LAND AT THE POPLARS (FORMER HRI SITE)

WORTHING ROAD, LITTLEHAMPTON

WEST SUSSEX BN17 6GZ

Foul Water Drainage

1. Introduction

1.1 This report has been prepared on behalf of Hargreaves Residential Developments Ltd. and concerns a proposal to construct an additional 7 residential units on the site. A recent planning application, referenced LU/306/11 has been refused and whilst the Council offered no objections on drainage grounds, various local residents expressed concern at the ability of the on-site foul water pumping station to accept additional flow.

1.3 The pumping station has been adopted by Southern Water Services Ltd as sewerage undertaker for the area. Therefore any formal comment to the planning authority regarding its capacity would be made by them and it is noted that they offered no objection to the proposal when they were consulted on this application – their letter dated 12 December 2011 ref: S/AR/2011/306 refers. We have nevertheless been requested to undertake a brief analysis of the flows to the pumping station and to comment on its ability to accept flow from the proposed 7 additional units

2. Anaylsis

2.1 The current connection to the pumping station is from only 144 of the dwellings on the site, as the remainder drain by gravity separately to the public sewer in Worthing Road. An analysis of the number of bedrooms in these 144 dwellings provides a likely occupancy of 487 persons. Applying standard rates for internal water use for units built to the Code for Sustainable Homes and those not, provides an average daily flow of 0.935 litres/ second to the pumping station. It is normal to factor this by 6 in order to provide a flow at peak times in the day and this gives us a design flow of 5.61 litres/ second. Whilst it would be normal practice to add a little flow to this for groundwater infiltration, it is also likely that water metering and water saving appliances will reduce the flows that are currently assumed for design purposes and a balance is likely.

2.2 The pumping station was designed to deliver 6.2 litres/ second, and we therefore consider it be adequate for the proposed additional dwellings.

RTF Clark BSC CEng MICE
Robert Clark Associates Ltd
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