# 3 Lyncroft Gardens, NW6 1LB Alterations

Basement Impact Assessment
Planning reference no [2018/3268/PRE]

For

Mr Patrick Boylan

Project Number: AYH08-255

14 January 2019

### **Revisions & additional material**

### **Document History and Status**

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## **Additional supporting documents**

Please note – the review process will be quicker if these are submitted as Word documents or searchable PDFs.

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11 January 2019	2.1	LMB_19.01.11_REPPIL_GI_BIA_Lyncroft_v2.1_ALL.pdf

#### 3 Lyncroft Gardens BIA Cover Document

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#### **Appendices**

- Appendix 1: Desk Study References (refer generally to LMB BIA document)

  Site Location Plan (ditto; and OS location map as AYH drawing -8-255\_01A)
- Appendix 2: Site Investigation Data (refer to LMB BIA document)
- Appendix 3: Existing and Proposed Development Drawings (refer to set of AYH architect drawings to PA)
- Appendix 4: Ground Movement and Damage Impact Assessment (refer to LMB BIA document)
- Appendix 5: Structural Engineer's Drawings and Calculations (refer to SEs documents attached to PA)
- Appendix 6: Arboricultural Report/Other Reports (as required) (not applicable)
- Appendix 7: Utility and Infrastructure Consultations (refer to LMB BIA document)

# **Non-Technical Summary**

- 1.1.1. The site location is 3Lyncroft Gardens, NW6 1LB and this location and site plan is illustrated in AYH drawing 08-255 01A that accompanies the planning application submission.
- 1.1.2. The current site arrangement is a terrace house of three storeys occupied as a single family dwelling; with an existing cellar under the main part of the house that has limited headroom from a floor to ceiling height of only 1.815m.
- 1.1.3. The proposed development comprises alterations to the existing cellar to lower the floor level by 0.66m to provide a family room / gym / sport area with suitable new structural reinforced concrete floor and underpinning as illustrated in architect 's drawings 08-255\_09B; 10B; 11B.pdf and the structural engineer's drawing 18K01.01B.pdf
- 1.1.4. The following assessments are presented: in the accompanying BIA report by LMB:-
  - Desk Study
  - Screening
  - Scoping
  - Additional evidence/assessments
    - Site investigation
    - Ground movement assessment
    - o Consultation with adjacent infrastructure/asset owners
    - Flood risk assessments
    - Surface water drainage strategy/SUDS assessment
  - Impact Assessment
- 1.1.5. The authors of the assessments are:-
  - Philip Lewis Bsc(Hons), MSc, CGeol, FGS with extensive experience in Camden assessments

    Richard Drabble I.Eng.AMIStructE, and experienced consultant structural engineer

    Andris Berzins B.Arch(Hons) RIBA with extensive experience of work in Camden & London.
- 1.1.6. The ground beneath the site (ie. the cellar floor) is made ground overlaying London clay formations. No groundwater was recorded during the deep borehole drilling or during return monitoring. In three trial pits within the cellar only one recorded some standing water at a depth of between 0.38m and 0.60m below the existing cellar floor level.

- 1.1.7. The construction methods proposed are careful excavation and underpinning of existing masonry footings and part mass concrete foundations by an experienced specialist basement company; with such temporary supports, shoring and strutting as necessary to maintain rigid structures; the underpinning to be by way of sequential pits to form new reinforced concrete foundations that are integral with a new reinforced concrete ground slab (refer CMS and structural engineer drawing).
- 1.1.8. A structural monitoring strategy to control the works and impacts to neighbouring structures will comprise monitoring of any movement undertaken with surveying points set up prior to commencement of the works. Thereafter there will be weekly monitoring during the works and trigger values for monitoring will be based on the predicted ground movements, to ensure conservatism, and these should be agreed under the Party Wall Act notices and Awards.
- 1.1.9. The BIA has assessed land stability and the impacts of the proposed development on neighbouring structures will be *Burland Category (Negligible) to 1 (Very Slight) as documented in the BIA document by LMB as attached to this submission.*
- 1.1.10. The BIA has identified the that the anticipated vertical movements provide a maximum tilt of about 1 in 7500 which is well within generally tolerable differential movement as documented in the BIA document by LMB as attached to this submission.
- 1.1.11. The BIA has identified that there are no significant ground water conditions, as documented in the BIA document by LMB as attached to this submission, and the modest depth of the proposed excavation should have no residual impact on the wider hydrological environment.
- 1.1.12. The BIA has identified *no hydrogeological impacts*.
- 1.1.13. The BIA has identified that the site and proposed development are in an area at low risk of surface water flooding (<300mm); the existing raised kerb and entry step up to the approach path to the house provide protection for the steps and existing entry well to the cellar; these will remain unaltered in level in the development and thus no additional mitigation measures are needed.

For further sections refer to the LMB BIA technical document that accompanies this submission.