



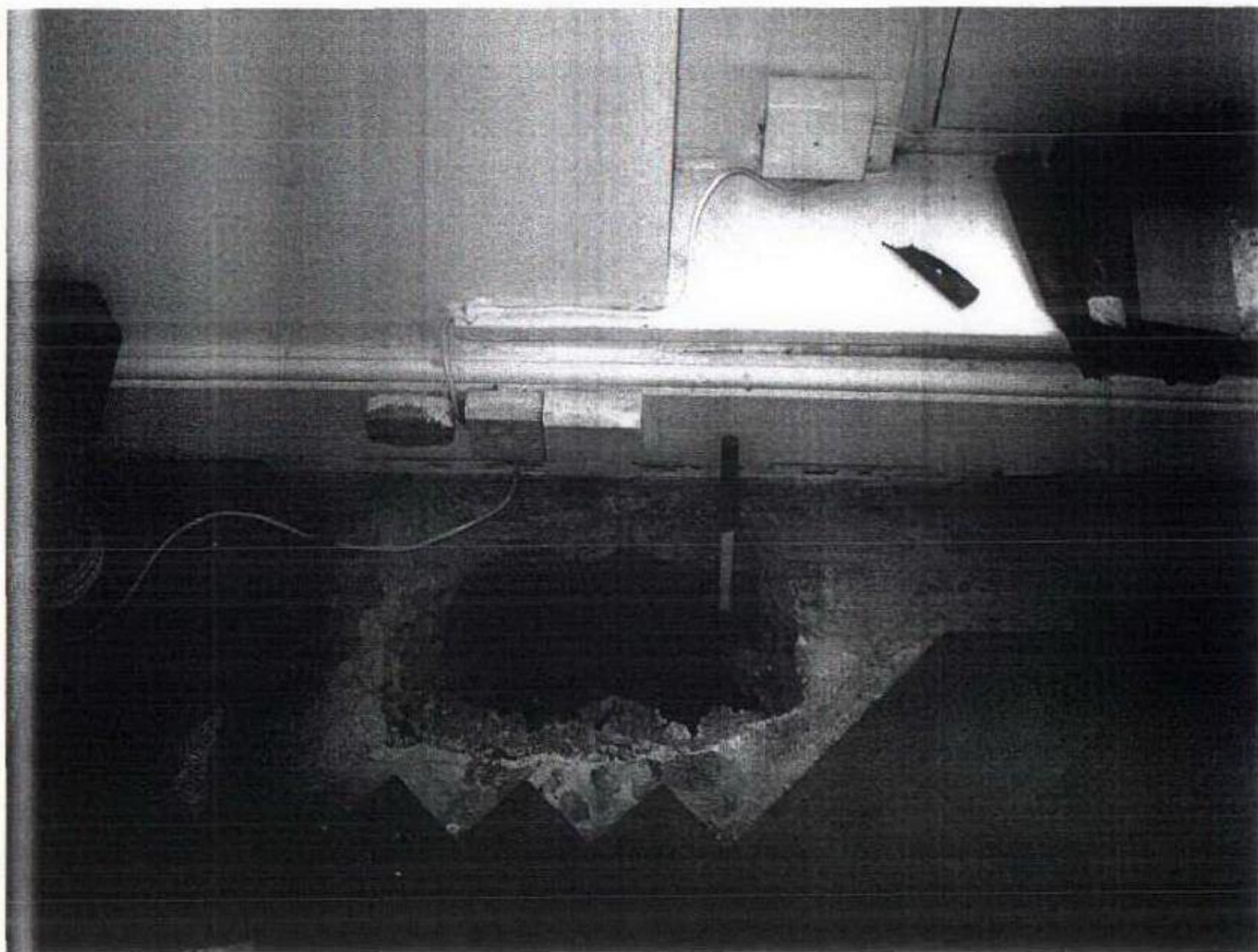


33 CHALCOT  
SQUARE, NW1

PHOTO 5







33 CHALCOT  
SQUARE, NW1

PHOTO 4.2