

Repair of party fence wall between Numbers 10 and 11 Chalcot Square

Design and Access Statement

1 Introduction

This application relates to the repair of the party fence wall (garden wall) separating Numbers 10 and 11 Chalcot Square London NW1 8YB.

In November 2019, a 3 metres long section of the wall collapsed (photo 1). Over the following months it became apparent that the adjacent section of wall was leaning increasingly towards Number 11 Chalcot Square and was in imminent danger of collapse. By this time, the country was in lockdown for the pandemic.

A firm of structural engineers was appointed in September 2020 to advise on how the wall should be repaired and their report is attached to this application. The engineers advised that the wall needed to be rebuilt from the end of the garden of Number 10 for a length of 8.3 metres up to and including the second pier.

In addition, the capping on the remainder of the wall was badly eroded (photo 6) and needed replacing to avoid further erosion of the wall.

2 Background history

Numbers 8-11 Chalcot Square were built in the late 1840s. The undeveloped land was auctioned in 1840 and these houses appear on a map dated 1849 at least 10 years before other houses in Chalcot Square were built. The garden of Number 11, originally the same width as that of Number 10, was merged with an adjacent piece of land in the 1960s to form a large square garden. The houses were Grade II listed on 14 May 1974 (list entry 1258094).

3 Original materials and condition

Left hand section of 8.3 metres (looking from Number 11)

This was built mainly of reddish coloured London stock bricks and included two tapered piers. Parts of the brickwork were missing (photo 2) including about 25% of the second pier (photo 3), and parts had been poorly repaired (photo 5). The wall was capped with stock bricks on edge.

Right hand section of 12.2 metres (looking from Number 11)

This section was rebuilt, probably in the first half of the twentieth century, using mainly common bricks but incorporating some 10% of stock bricks. It includes one vertical pier and has brick on edge capping (common bricks) which was severely eroded (photo 6). The general brickwork standard is not high (photos 7 & 8).

4 Foundations

The ground comprises a layer of about 300 mm top soil on top of clay. The level of the ground on the Number 10 side of the left section of wall is up to 800 mm higher than on the Number 11 side corresponding to the general slope of the land behind the houses on the south-west side of Chalcot Square. This has two consequences:

- a) the rebuilt wall needs to retain the much higher ground on the Number 10 side, and
- b) there is substantial ground water around the wall foundations. For much of the year, the ground water level is high - only 200-250 mm below the ground surface.

For these two reasons, the engineer advised that it was necessary to have a concrete foundation with retaining upstand on the Number 10 side only - all below ground level. This replacement of the foundations is consistent with Historic England's Conservation Policies and Guidance §119: "Once failure occurs, stabilising the structure depends on addressing the underlying causes of the problem, not perpetuating inherent faults".

5 Repair materials

The aim was to clean off and reuse as many of the original bricks as possible and the bricklayers made considerable efforts to do this. However, these bricks were found to be very fragile indeed. Because some areas of the wall had been rebuilt/repointed with cement mortar, it was not possible to remove this without breaking the bricks. Of those which could be cleaned off, many were found to be fractured or too fragile to be reused.

Additional bricks were therefore needed and matching reclaimed London stock bricks were sourced.

6 Design details

The wall was rebuilt to the same height with brick on edge capping, tapered piers, bonding and pointing to match the original wall.

The second pier detail required minor adaptation to provide a transition between the vertical rebuilt wall and the original wall which was just under 75 mm off vertical.

The remaining original wall was recapped with reclaimed stock bricks on edge.

7 Construction

The rebuilt and recapped walls are shown in photos 9 – 14. The photos of junctions between rebuilt and original walls show that good matching has been achieved even before weathering has taken place.

8 Access

There are no access issues relevant to this application.

24 July 2020

9 Photographs

Left hand section of wall before rebuilding



Photo 1: Collapsed section, Number 11 side



Photo 2: Number 11 side



Photo 3: 2nd pier, Number 11 side

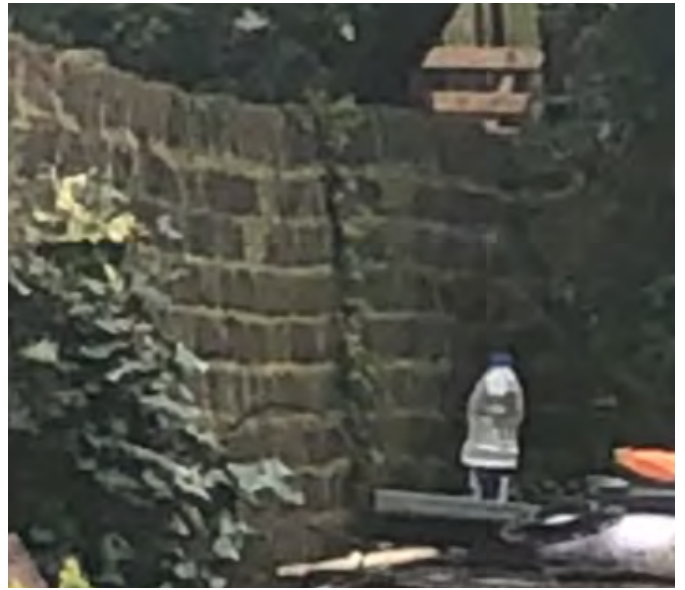


Photo 4: 2nd pier, Number 10 side



Photo 5: Old cement repairs, Number 10 side

Right hand section of wall before recapping



Photo 6: Condition of capping before repair



Photo 7: Quality of this section of wall



Photo 8: Brick types

Rebuilt wall



Photo 9: Junction of rebuilt wall & 2nd pier and old recapped wall, Number 10 side



Photo 10: Junction of rebuilt wall & 2nd pier and old recapped wall which is about 75 mm off vertical, Number 11 side



Photo 11: Rebuilt tapered 1st pier, Number 11 side



Photo 12: Junction of rebuilt wall between Numbers 10 & 11 (left to right) and existing end wall of Number 10 (top to bottom)



Photo 13: Rebuilt wall, Number 10 side



Photo 14: Rebuilt wall, Number 11 side