Sewage Concerns

The proposal is to connect the entire New Monks Farm into a failing main sewer which had insufficient capacity for B&HA's Training Academy.

The Academy installed their own internally processed foul waste treatment plant (PTP) with no need for a main sewer connection.

That main sewer has fully inundated with long term groundwater flooding in 4 out of 6 last winters with:

- Many residents' loss of foul waste facilities
- Burst manholes covers with sewage in roads and gardens
- Road and lane closures
- Tankering and overpumping into ditches for up to 8 weeks.

Southern Water's NMF specification is geared to a 1 in 30 year weather event. In those 6 winters, 2 of the years experienced 1/100 year events (up to 195% of average rainfall for 3 months) and two at least 1 in 30 year events. In such weather periods this additional flow from NMF into an already overburdened sewer will exacerbate problems for the Lancing community and the water authority..

During such events, main sewer inundation means pumping from NMF will not be possible because of a lack of sewer capacity. During these frequently repeated, extreme conditions millions of litres of foul waste will back up onto the NMF site with inevitable loss of facilities for residents, IKEA and the Training Academy. **A fully specified dedicated sewer run to the processing treatment plant should have been planned to ensure site sustainability for foul waste management.**

Ground Water Concerns

New Monks Farm site sits within an Environment Agency high risk of flooding Zone 3 area with a greater than 75% risk of flooding from ground water. The Flood Risk Assessment references monitoring during a period when rainfall levels were low and the real influence of high ground water levels is not recorded. This masks the impact of rising groundwater on the drainage of the site. Realistic data is vital to ensure that all the calculations of ditch capacities/flows are correct. There are also concerns regarding management of water quality prior to discharge to the receiving watercourses when draining the residential areas of the site. This issue is raised within the final report by the Lead Drainage Authority. **More work needs to be done on groundwater influences and water quality management to justify sustainability.**

Tidal Rise/Sluices Concerns

Lancing Brooks ditch network drains the whole of Lancing catchment area. Flows run south/south eastwards and outfall through tidal sluices into the Adur River lagoon next to the estuary. Within the Flood Risk Assessment documents and the Environment Agency submission documents there has been no evidence to show that these tidal sluices (open when tide out, closed when tide in, twice daily) will manage the area's ditch drainage sustainably, including that of New Monks Farm for the lifetime of the development. EA projections for annual tidal rise have been made until the year 2115. As sea level rises, sluices will be open for less and less time. It is estimated that within 2 decades, flows into the ditches will have to be contained for well over 8 hours as opposed to the 6+ hours experienced at present – a 30 to 40% increase. Year by year containment time becomes longer. The longer the time, the higher the ditch water levels. In times of extended extreme weather events, this may mean flooding of not only the New Monks Farm site but upstream and downstream of the site. **Sluice infrastructure is as important as the increased protection from tidal walls enhancements currently being installed. Neither the applicant/local authority or Environment Agency have addressed this issue.**

All these unaddressed issues mean that the NMF drainage is not demonstrated to be sustainable for its lifetime and will not cause problems elsewhere.

REASONS TO REFUSE FOR LACK OF SUSTAINABILITY
Non compliance with:

Adur Local Plan 2017
Policy 36: Flood Risk and Sustainable Drainage
All development or changes of use to a more vulnerable use, regardless of flood zone or size, where flood risk from other sources (surface water, sewer, groundwater) is identified by the Strategic Flood Risk Assessment. The flood risk assessment will need to demonstrate that development:

- *will be safe for its lifetime taking account of the vulnerability of its users;*
- *will not increase flood risk (including sewer flooding, surface water and groundwater flood risk) elsewhere;*

Policy 35: **Water Quality and Protection**
Development will be permitted provided that: It does not have an unacceptable impact on the quality and potential yield of local water resources and the water environment; also It protects and enhances groundwater, surface water features and controls aquatic pollution to help achieve the objectives of the Water Framework Directive

National Planning Policy Framework
Para 160 (b) *The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible will reduce flood risk overall.*
Para 163(b) *When determining any planning applications local planning authorities should ensure that flood risk is not increased elsewhere …. Development should only be allowed in areas at risk of flooding where……it can be demonstrated that:*

- *The development is appropriately flood resistant and resilient.*