Response Note

Project: Orchard Farm, Pershore

Subject: Response to the Emergency Planner

Client:	Formula Land		
Project No:	06842	**Version:**	A
Document Ref:	06842-TN-02	**Author:**	Charlotte Turner
Date:	18/06/2024	**Approved:**	Alison Caldwell

1 Context

1.1.1 PJA on behalf of Formula Land have prepared a Flood Risk Assessment, Surface Water Drainage Strategy and Foul Water Drainage Strategy (May 2024) which has been submitted to support an outline planning application at Orchard Farm, Pershore for *"the demolition of existing farmhouse, agricultural buildings and structures, the erection of a phased development of up to 300 residential dwellings (Use Class C3) and associated public open space, drainage, infrastructure and engineering works with all matters reserved except access at Orchard Farm, Defford Road, Pershore, WR10 3BX."* (Wychavon District Council planning application reference W/23/02112/OUT).

1.1.2 A written response was received from Wychavon District Council in their role as the Emergency Planner, via email, on 12th June 2024 which raised concerns regarding the potential flood risk to Defford Road and the need for a second vehicle access to the Site.

1.1.3 This Response Note aims to provide clarity on the identified potential flood risk to Defford Road post-development to demonstrate that a second vehicle access is not required.

2 Response

2.1.1 With regard to the flood risk, it should be noted that a detailed hydraulic modelling and assessment of the potential flood risk has been undertaken which considers the potential flood risk to Defford Road to be low. This detailed hydraulic modelling is summarised within the submitted Flood Risk Assessment (Ref. 06842-FRA-001-P11, May 2024), with further detail and assessment of the hydraulic modelling undertaken set out within the Hydraulic Modelling Technical Note (available within Appendix J of the FRA).

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2.1.2 As set out in the FRA, even within the most extreme event (i.e. 1 in 1,000 year event, which is the equivalent probability of 0.1% chance of this occurring in any given year), maximum peak water depths are identified to be less than 150mm within Defford Road when considering surface water sources only, and in no instance do the identified maximum peak flood extents cover Defford Road in its entirety. Furthermore, when considering surface water sources and the River Avon influence, maximum peak water depths are identified to be less than 300mm within Defford Road in all events, including the most extreme event (1 in 1,000 year event), with only a small localised area to the east of the Site identified to cover Defford Road in its entirety.

2.1.3 Within the Hydraulic Modelling Technical Note (Appendix J of the FRA, Section 7.4), an assessment of the identified hazard of potential flood risk within Defford Road has been undertaken. This confirms that the potential hazard presented by surface water flooding sources on Defford Road is negligible (i.e. does not present a danger to any) in all modelled events. Further to this, when integrating the River Avon with surface water sources, this is also identified to be negligible in all assessed event, with a very small, localised area to the east of the Site identified to be as 'Danger for Some,' only in the most extreme event (1 in 1,000 year). It should be noted that 'Danger for Some' is classified as children, elderly and the infirm in terms of pedestrian movements, not vehicular. Most notably, the potential flooding to Defford Road is not identified to be a risk to the general public nor emergency services, and the potential hazard does not encompass the entirety of Defford Road in any location to deem it to be impassable to vehicles.

2.1.4 The 1 in 1,000 year event is a very extreme, and as such highly unlikely (i.e. 0.1% chance of this occurring in any given year), storm event. Furthermore, within the hydraulic modelling undertaken, a significantly conservative assumption that the 1 in 1,000 year event occurs on the River Avon (in terms of peak river flows and associated flood extents) and 1 in 1,000 year event localised rainfall over the Site itself falls simultaneously, which in reality will have a significantly lower probability of occurring than the 1 in 1,000 year event.

2.1.5 Finally, it should be noted that the proposed development has been demonstrated to not increase existing potential flood risk to Defford Road, rather reducing potential flood risk to Defford Road in all modelled events when considering both surface water sources and inclusion of the River Avon.