

Wool Parish Neighbourhood Plan – Supporting Document

Purbeck Local Plan – Strategic Flood Risk Assessment 2018 – additional comments by a local expert

(Black text taken directly from the SFRA while blue text is an informed analysis of areas of concern).

1. Much of the SFRA is quite accurate in the flood risk data that has been accumulated and described in so much as stating that developers must take account of impacts that may come about in respect of significant developments in Purbeck. **Wool having by far the largest proportion of proposed development aimed within its boundaries has every reason to develop a neighbourhood plan as endorsed and supported in paras 94 & 95 of the SFRA, however late such a plan has been sought.**
2. “When commenting on options sites for new homes in 2016 (which were presented as part of the review the Council’s Local Plan in 2016) the LLFA noted that there were empirical records of localised flooding to the west of the Wool, around A352, and in the fields next to Purbeck Gate development”. **Local surface water issues are not well understood and need extensive investigative work to produce a sound FRA for the current situation let alone any proposed large development to the south of the Waterloo to Weymouth mainline that has insufficient culverts at present to allow both surface water or high level ground water to drain down northward to the Frome floodplain. In effect the railway cuts of the village to the natural receiving floodplain to the north.** This is noted within para 127 of the SFRA and is therefore a key limiting factor for most if not all of the preferred option sites in Wool. Every site will require a form of flood mitigation as part of the development.
3. Land Drainage Act 1991 civil case history re **Bybrook Barn V Kent DCC** is a significant example here placing a significant moral and financial liability on both developers and Network Rail to ensure any subsequent surface water drainage currently limited to just three minor culverts beneath the railway at Darkies Lane Crossing, the bottom of Baileys Drove and beneath station approach in Wool itself **are not left or ignored but adequately and substantially improved to take account of not just existing flows but any obvious increase in run off as indicated as likely with the SFRA in para 64.**
4. “A culvert near the BT Exchange in Wool has historically led to some localized flooding. The watercourse at Spring Street and Duck Street also occasionally overtops its banks and causes some flooding to property”. **This culvert is visible where it commences near the BT exchange carrying the historic ‘by-pass’ drain that has over many years been culverted over and as a resulting in localised flooding in the High Street, particularly to properties at the southern end where it commences at the junction of Colliers Lane. It is also further culverted and believed to run beneath the railway station exiting on the north side of the junction of the A352 with the East Burton Rd where frequent surface water flooding often covers 50% of the minor road junction on the edge of the R Frome floodplain.**
5. “The bridge over the River Win at East Burton crossroads is of adequate capacity, but the downstream channel is restricted. Although the flood risk has been reduced, the

watercourse still represents a significant flood risk. The area was severely flooded in 1983, affecting several properties". The culvert under East Burton Cross was extensively rebuilt by DCC and no longer causes problems. However if channel maintenance is not carried out by riparian owners (as is expected under recently en-mained river bylaws now enforced by the Environment Agency), flooding can occur downstream within East Burton Road with low lying properties being exposed to risk without the routine maintenance currently carried out by the EA in default of riparian owners.

6. "There is anecdotal evidence that the area to the west of Lulworth Road suffers groundwater flooding and a lake sometimes forms. Flooding here also results from a spring and small watercourse with Flood Zones 2 & 3 to either side". This is correct and is reflected in the fact that at the head of the dry valley a principle WWplc borehole exists at Bellhuish Farm, consequently during high levels of groundwater recharge, **the valley starts to behave as a 'Winterbourne' with the subsequent ponding of groundwater as recently witnessed during the 2013/14 event.**
7. "In Bovington, a watercourse running behind properties in Cologne Road has caused some flooding in the area. There is also a flood risk from overland flow containing silt from Bovington Camp". The author of this summary worked extensively with the MoD Conservation Group in order to find ways of reducing sediment load discharged into the R Frome SSSI as discussed in para 128 during the early 1990's with some success **provided maintenance continued while MoD budgets remained.**
8. In addition and while no registered reservoirs are present in the parish, the MoD possess a number of exempted structures throughout the ranges of Bovington Heath, the largest behind Cologne Road is known as the Lower Check Dam, constructed by the Avon & Dorset River Authority in 1951 for the then MoD to help reduce both flood risk and sediment deposition. **Recent legislation that might have seen this structure become a registered reservoir was not enabled. As a consequence, the legal requirement of flood risk assessment and warning applied to large reservoirs does not apply.**
9. Though not identified within the SFRA, a state of exemption also exists with recent construction of a large farm waste effluent dam and holding lagoon at Newburgh Dairy just south of the A352 roundabout west of Wool village. While the structure sits outside Reservoirs Act legislation it still represents a significant risk to property immediately downstream being entirely governed and regulated by SAFFO (Silage/Slurry and Fuel Oil regulations) as administered by the EA in terms of pollution risk **but not flood risk. The structure was not built under regulations designed to ensure dam safety and flood risk, (being suitably supervised by a qualified civil engineer as is normal for structures greater than 25000m³),** despite being designed to hold >10000m³ above the natural ground level as determined by work undertaken by the EA and under local planning regulations.
10. "Further development in and around the settlement may cause or exacerbate existing flooding if routes of surface flow are obstructed or surface water run-off from development is not properly managed. Potential measures to manage flood risk The layout of any proposed development must ensure that surface water flow paths (existing and those of dry valleys) and areas of surface water ponding are kept clear and where possible managed to

reduce causes and impacts of flooding. Such management could involve their inclusion as part of a wider site landscaping scheme that provides the opportunity to provide new Green Infrastructure and connect with existing Green Infrastructure adjoining the site". This qualifies much of the concerns already raised above, however as to how effectively such measures can be enforced and delivered during development remains to be seen, especially in the light of **shortcomings experienced with the Purbeck Gate development that has ongoing issues with regard to surface water ponding and groundwater activity combining as they have done in recent events, notably 2012, 2013/14 and 2020 events.** Not surprisingly residents who live adjacent to or down gradient of the area remain sceptical that adequate infrastructure will form part of the proposals should significant development be permitted in those areas identified south of the Waterloo to Weymouth railway line.

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