

Heritage statement & DAS
Land to west of 2 King's road,
London N17 8NP

Reclaimed Brick and proposed lime mortar

Reclaimed bricks for rebuilding front wall: Enclosure strategy

Extracts from DAS statement submitted in planning application HGY/2021/3038

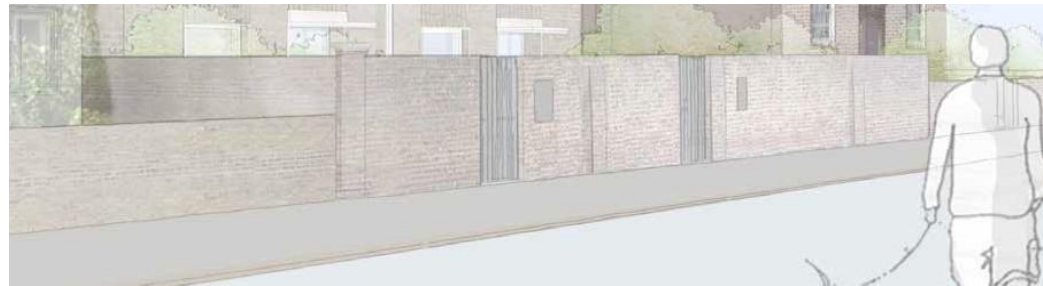
Materiality : Existing and Proposed brickwall and repair of existing front garden wall

The diagrams illustrated from the heritage report suggest that the main neighbouring listed building is in high significance. However, land plot is surrounded with mixed of low and medium with inconsistent bricks and its value overall is not sufficient quality for listing in its own right.

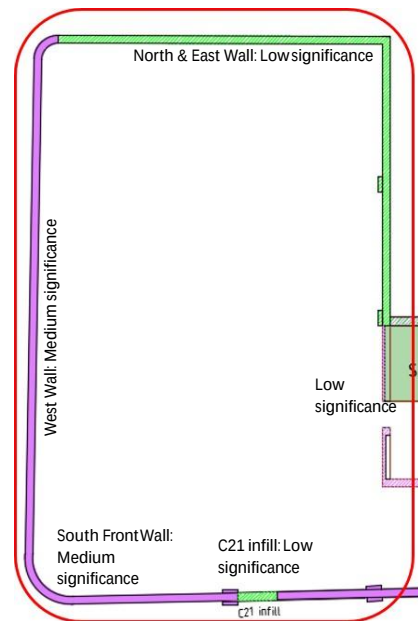
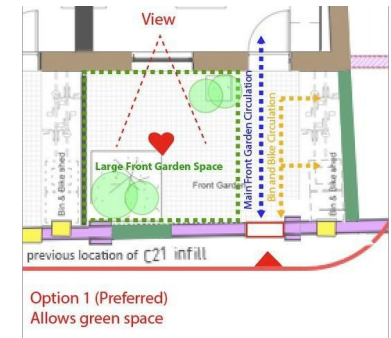
The North and East boundary which was built in 2015 after it was damaged and collapsed. The structural report also suggest that the South Wall has major lateral deflection and will be require rebuilding after its collapse. Thus, the scheme proposes the consistent use of the Multi-stock brown bricks for the main building in a stretcher bond and the rest of the garden wall to the rear and the south east and south west to be build with reclaimed bricks. These reclaimed brick will be obtain through the part removal of the west wall which suggest a mitigation approach by retaining the heritage fabric in the re-using of reclaimed bricks.

As the North and East wall as in low significance, we will keep consistency in the outlook of the wall by using only 2 type of bricks; Multi-stock brown and the reclaimed bricks at the rear outdoor area.

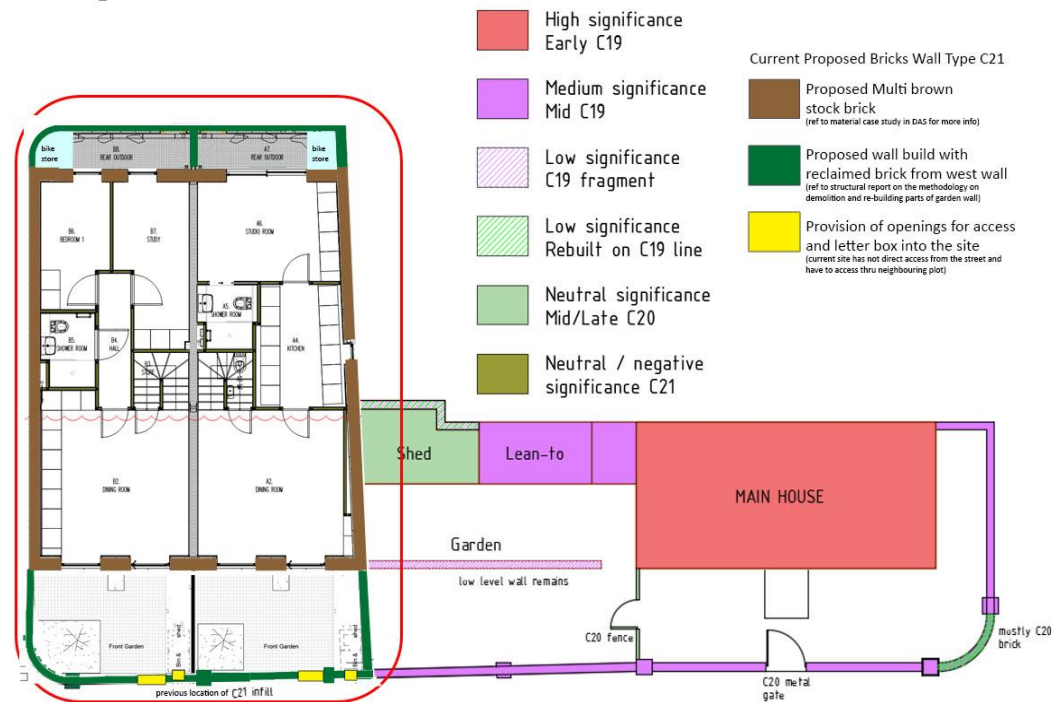
Side located on the entry door it relates better to the piers and original design of the wall as well as the optimum use of the front gate to the bins and cycle store



Proposed retained front garden wall illustration



Current existing bricktype



Newly Proposed brick types

Condition 3(b) Repair works to front existing wall:
Retain Front External Envelope

Condition3(b)
Proposed Repair work to existing Front Brick wall

Existing Front Garden brick

The scheme proposed to retain and repair the medium significant as structural report also suggest that the South Wall has lateral deflection and will be require repointing and repair.

The whole wall has many damaged facing brickwork and deteriorated to such an extent that water could penetrate behind this section of brick and had forced it to bulge. The repair front garden wall brickwork will match the existing adjacent and be tuck pointed.

Following cleaning of the facade including piers and caps, an inspection will be carried out to determine the extent of brick and stone repair and pointing required. Prior to cleaning, loosely adhered deposits and growths to be removed using suitable corrosion resistant brushes with copper bristles, and scrapers/ spatulas that do not abrade or gouge the surface.

Brick repairs Minor areas of defective brick are to be cut back on individual bricks and repaired with lime mortar colored to match existing brick. Cement mortar to headers above ground floor window (far right image) is to be carefully removed for inspection, it may be necessary to cut out and replace individual red facing bricks to match existing bedded in lime mortar. Pointing - defective or missing mortar to be raked out and re-pointed in lime mortar to match existing.

The rear walls East, West will be made of new bricks and the North wall will be made of reclaim bricks from the old existing bricks.



Existing front garden patch wall



Existing front garden wall (Internal site facing)



Existing front garden wall (King's road facing)



Condition 3(b) Repair works to front existing wall: Existing Condition of front wall

Condition3(b)
Proposed Repair work to existing Front Brick wall

Previous Collapsed Front Garden brick condition

The previous condition of the wall is in a poor condition and the mortar are cracking and falling away. Works of rebuilding with proper foundation is required. The mix of lime mortar for bricks is also selected in the traditional London mix to match the existing, Parts of the mortar is cover in dirt and patches of repairing mortar over time. Thus, the Heritage lime mortar color is the closest matching mix to the previous existing brick mortar.

In making the openings for the gates the deflected weak wall collapsed and the contractor has bought it to the ground as it was a hazard to the passer-by. There is also discovery these wall were build without foundations.

Works to rebuild wall and allow for new lime mortar repair as specified in methodology in heritage statement and the latest structural statement.

The design due to collapsed wall is to rebuilt the frontage wall including the curved front of the proposed houses. For mitigation, they will be rebuilt with the reclaimed bricks on-site. The frontage wall are to be carried out in accordance with the SE 01/09/2022 report and the conservation Method Statements. The brickwork that was damage unsympathetically will be rebuilt to better respect the details and weathering of the rest of the wall, reusing the bricks from the West Wall and Front wall.

Proposed of rebuilt reclaimed brick work currently on-site mock-up with traditional London lime mortar



Selected mortar colour to match existing



Previous gateway created by previous owners

This shows damage to soft brickwork by the use of cement mortar.

This shows sound lime mortar below a shallow layer of cement repointing mortar which is cracking and falling away.

This shows the joints which are friable and deeply eroded. Wind-driven rain can make its way into the core of the wall through open joints

Existing front garden wall

Extracts from heritage statement submitted in planning application HGY/2021/3038

- 2.3 The Proposed Wall Conditions document describes the existing walls with accompanying photographs.

Figure 12. Extract from the Proposed Wall Conditions showing the sections of wall described in the Table below:

- 2.4 The Mid C19 roadside and west boundary wall (1) has Medium historic interest. Its interest derives from being contemporary with the service wing, showing the historic enclosure of properties, and it has a distinctive layout. Loss of interest derives from its alterations, which include that it is repointed with C20 cement pointing and the top is rebuilt. It has Medium architectural and artistic interest as it is a good example of C19 enclosure and is built in flemish bond like the main house. It is of **Medium value** overall and not of sufficient quality for listing in its own right. For the purposes of this assessment the former unauthorised opening is not taken into account. This is marked pink in Figure 12 and visible as a blocked opening in poor quality brickwork.

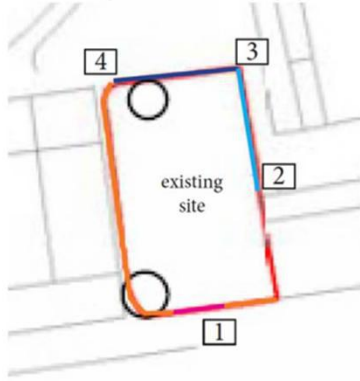


Figure 13. C19 roadside boundary wall (1). The blocked opening is towards the left.



Figure 14. Western end of C19 roadside boundary wall (1) showing the curved corner.

- 2.5 The western boundary is hidden by undergrowth and the modern neighbouring wall. Allow for this to be similar in age, survival and significance to the roadside boundary as the visible ends are similar. It is likely to be in poorer condition due to the longstanding plant growth.



Figure 15. Typical West boundary (4) to (1)

Method Statement for brick wall repair

These are to be read in conjunction with the Structural Engineer's 05/09/2021 report:

- 4.6 Works are to be carried out in accordance with conservation good practice within the Historic England Practical Conservation Repair Series unless otherwise agreed with the Conservation Officer.
- 4.7 Ivy and plant growth is to be carefully removed in order to access the walls and carry out repair and alteration works.
- 4.8 Allow for repointing to the frontage (South) and West Wall, when the ivy has been carefully removed. Inspection is to be carried out in order to determine the extent of sound and historic lime pointing prior to carrying out the work. Sound historic lime pointing should be retained and its texture matched for any new pointing. Unless agreed otherwise with the Conservation officer, new pointing is to be carried out in flush pointed NHL 3.5 lime mortar mixed with soft and sharp sand with dark inclusions to match the colour and texture of the closest surviving pointing. The face of the mortar is to be set back flush just enough to show the arrises but not enough to trap water.
- 4.9 Where cement pointing is to be removed, work is to stop and further advice sought should its removal affect the arrises of the historic bricks.
- 4.10 Where historic brickwork is required to be taken down, this shall be to the extent described in the Structural Engineer's 05/09/2021 report or as otherwise agreed with the Conservation Officer. It shall be done with care in order to preserve the original arrises and bricks stacked and protected on pallets until being reused. Where this abuts retained or new panels with straight joints, allow to provide stainless steel fixings hidden in the lime joint to the straight joint as shown in the Structural Engineer's Report.
- 4.10 Allow to build $\frac{3}{4}$ height internal brick piers with sloping tops to restrain the end of the existing wall next to the proposed entrance openings. This is so that they match existing, do not affect the coping detail and are not visible from the street.

Method statement for rebuilding collapse
wall refer to structural report instead

Extracts from structural report statement submitted in planning application HGY/2021/3038

Demolition works

1. Carefully remove bricks by hand and, only using hand tools, clean them of existing mortar and stack on pallets in the immediate area for re-use.
2. Brickwork to be taken down carefully in sections from east wall, north wall then to the western side.
3. Unusable bricks to be removed from site.

Reconstruction

1. Carefully remove the Tree to the North and Southwest corner of the site
2. Carefully dig to excavate for the new concrete foundation to structural engineers design and remove all spoil from the site
3. Pour Concrete to form new concrete foundation as Structural Engineer's design
4. Reclaimed/Salvaged stock bricks from west wall to be reused in rebuilding where-ever required to replace unusable existing brick (Refer to the diagram illustrating the design of the proposed walls location)
5. Rebuild the rear of North and East walls brick walls reusing the previously salvaged bricks from west wall. (Refer to the diagram illustrating the design of the proposed walls location)
6. Replace top soil in the area of works
7. Carefully remove scaffolding from site

Structural Repair Specifications

Cracks of 1mm wide or less will be filled (internal) or repointed (external). Where the cracks are wider than 1mm, but less than 5mm, the underlying brickwork will be exposed broken or cracked bricks or blocks will be replaced prior to covering with expanded metal and making good the finishes. Where cracks are 5mm across or wider, some form of bed joint lime mortar should be introduced. This will involve disc cutting a 20mm deep chase into the bed joint across a crack. An epoxy resin mortar is then pressure grouted into the open joint, and stainless-steel rods are set into place.

6 Conclusion

The method statement has been prepared as part of the submission for the listed building consent to demolish and re-construct the boundary walls with opening for access and letter box for a proposal of 2 houses at Land to west of 2 King's road.

The conclusion for the observation and recommended works are:

The property has suffered from subsidence movement. The prevent further damages/movements to the wall Some action should be taken by

- 1) The installation which underline in **Structural Repair Specifications** section should be carried out properly especially for vertical cracks.

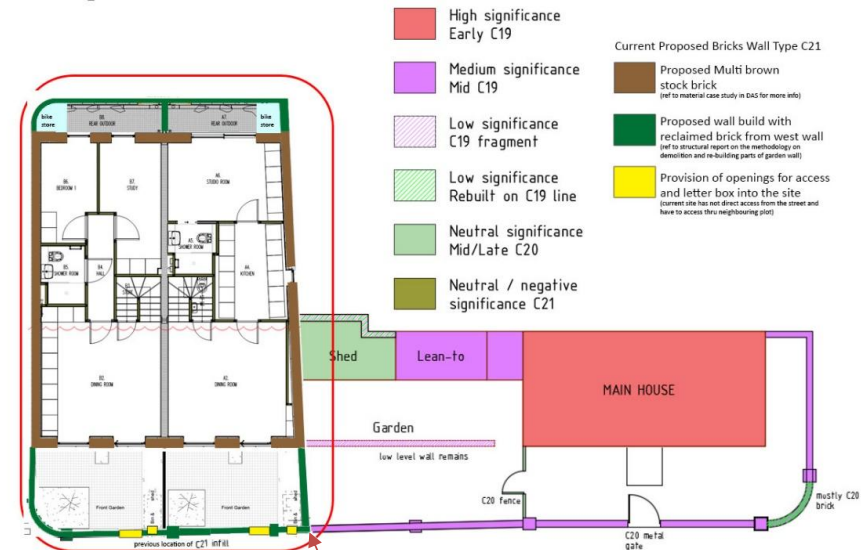
• It will be impractical to use the walls for 3 story building as they are loadbearing walls. Due to the wall leaning excessively by 130mm over a height of 1700 mm and some part these walls would be dismantle easily by hand.

• The whole front wall requires repointing.

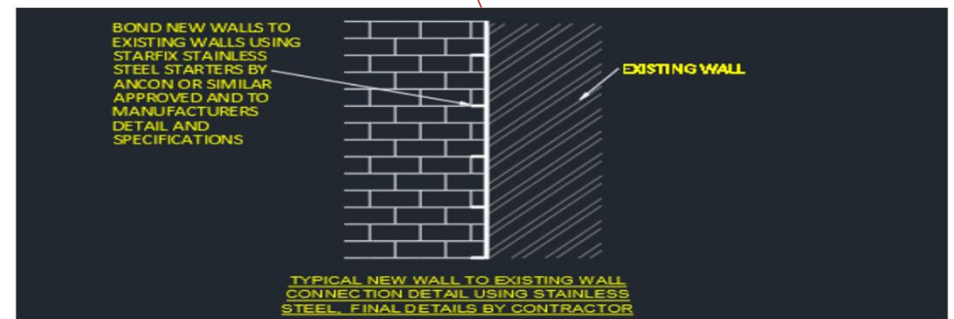
• The tree roots beneath the wall may destabilize the wall further, this should be taken in account and further action should be taken for tree management.

• Lateral deflections have developed due to the tree pushing against wall.

• The majority of the mortar is loose and requires to be repaired both at the front and rear.



Proposed split joint between
Boundary line



Sep-22

Extracts from new structural report statement submitted for latest LBC

General Description of Property

The property is located in Land to west of 2 Kings Rd London N17 8NP. For detail please check Annex 1. Planning application and conditions were discharge to commence work on site. The opening for the gates which are part of application HGY/2021/3038, the wall has been observed to be leaning and Upon making opening for access into the site the C19 wall has collapsed. The part of the wall has been taken to the ground by contractor as due to poor nature and safety of any passerby on the pavement area. Most of bed joint for brick wall losing their bonding capacity and the pier was supposed to strengthen wall laterally but unfortunately due to wall movement pier lose functionality. The wall was constructed with brick with 1700 mm height with 250mm width but due to lateral load and approved planning works with opening access to the site a portion of wall collapsed and deviated laterally more than the permissible deviations for masonry elements tolerances (BS EN 1996-2:2006.

3 Observation / Damages

Structural Observations

Front Wall (C19 roadside boundary wall)

The front boundary walls are 215mm thick constructed with London bricks with 1700 mm height with two pier and bricks was collapsed and removed around the centre area. A pier (450x450 mm) to the left hand end forms the return corner to the left hand side wall and a concern as it is currently leaning out into the pavement.

Initially, before work started on 15th July 2022, the front wall was previously horizontally deflected at the top by 100 mm to 130 mm. Due to planning approach and suggestion from the conservation officer the front was to be retain and repair. However, as noted in the previous structural report in the planning application, it's work actually would require rebuilding as the most of the mortar are crumpley and the wall was leaning.

It is noted in the previous structural report: "a result of sulphate damage causing the wall to deteriorate. As a result of the initial tree(which is now removed in the site clearance) was pushing against the wall. This is indicating that tree roots are beneath the wall lifting the wall upwards or alternatively shallow foundations to the pier and front wall have suffered from subsidence. Because the effect of tree roots in shrinkable clay is a common occurrence. Especially, the water demand of the trees causes seasonal fluctuations in the clay bearing strata which result in volumetric changes in the ground on which the building and external works are founded. In summer when the water demand of the trees is high the ground shrinks, while in winter when the water demand of the trees is very low the ground swells. These seasonal changes occurring over a long period are commonly responsible for the type of structural movement evident at this property."

5 Recommendations.

Demolition works

1. Carefully remove all the remaining brick wall and pier by hand and, only using hand tools, clean them of existing mortar and stack on pallets in the immediate area for re-use.
2. Brickwork to be taken down carefully in sections from east wall, north wall then to the western side.
3. Unusable bricks to be removed from site.
4. The works are to remove the concerning walls and re-built them with the reclaimed bricks on site. Contractor to reinstate the wall and piers at original location with the approved design for the 2 gates with letter box towards the street.

Reconstruction

1. Carefully remove the Tree to the South wall, Southwest turning corner of the site
2. Carefully dig to excavate for the new concrete foundation to structural engineers design and remove all spoil from the site
3. Pour Concrete to form new concrete foundation as Structural Engineer's design
4. Reclaimed/Salvaged stock bricks from west wall to be reused in rebuilding where-ever required to replace unusable existing brick (Refer to the diagram illustrating the design of the proposed walls location)
5. Rebuild the southern front walls brick walls reusing the previously salvaged bricks from front wall. (Refer to the diagram illustrating the design of the proposed walls with reclaimed bricks location)
6. Replace top soil in the area of works

Structural Repair Specifications

Cracks of 1mm wide or less will be filled (internal) or repointed (external). Where the cracks are wider than 1mm, but less than 5mm, the underlying brickwork will be exposed broken or cracked bricks or blocks will be replaced prior to covering with expanded metal and making good the finishes. Where cracks are 5mm across or wider, some form of bed joint lime mortar should be introduced. This will involve disc cutting a 20mm deep chase into the bed joint across a crack. An epoxy resin mortar is then pressure grouted into the open joint, and stainless-steel rods are set into place.

The property has suffered from subsidence movement. The prevent further damages/movements to the wall Some action should be taken by

- 1) The installation which underline in **Structural Repair Specifications** section should be carried out properly especially for vertical cracks.

· Due to the wall leaning excessively by 130mm over a height of 1700 mm and some part these walls would be dismantle easily by hand.

· The whole front wall requires rebuilding.

· The tree roots has been removed beneath the wall part of the site-clearance

· Lateral deflections have developed due to the previous tree pushing against wall.

· The majority of the mortar is loose and requires to be repaired both at the front and rear.

· The front wall in its present condition: The safety factors for the stability of the wall have been considerably reduced and vibration from traffic or construction work and a possible increase in wind forces. Thus, the collapsed has happened and it is recommended that all of the wall boundary are to be rebuild as there has been multiple collapse over the years some which are not recorded. The C19 curtilage walls are in a poor condition and are leaning in most area. It is advisable to rebuilt all the C19 walls with the existing bricks (removing any mixed brick which is uncharacterise with the initial old bricks.

Please see the attached Appendix pdf for summary of all the curtilage condition all around the site. Please note that the listed building is a separate property to Land to west of 2 King's road in terms of title for the past 10 years.

