DRAINAGE STATEMENT

This statement is written to support a planning application for the development of 41 dwellings on a site off James Road, Crowland, Lincolnshire, PE60BE.

The current planning application reference is H02-0696-22

Introduction & Background

This statement accompanies Drainage Strategy Drawing BARB-SH-PD-DS-03, and should be read in conjunction with the strategy plan.

The main extents of the development site received planning approval in 2022- Reference H02-0064-21, and we now look to slightly adjust the layout (retaining the road pattern and footprints generally), but the land immediately adjacent Barbers Drove North has been removed from the original site area, along with the existing dwelling No.17 that will now remain and is not to become demolished.

The purpose of the drainage strategy combined documentation is to support a planning application and identify a 'strategy' as to how foul and surface water will be collected/drained and dispersed from the development site.

The object of this report is to clarify the design philosophies followed whilst preparing the proposed surface & foul water drainage arrangements for the site and to outline the proposed solution in sufficient detail for all relevant parties to be able to comment.

Flood Risk

A site-specific flood risk assessment has been prepared by Ellingham consulting Ltd. The flood risk assessment has identified that a minimum floor level of 2.3m AOD is required.

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Surface Water

The surrounding existing Highways and residential developments are served by a series of adopted Public Anglian Water sewers and the IDB drainage system.

To the east of the site between James Road and the site boundary is a drain originally formed to take the discharge of highway water. LCC highways have confirmed that this drain is within their maintenance area and land registry title plans show this within their ownership.

Immediately adjacent and abutting the northern boundary of the site is a drain maintained by the internal drainage board, namely 'North Level District Internal Drainage Board, the drain referred to as Greenbank Drain(ID916). The applicant will be required to apply to the IDB for a discharge consent, to allow the final outfall of the surface water into this drain.

The site currently stands as a greenfield site with no active drainage system. The surface water run-off is served by the drain shared with James Road to the South East boundary and the IDB Greenbank Drain to the North East Boundary.

The SuDS hierarchy has been given consideration during the design of the proposed surface water drainage system. It has been established that the sites geotechnical characteristics of poor infiltration rates and relatively high water table do not lend themselves to the use of an infiltration

The private drive and parking space areas should be constructed utilising a permeable paving system and will be conveyed into the ownership of the private dwelling owners who will be responsible for their maintenance.

It is proposed to drain the site by gravity drainage via a SUDS system before the discharge enters the IDB drain. The adopted highways will be drained utilizing filter drains alongside the highway and gullies.

The dwelling roof water will be collected via downpipes and gutters and will be discharged into the main adoptable Anglian Water drain run and appropriate points.

Prior to an outfall into the IDB watercourse, there will be a sequence of filter drains, below ground storage tank and small attenuation basin, before outfall is restricted through a hydrobrake device limiting outfall to a practical 5l/s.

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Foul Water

There is an existing foul water drain from No.17 Barbers Drove that routes along their driveway, and crosses the proposed development footpath link to Barbers Drove. The eventual outfall is into a foul water Anglian Water sewer within Barbers Drove, and it is that sewer that the developments foul water will eventually outfall into.

The proposed dwellings will have private buried pipe foul water network. There will be an adopted main sewer beneath the adopted highway conveying the foul water South-Westward towards an outfall into the existing Anglian Water network along Barbers Drove North, following the approximate alignment of the connecting adoptable footpath link.

Conclusion

Foul water drainage will therefore discharge into an existing Anglian Water system, and surface water will discharge into a neighboring IDB ditch.

The detailed drainage proposals will be further progressed following receipt of planning permission and undoubtably will be captured within a planning condition.

A detailed drainage scheme will be presented to both Anglian Water for the adoptable extents to secure a S104 agreement, and the domestic drainage will be presented to the building control body as part of the Building regulations approval process. The combined systems will also need to receive eventual approval from the planning authority, who will be heavily informed by the subject matter experts.

03.05.2023