Consult Construct

# Defects Report

For

Brick planter of tree opposite 37/39 Rossendale Way

At

Elm Village
Camden
London
NW1 0XB

January 2025

25.3834

Prepared for and on behalf of

Consult Construct Limited
Gunpowder Works off Bysing Wood Road
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## Consult Construct - Quality Management

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C This document has been checked and approved by:

Charley Noble BSc (Hons) PG Dip

Building Surveyor

Signed!

**Contents**

## 1.0 General Details

### 1.1 Client Details

RMG London
31 Plympton Street
London
NW8 8AB

### 1.2 Surveyors Details

Oliver Garsed-Bennet

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### 1.3 Address inspected

Opposite 37/39 and 47 Rossendale Way
Elm Village
Camden
London
NW1 0XB

### 1.4 Date of inspection

13:00 on 9 January 2025

### 1.5 Weather

First inspection – Cold and sunny following periods of rain.

## 2.0 Description of the Property

2.1 Elm Village is a purpose made development low rise terraced houses and apartments with associated landscaping, parking and access roads comprising of Rossendale Mews, Blakeney Close and Barker Drive. It was completed in 1984.

2.2 The external areas comprise of predominantly brick paving to access roads with concrete slab and poured concrete pavements with granite sets to some pavements and sloped areas. Landscaping is broken up with raised beds with a mixture of sloped granite setts and brick planters between levels on the site. Some planters include trees which generally appear to date from the original development approximately 40 years ago, some of which have been replaced in recent years.

2.3 The buildings are not Listed nor within a Conservation Area, but it borders the Regent's Canal Conservation area.

2.4 We were advised that the original, larger trees on the site were subject to Tree Preservation Orders. Details of the local TPO's were not available on the London Borough of Camden website and so this was not able to be confirmed. Various trees across the site sported numbered metal plaques suggesting the listed nature. No such numbered metal plaque was noted on the tree within the planter inspected.

## 3.0 Limitations of Survey

3.1 The inspection was of a visual and non-destructive nature. No opening up works were undertaken as part of our inspection consequently defects within the structure or ground are unknown.

3.2 The survey was limited to the defects highlighted and requested to be looked at within the brief.

3.3 This report is for the use of RMG London only, whilst it may be shown to other professional advisors acting on your behalf, the contents cannot be used by any Third Party without our prior written consent. Without such consent, we can accept no responsibility to any Third Parties.

## 4.0 Confirmation of Brief

4.1 Our brief was to inspect the brick planter with a large tree growing in it that was reported as unsafe by a tree surgeon. This is highlighted on the site plan below and is opposite 37/39 Rossendale Way.

4.2 Whilst on site a local resident advised of a brick pillar that they were concerned was leaning a potential hazard. This is located to the east of the alleyway between Rossendale Way and Bergholt Mews, opposite 47 Rossendale Way. It was agreed with RMG that this would also be inspected and included within this report.

## 5.0 Site Plan


## 6.0 Observations

### 6.1 General Site Observations

6.1.1 The external areas of the site are generally in need of maintenance and improvement. There were various undulations to the pavements and roadways where the substrate has dropped. Various cracks were noted to various planters across the site. These do not form part of the brief of this defects inspection and have not been investigated or advised on further.

6.1.2 The trees forming part of the original landscaping are mature and appear overdeveloped in relation to the close proximity to the properties and within the restricted raised planters. An arboriculturally assessment should be carried out of the site periodically to assess the risk imposed by the trees and required works, with priorities.

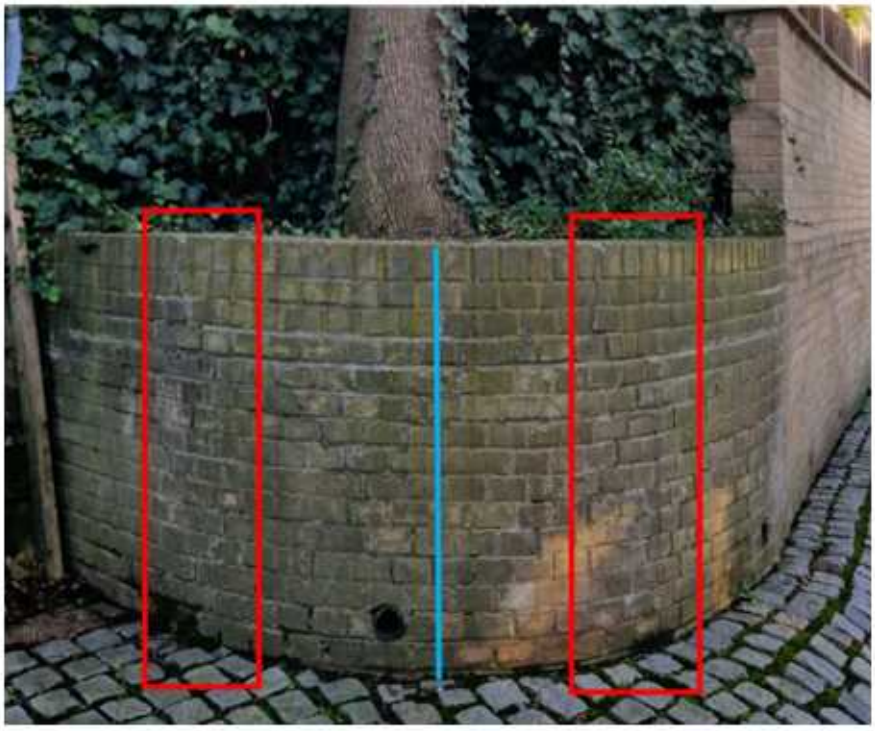
### 6.2 Brick Planter with Tree Opposite 37/39 Rossendale Way

6.2.1 The planter is approximately 1.1m height, of solid construction and a full brick wide of header bond with a soldier course to the top.

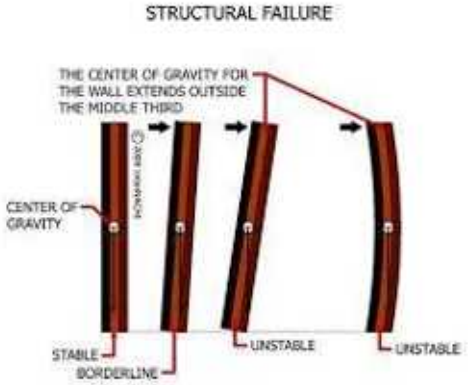
6.2.2 The planter forms a quadrant around the mature tree contained within. The tree appears to be a maple or sycamore from the leaves and seeds observed at the base. The tree is mature and approximately 40 years old.

6.2.3 The planter has evidence of numerous previous repointing, with the latest repointing undertaken 1 to 2 years ago by a local resident.

6.2.4 The most significant movement is to the middle quarters of each side of the planter, as outlined in red below. Previous repointing is evident to the vertical mortar joints (perpends) which have further opened up over the last 1 to 2 years by up to 5mm at the outer edge on the top soldier course. These areas of cracking are highlighted in red below. This shows that the central half of the planter, largely between the highlighted areas, is being pushed out horizontally from the top.



6.2.5 The wall was observed to be approximately 21mm out of plumb over the height of the wall (19mm:1000m) at worst, in the middle, highlighted by the blue line above. Applying the middle third rule demonstrates that the wall is not at risk of structural failure from its self-weight, which would permit the wall to be up to 72mm out of plumb.




6.2.6 The horizontal load imposed by the tree roots is expected to be significant as it grows, but with the expansion of the brick planter accommodating this movement by the increased crack width. Therefor there is not expected to be any additional load imposed by the tree roots to contribute to the imminent collapse or failure of the wall.

6.2.7 There is a drain towards the base of the wall to prevent the build-up of water within the planter. This reduces the saturation of the soil and reduces the hydraulic pressure within the planter. Therefore, there would not be any expected significant hydraulic pressure that would affect the structural stability of the wall.

6.2.8 The repointed mortar bed four from the top of the planter suggests that there could, potentially, be Helifix type reinforcement within this joint.

## 6.3 Brick pillar opposite 47 Rossendale Way

6.3.1 This pillar is at the south end of the brick planter running north to south on the east of the alley between Bergolt and Mews and Rossendale Way. The pier appears to be brick bonded into the single brick thick planter wall on the northern side, but not to the raked planter to the east, formed from concrete and granit sets.

6.3.2 The pillar has a significant lean to the west, towards the alley and adjacent pillar.

6.3.3 The pillar is approximately 110mm out of plump at the base of the cap, which is 2.6m height. This equates to approximately 42mm:1m. The centre of gravity is raised significantly above the middle of the pillar due to the concrete pillar cap on the top. Initial estimates place the centre of gravity at approximately 1.8m from ground level. Applying the middle third rule demonstrates the pillar could be up to 73mm out of plumb at 1.8m, which equates to 105mm at 2.6m.

6.3.4 Subject to a structural engineer's assessment, the pillar therefore appears to be at the limit of the tolerable risk of its self-weight for potential collapse.

6.3.5 In addition to this self-weight, there is the additional risk of wind load in the direction of the lean, which further increases the risk.

6.3.6 The foundations and ground beneath the pillar have not been assessed.

## 7.0 Conclusions

Brick planter with tree opposite 37/39 Rossendale Way

7.1 The brick planter / retaining wall does not appear to be at imminent risk of collapse.

7.2 However, the tree within the planter is larger and the planter was not designed to accommodate movement. The tree, including the base of the trunk and the roots, will continue to grown and exert significant force on the planter wall. It is not expected that this would be able to be contained or withstood by the brick planter wall, although specialist design and reinforcement could potentially be considered.

7.3 The planter should continue to be monitored with consideration for reinforcing the wall to prevent individual bricks falling as the movement progresses.

7.4 Note that an arboriculturist assessment of the tree health and general stability has not been undertaken. Generally, the trees within the area are larger than would expected to be safe in relation to the proximity to the properties and hard landscaping. They will likely lead to continued ground movement plus the risk of damage to buildings in strong winds.

Brick pillar opposite 47 Rossendale Way

7.4 This brick pillar is of more concern. The lean is measured to be on the limit of what would be expected to be stable from its self-weight.

## 8.0 Recommendations

8.1 From our conclusions, we would recommend the following actions are taken:

8.2.1 Brick planter

1. Undertake an arboriculturist assessment of the tree health and general stability, if not undertaken within the last year.
2. Reinforce the top rows of bricks using a metal strap resin fixed to the 2nd row of bricks, or with Helifix reinforcement top the 2nd and 6th beds, unless already installed.
3. Removal of the tree within the planter and replacement with a smaller and more suitable tree species that is better suited to the size of the planter and location.
4. Engagement of arboriculturist and liaison with the Tree and Landscape Officer at Camden Council to agree removal and replacement of the tree, which is expected to have a TPO. Consideration to a tree management plan for the site should be considered at the same time.

Note that the proposed metal strap reinforcement or Helifix rods should be fixed along the arc of the wall, but not to the larger walls at either side. The as the growth of the tree would not be able to be retained by this reinforcement. The proposed reinforcement is to prevent the top courses of brick from falling only. Tying into adjacent walls would likely lead to damage of these structures too.

8.2.2 Brick pier

1. URGENT Access to the area should be restricted until temporary propping or remedial works can be undertaken.
2. Undertake temporary propping or remedial works. The following options are available:

i) Remove the concrete cap at the top to reduce the weight on the top of the pillar, lowering the centre of gravity and risk of collapse. An appropriate working tower and lifting equipment would be required to achieve this.

ii) Fit a prop between the two piers, preventing the further movement of the eastern pillar. A prop / bridge above head height, at say 2m, could be fitted by framing out the opening.

3. In the long run, the pier should be taken down and rebuilt on foundations designed by a structural engineer.

4. Consideration should be given to including a permanent prop / bridge between the two piers to provide additional structural stability.

END OF REPORT

## Appendix A – Photographs

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 13:

Photo 14:

Photo 15:

Photo 16:

Photo 17:

Photo 18:

Photo 19: