

## **Brick Repair and Re-pointing Method Statement:**

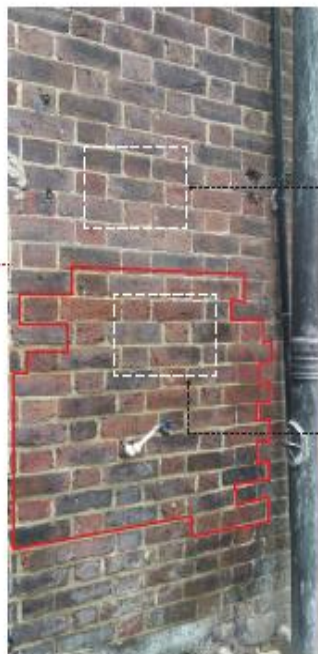
***Firstly, we wish to highlight that there is only one section of the southern wall (outlined in red below) where we will be carrying out repair.***

1. The building's brickwork pointing work has been closely inspected as it is imperative that an understanding of the building was gained before specifying and undertaking any works to create a sample area with reclaimed bricks and lime based mortar.
2. All areas of cracked or spalled bricks in the existing elevations have been identified (please see attachment below). There is only one area where we propose replacement bricks. (as identified in the image below).

### (B) Detailed Schedule Of Repair For All Works Of Repair To Retained And / Or Reinstated Fabric



Brickwork and masonry work to existing facades to be cleaned and repair where necessary. Design to be in accordance with consented elevations.



Section of sample brickwork that have been washed, repaired and repointed on site at location highlighted in red



Existing brickwork



Sample of brickwork washed, repaired and repointed

3. The damaged bricks shall be replaced with reclaimed bricks from the building. As the sample above shows.
4. These bricks will be cut out carefully in one piece with a hammer and bolster (2-3 inch) in order to remove the mortar surrounding the brick. The mortar to the sides of the brick would be removed first, then the bottom and finally the top. If things start to get a little tight for the bolster or and we need to get into tighter areas, a plugging chisel shall be used. The claw chisel would also be used to remove dense, strong mortar within the cavity/joint.
5. The old mortar in the joints would be raked out to a depth no less than 15mm to give an effective key. Extra care shall be taken where the old mortar is hard or tightly adhering.
6. Once all the mortar has been removed the brick should be loose and it will be slowly removed by hand, by wiggling it around a bit to loosen it fully and then jiggling it from side-to-side, pulling forwards at the same time until it comes out. The damaged bricks will be placed in an area for disposal.

7. Following removal of the mortar and brick – the joints and cavity would be thoroughly cleaned and wetted
8. Once the replacement brick is ready (reclaimed from the building) the cavity will be infilled with the mortar mix. The mortar mix shall consist of shall be
9. Typically, a nominal volume ratio of 1 part slaked lime to 2 parts of sand would be used where a sharp, well-graded concrete sand (5 mm down) is being used. The minimum binder to sand ratio was checked by calculating the void ratio of a particular sand. This was achieved simply by drying a sample of aggregate and then measuring the amount of water required to fill all the voids.
10. Once the joint is clean and lightly moistened with a fine water spray, fresh mortar shall be pushed to the back of the joint using a pointing tool, and left slightly proud of face. In filling the joints the mortar shall be pressed well in to ensure maximum penetration, compaction and bond to the original bed. At the same time, it shall be kept well within the confines of the joint and never allowed to spread over the face of the brickwork.
11. When the mortar is biscuit hard, any excess shall be scraped off to form a flush joint.
12. Where arrises are worn, the pointing shall be kept back from the face to avoid an apparent increase in the thickness of the joint and the creation of feather edges.
13. The repointing shall be carried out from the top of the wall downwards.
14. The new work would be temporarily covered with damp hessian sheets so it doesn't dry out too quickly and start to crack.
15. From the sample created on site it is evident that the work of making good will be achieved with finishes that match the existing original brickwork in terms of material, colour, texture, profile.
16. We wish to highlight that repointing works will only be carried out to the identified replacement brick area in the image provided.

#### **Cleaning existing brickwork:**

This method statement described the removal of cementitious and other airborne contaminants from masonry and the brickwork by means of the use of specialist and high pressure cold clean water washing.

The brickwork will be dry scraped thoroughly of heavy contaminants using wooden scrapers.

As far as practicably possible, thoroughly wet the surface to be cleaned with clean cold water using fibre bristled brushes to the previously wetted surface.

After no less than 10 minutes and normally no more than 30 minutes, thoroughly brush the surface with fibre bristled brushes using high pressure cold water.

#### **Wet Method of cleaning - DOFF System:**

It has been noted that the existing brick work to the southern elevation has been covered in paint to remove the existing Pizza Express painted logo (please see materials schedule for photograph)

Doff super heated steam cleaning is highly effective for gentle cleaning and restoration of all historical or conservation projects. Doff cleaning is a super heated stone cleaning system used to clean all

stone and brick surfaces removing years of atmospheric deposits without damaging the host material. It uses very low pressure high steam of up to over 150 °C to remove all the surface contaminants along with some from stone, masonry and building cladding.

A specialist contractor shall carry out the works. Please see DOFF Technical Specification sheet provided.

Summary of DOFF technique:

A normal water supply is taken through the pump into the Hotbox, where a range of temperatures of up to 150° C can be achieved. The low volume of super heated water and steam (5 litres per minute) is then fed through heat resistant hoses to special nozzles where a genuine 150° C is delivered. The surface being cleaned does not suffer any damaging pressure, thermal shock or deep saturation and dries within minutes.