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5th March 2014

Mr Nigel Phillips
Newbridge Construction Ltd
23A Gold Tops
Newport
S Wales
NP20 4UL

Ref: 08169

Dear Nigel

Ref: Former Tredegar Park Golf Course, Park View, Baseeleg

Please find set out below engineering comments relating to any future increase in residential housing provision to the North of the current master plan. This statement is based on an increase in housing units up to circa 300.

Surface Water Drainage System

The proposed surface water system for the Tredegar Park development will accommodate both the domestic and highway drainage systems and will be adopted by DCWW. The sewer will discharge to the River Ebbw at a restricted rate and attenuated below ground. To accommodate both DCWW requirements as well as those of the NRW there will be two attenuation tanks, one to accommodate the 1 in 30 year event and a separate overflow tank to accommodate the 1 in 100 year with an allowance for climate change.

The proposed piped surface water system will be designed to accommodate the additional parcel of land to the north of the current site plan, this will include oversizing the pipes to accommodate both shallow gradient falls and proposed surface water flows. The proposed surface water will discharge directly to the River Ebbw at an agreed Greenfield rate via a concrete headwall which will also be oversized to accommodate future developments. An offline attenuation crate system, which will be located within close proximity to the outfall will be sized to accommodate the immediate development, however this can be easily increased in volume to accommodate any future developments. In addition to retrofitting additional storage volume to the attenuation tanks the flow control chamber will be upgraded to accommodate higher flows (as the Greenfield area would have increased).

Foul Water Drainage System

The proposed foul water system will accommodate the full extent of the development and will be adopted by DCWW. The foul drainage will combine in an adoptable pumping station in the eastern portion of the development which will be pumped the short distance to the DCWW combined sewer which located just beyond the site boundary. The pumping station will discharge to the public sewer at a rate agreed with DCWW and will be sized to accommodate the immediate development.

The site wide network will be designed to accommodate the future development, thus the system will accommodate oversized pipes initially.



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The agreed discharge rate to the public sewers will remain as per the agreed rate with DCWW when the future development occurs, however the pumping station will be increased in volume . likely via offline storage to accommodate future additional volumes.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "S Reynolds".

Simon Reynolds
Director of Civil Engineering