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46 Well Walk, London NW3 1BX

Revised Repair Proposals

Ref: 130581/T Girdler

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1.0 INTRODUCTION

1.1 This report should be read in conjunction with submission for Application Reference 2016/0242/L, which was granted Listed Building Consent, notification letter dated 15 March 2016.

2.0 REVISED PROPOSALS

2.1 The cracks in 46 Well Walk have been monitored for movement since 2013. The crack widths particularly in the front wall have been increasing, leading to the engineering decision that engineering intervention was needed.

2.2 As this is a Grade II* building, a method of strengthening the wall without major loss of historic fabric was considered to be a priority.

2.3 The proposed scheme strengthened the front wall by inserting stainless steel reinforcement in diamond cored holes, at two locations near the bottom of the basement. This creates a reinforced beam in the masonry allowing it to distribute loads across the entire elevation and bonding it together. Further works included reinforcing the upper levels of brickwork by inserting small diameter stainless steel bars in the bed joints. The front wall is then to be tied into the floors / landings behind.

2.4 In order to drill the diamond cored holes an access trench was proposed in the pavement at the junction of Gainsborough Gardens and Well Walk. Following a utilities / services search by the contractor, we have been informed that two electricity power cables in the pavement in the precise location of the proposed drilling will prevent the scheme as approved from being implemented.

2.5 Alternative drilling techniques have been considered but the length, size and location of the holes does not appear to have a viable alternative.

2.6 After site investigation, it has been concluded that the least damaging alternative is to insert the required stainless steel reinforcement behind the facing brick skin, in short lengths, fixed together with proprietary screw couplers. Access to place the reinforcement will require the face brickwork to be carefully cut around the mortar joints, removed and then replaced.

2.7 The remainder of the scheme remains exactly as previously proposed and for which LBC has been granted.

3.0 DISCUSSION

3.1 The image on the front sheet of this report shows the amount of coloured mortar that has been used prior to the insertion of the tuck pointing. This will allow the bricks to be carefully removed and reinstated without causing serious visual disturbance. It is acknowledged that appearance is not a primary issue but as the drilling option is not possible, a scheme that does not cause disturbance to the internal panelling and finishes or the major thickness of the wall and will not leave a visual scar, has some conservation benefits.

3.2 To aid the understanding of the difference between the two schemes, sketch SK010 has been produced to shows the difference between the original proposal Option One and the revised proposal, Option Two. There is no more steelwork being proposed, just the method of putting it into the wall.

4.0 CONCLUSIONS

4.1 The repair of this wall is now an urgent structural intervention. At the end of last year, accelerating movement caused a brick arch on the front elevation to move. Emergency structural restraint was added in the form of clamping plywood plates to resist the bucking of the window arches. This was a deliberately soft touch approach as we expected the repair solution to be implemented this year. Delays in carrying out the repairs could result in significant loss of masonry for the full height, adjacent to the left hand end of the front elevation.

4.2 A previously stated reason for granting listed building consent was *.....Although by their very nature the works are invasive, the harm to the historic fabric will be limited and have minimal visual impact due to the sensitive making good works. Any harm will be outweighed by the structural works which will prolong the life of the listed building.* The same reason is applicable to the scheme now being proposed.

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