

MICHAEL OAKES ARCHITECTS LTD.

Michael Oakes (Director) B.A. Hons Arch, Dipl. Arch, Registered Architect

REGISTERED ARCHITECTS, DESIGNERS + ILLUSTRATORS

Telephone: 01895 235089 - E-mail: michaeloakesarchitect@googlemail.com

re 66 Broadwood Avenue, Ruislip planning proposals, Local Food Risk Zone response/ measures adopted.

Attention Mandeep Chaggar

From Appendix F, Hillingdon Spacial Planning Information Pack

1. We note that this area is not categorised by the London Borough of Hillingdon as within a named 'Local Flood Risk Zone'.
2. The above infers this area is not 'a named significant risk'.
3. Also, this area is not rated as a 'Flood Zone 3', therefore a flood risk assessment is not a planning requirement (re; surface water management plan)

Other potentially important information (gleaned from researches of the Hillingdon Council Surface Water Management Plan Parts 1 and 2)

4. There is a culvert that runs, between two of the houses on Broadwood Avenue, from Ruislip Woods, and at its closest point is approximately 30m to the west.
5. The site is outside of Hillingdon's 'potential elevated groundwater map'.
6. The site is not shown within a 'Critical Drainage Area'.
7. The site is shown as a 'very low hazard' area re the possibility of a 1 in 200 year rainfall event flood hazard.
8. The site is shown as a '10cm to 25cm' worst-case flood re the possibility of a 1 in 200 year surface water depth.
9. The site is shown as a '10cm to 25cm' worst-case flood re the possibility of a 1 in 100 years 'plus climate change allowance' surface water depth.

Existing mitigation measures and proposed mitigation measures here.

10. There is a North Ruislip Flood Action Group, the local representative is proactive and lives at 60 Broadwood Avenue; mitigation measures have been undertaken and are monitored and reported-on- eg,

Since we moved in, our and neighbouring gardens were flooded on referendum day in 2016. The main reason was a burst Affinity Water pipe in Park Wood which was subsequently decommissioned in December 2017.

An elderly neighbour, who lives across the street, recalled flooding on 3 occasions in the last 40 years – the forementioned one plus one other time when the Affinity Water pipe burst again, and some decades ago, when due to the Lido being used as a Water Ski and boating activities its water level was high and there was very heavy rainfall. The water level in the Lido has been reduced and maintained since then and no water sport activities are taking place.

Below are copies of e-mail updates from our neighbour at No 60 and North Ruislip Flood Action Group (NRFLAG) representative:

02/01/2022 – “After the heavy overnight rain, this morning, there are a few puddles of standing water in the ditch to the culvert (that drains onto Pinn Meadows), but there is no water flowing in it.

*This is very reassuring. Later, I'll be checking the Park Wood NFM system, just to make sure everything's intact.**

21/10/2021 – “After all the recent rain and more overnight, this morning the ditch to the culvert still dry. I'll be checking to see how the NFM system is looking, what needs repairing/improving and how saturated the ground is getting.”

17/12/2020 – “.... a lot more work has been done in Park Wood by Thames21, James Latham (Hillingdon), RWMAG and NRFLAG - a truly collaborative effort.

We now have an effective NFM system in place, with more to come.

You don't need any more evidence than after we've had heavy/prolonged rain recently, the water entering the culvert behind Broadwood Avenue is now a very manageable trickle, instead of a sudden devastating burst of water.”

16/02/2020 - “Following Dennis' performance, I've just been out to have a look at the ditch/culvert. While the ditch/culvert is running fast and the water pretty muddy, the level is remarkably low.”

11. The owners are fully aware of the 1 in 100 year surface water flood risk here, and will be happy to undertake the installation of attenuation works, to offset any extra flood risk here, for themselves and their neighbours' benefit.

12. The risk of surface run-off will be improved by adopting SUDS paving measures here re the proposed rear patio area.

13. The rear garden is large enough to contain a rainwater crate storage system (see the attached information) here, set above the ground-water table levels.

14. There is the opportunity to install above ground rainwater storage butts that will act as an attenuation measure, to slowly feed sudden torrential rainwater flows back into the rear garden over a period of time after the storms have passed.

15. The homeowners have undertaken local research, and are unaware of any groundwater flooding incidents in the locality, so the risk of such is assumed to be low.

16. Whilst the clients have not had need to request further 'Flood Risk' reports for this area, they have had sight of other nearby developer's own reports, and will adopt similar mitigation measures, for their own and their neighbour's benefit.

17. All rainwater captured on the proposed roof will be processed/ kept within the rear garden here, and thus not affect neighbouring properties.

18. As the footprint of the proposed extension is within the Flood Zone 1 (low probability of flooding), there is no requirement to raise the extension's finish floor height to match a height set 300mm above the 1 in 100 year annual probability fluvial flood (1% AEP) plus climate change allowance.

This makes sense, as the new extension floor should match the existing floor levels within the house, (which, would still be at a low statistical risk).

19. If a requirement, further details can be provided re rainwater drainage, but please refer to the attached diagrams.

20. As the site is located within Flood Zone 1, there is no requirement to provide a 'flood warning and evacuation' plan in this instance.

21. The clients are aware that it is good practice (where possible) to install all electrical cables from ceiling runs, via drops-down (eg, not under ground floors) and breathable, non oil paints should be used.

22. In the statistical event of a 1 in 1000 year flood event, it will be sensible for any construction here to avoid cavities with quilt insulation, avoid installation of plasterboard finishes, and avoid hollow-structured boards/ doors (all good practice).

23. In conclusion, this proposal, if approved, would represent no undue safety risk to the occupiers/ clients and the suggested rainwater attenuation measures will not increase the flood risk elsewhere.

[researched 11.1.22]