## Appendix A – Detailed Commentary on Principle & Methodology

Fundamentally, there is no certainty that the development industry is contributing towards increased Nitrogen loading on the Solent area or, at the very least, the impact of Nitrogen from new development has been over-estimated resulting in disproportionate costs being borne by the development industry.

As acknowledged within the Positon Statement the nitrogen contribution from new developments is 'extremely small', with the majority of nitrogen deposition coming from agricultural practices employing nitrogen based fertilisers or background deposition.

The starting point of the Position Statement is that, due to new European case law, it can only be concluded that new development could increase nitrogen and phosphate deposition into the protected harbours above permitted levels. This conclusion has not been properly tested or verified.

For example, no consideration has been given to the background Nitrogen concentrations that exist in fresh / potable water before it treated and piped to a new development. Further work is being undertaken by the Consortium's consultant team, but initial research has suggested that, in some instances, Nitrogen concentrations at extraction source are equal to or close to the levels of Nitrogen that are permitted to outfall from the WWTW. This is particularly pertinent for river extraction where run-off from agricultural practices has already artificially increased Nitrogen concentrations. If permitted Nitrogen concentrations out-fall from a WWTW at a level that is equal to or less than the concentration of abstracted water, it must be concluded that new development is not increasing nitrogen and adversely impacting on the European sites. It follows therefore that no water quality mitigation would be required for new development. For mitigate to be justified there must be confidence that new development is part of the problem. Further work is therefore required to determine whether nitrogen from new development is even an issue in Havant Borough.

Turning to permit levels, each WWTW have maximum permissible daily discharge of Nitrogen. These levels are themselves set to achieve the requirements of the Habitats Regulations. It is understood that the principle WWTW for Havant Borough is Budds Farm (with some limited outfall to Thornham WWTW). The most up to date assessment of water quality for Budds Farm is the Integrated Water Management Strategy. This Strategy confirms that growth can be met within consented nitrogen levels until 2036. Based on this evidence, for which the Council was one of the commissioning partners, it is clear that mitigation is already in place to allow new development to proceed in the foreseeable future.

In the longer term, it is possible that WWTW infrastructure may need to be put in place to achieve a Nitrogen 'standstill' once current limits are expected to be exceeded. However, this is a matter for the Water Industry permitting process, and not the Town and County Planning Act development control process.

## Natural England Methodology Issues

As mentioned in the main report, the Consortium has had discussion with NE about various assumptions in the methodology as written.

Firstly, the double counting of impacts has been baked into the Methodology as it is assumes that every new house built will result in an additional 2.4 people. This is a flawed assumption as a proportion of people who already live in the area and contribute to nitrogen input will move within the area to occupy the new houses. It is only the additional population arising from people moving to the area (not within the area) should require mitigation. This principle was agreed with Natural England in a case in Suffolk in relation to SANGs; and should also be applied here.

Secondly, no account seems to be taken of SUDS and filtration methods, the nature of pathways to the water body in question, the distance from the water body and time taken to travel to the water body, or the natural breakdown and oxidisation of Nitrogen, and/or its take up by vegetation on the way.

Thirdly, the updated NE Methodology arbitrarily places a 20% buffer on the Nitrogen input from a development. This has not been justified

Fourthly, a number of the assumptions regarding the Nitrogen inputs of some of the land uses have not been fully justified or are absent.

It is appreciated that the Natural England are seeking to take a 'precautionary approach' to mitigation but the cautious approach permeates through most stages in the calculation before an additional 20% buffer is added. The outcome will be that mitigation required by Natural England methodology is likely to be far in excess of what might be considered to be a reasonable and proportionate mitigation response