



Pat Fernandes
20 Fitzjohns Avenue
London
NW3

Our Ref: IW/15-129
Your Ref:
Date: 03 July 2015

Dear Pat

Subject: 20 FITZJOHNS AVENUE, LONDON, NW3
Our Ref: Structural Report On Impact On Rear Bay And Wall From Existing Tree

We were requested by you to visit the above site to undertake a visual structural inspection of the rear bay and wall to the existing house with regards to any structural impact the existing pear tree is having on the existing rear bay and wall to the house. This report is based upon a site visit that was undertaken on Friday 26 June 2015 by Ian Waddingham, Director at QED Structures.

External Observations

There is an existing pear tree within 3 meters of the rear bay to the property which appears to be a mature tree. We understand that a cctv survey was carried out of the underground drainage that runs parallel to and very close to the rear wall of the property. This survey identified fractured and damaged underground drainage pipes which had tree roots in and around the pipe. These fractures result in leakage of the surface and foul water from the underground pipes into the surrounding ground.

The low level plinth along the rear wall appears to be uneven. There are areas of brickwork above the two ground floor rear windows to the bay adjacent to the pear tree that have been re-pointed, there was a diagonal crack in one of the brickwork arches above one of the two windows within the bay at ground floor level and at the corner of the rear bay wall where it returns there was a vertical crack through one brick. There were also signs of cracking in the next door properties brickwork arches above the two rear windows that are close to the pear tree.

The white rendered section of wall just above the plinth at low level was showing no signs of cracking or distress.

Internal Observations

A visual inspection was carried out of the internal face of the rear bay wall and there were no visible signs of any cracking or distress to the bay walls.

QED Structures Ltd
Consulting, Structural & Civil Engineers
7 Hove Manor Parade
Hove Street
Hove
East Sussex
BN3 2DF

T: +44 (0) 1273 358035
F: +44 (0) 1273 207451
E: info@qedstructures.co.uk
W: www.qedstructures.co.uk

Our Ref: IW/15-129
Your Ref:
Date: 03 July 2015



Page 2 of 7
20 Fitzjohns Avenue, London

External Photographs



Rear Elevation Of Property



Proximity Of Pear Tree To Rear Elevation Of Property

QED Structures Ltd
Consulting, Structural & Civil Engineers
7 Hove Manor Parade
Hove Street
Hove
East Sussex
BN3 2DF

T: +44 (0) 1273 358035
F: +44 (0) 1273 207451
E: info@qedstructures.co.uk
W: www.qedstructures.co.uk

Registered Company: QED Structures Limited. Registered Office: Cornelius House, 178-180 Church Road, Hove BN3 2DJ.
Registered No.: 5559060 England and Wales. Director: Ian Waddingham BEng(Hons), CEng, MICE

Our Ref: IW/15-129
Your Ref:
Date: 03 July 2015

Page 3 of 7
20 Fitzjohns Avenue, London



Low Level Plinth And Render



Low Level Plinth And Render

QED Structures Ltd
Consulting, Structural & Civil Engineers
7 Hove Manor Parade
Hove Street
Hove
East Sussex
BN3 2DF

T: +44 (0) 1273 358035
F: +44 (0) 1273 207451
E: info@qedstructures.co.uk
W: www.qedstructures.co.uk

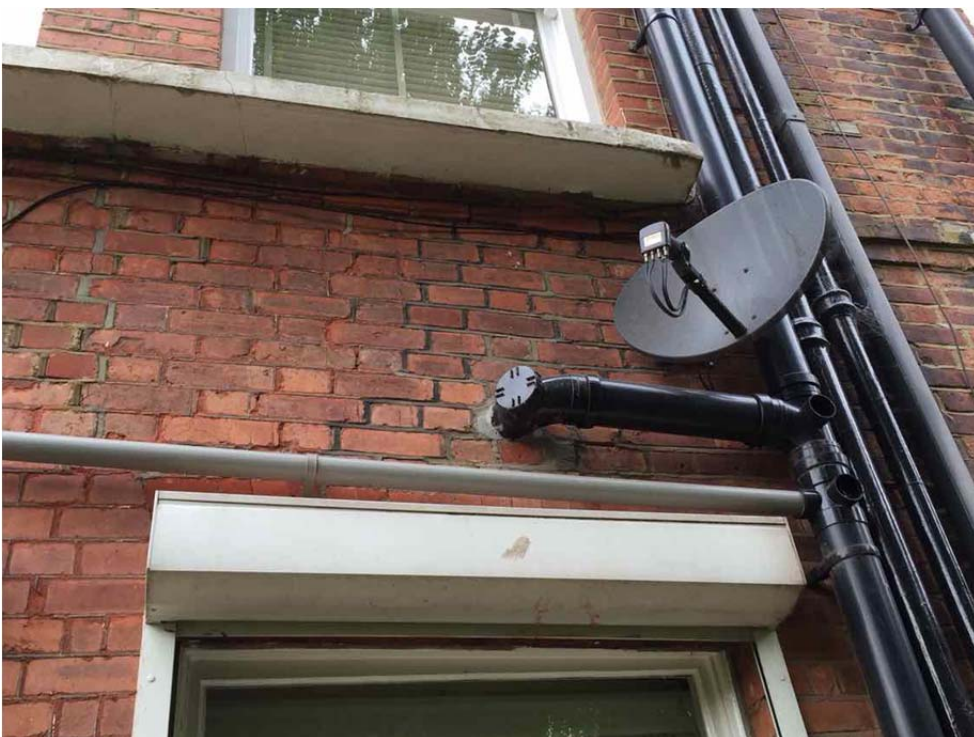
Registered Company: QED Structures Limited. Registered Office: Cornelius House, 178-180 Church Road, Hove BN3 2DJ.
Registered No.: 5559060 England and Wales. Director: Ian Waddingham BEng(Hons), CEng, MICE

Our Ref: IW/15-129
Your Ref:
Date: 03 July 2015

Page 4 of 7
20 Fitzjohns Avenue, London



Repointing Above Bay Window



Repointing Above Bay Window

QED Structures Ltd
Consulting, Structural & Civil Engineers
7 Hove Manor Parade
Hove Street
Hove
East Sussex
BN3 2DF

T: +44 (0) 1273 358035
F: +44 (0) 1273 207451
E: info@qedstructures.co.uk
W: www.qedstructures.co.uk

Registered Company: QED Structures Limited. Registered Office: Cornelius House, 178-180 Church Road, Hove BN3 2DJ.
Registered No.: 5559060 England and Wales. Director: Ian Waddingham BEng(Hons), CEng, MICE

Our Ref: IW/15-129
Your Ref:
Date: 03 July 2015

Page 5 of 7
20 Fitzjohns Avenue, London



Repointing At Corner Of Bay Return



One Cracked Brick At Corner Of Bay Return

QED Structures Ltd
Consulting, Structural & Civil Engineers
7 Hove Manor Parade
Hove Street
Hove
East Sussex
BN3 2DF

T: +44 (0) 1273 358035
F: +44 (0) 1273 207451
E: info@qedstructures.co.uk
W: www.qedstructures.co.uk

Registered Company: QED Structures Limited. Registered Office: Cornelius House, 178-180 Church Road, Hove BN3 2DJ.
Registered No.: 5559060 England and Wales. Director: Ian Waddingham BEng(Hons), CEng, MICE

Our Ref: IW/15-129
Your Ref:
Date: 03 July 2015

Page 6 of 7
20 Fitzjohns Avenue, London



Cracking In Brickwork Arch Next Door



Cracking In Brickwork Arch Next Door

QED Structures Ltd
Consulting, Structural & Civil Engineers
7 Hove Manor Parade
Hove Street
Hove
East Sussex
BN3 2DF

T: +44 (0) 1273 358035
F: +44 (0) 1273 207451
E: info@qedstructures.co.uk
W: www.qedstructures.co.uk

Registered Company: QED Structures Limited. Registered Office: Cornelius House, 178-180 Church Road, Hove BN3 2DJ.
Registered No.: 5559060 England and Wales. Director: Ian Waddingham BEng(Hons), CEng, MICE

Conclusion and Recommendations

Based on our visual site inspection there was no sign of any significant ground movement or structural movement in the rear bay or wall to the property as a direct result of the proximity of the pear tree to the building. However there were areas of cracking in the brickwork arches and areas of re-pointing above the bay windows at ground floor level.

The low level plinth appeared to be uneven, which could be caused by localised ground movement as a result of the leaking drainage pipes, however, the white rendered section above the plinth was not showing any signs of cracking or movement. It is therefore assumed that any ground movement that may have affected the plinth has not affected the main foundations to the bay window.

It is clear that the roots to the pear tree have damaged and fractured the drainage pipe as identified in the cctv report. The recommendation in the report was to line the existing drainage pipes. It is assumed that the lining of the existing pipes would not be done in a continuous length and therefore it would be jointed, this is to be confirmed by the drainage expert. If the liner is jointed then it is possible that the damage caused by the pear trees roots to the existing pipe will continue to cause damage to the lining pipe. Therefore resulting in leakage of surface and foul water into the ground.

We would recommend as a minimum the drainage run be lined as per the cctv survey and report. In addition to this and due to the extreme seasons we experience and the effects these seasons can have on the ground and ground movement, we recommend that the rear bay and wall be visually checked every 3-6 months for the sign of any new cracks.

If you have any queries relating to this report, please do not hesitate to contact me.

Yours sincerely,



Ian Waddingham BEng, CEng, MICE
Director

ianw@qedstructures.co.uk