

Technical Note

Project:	70 Vernon Road, Worsbrough	Project No:	11030-001-01
Subject:	Drainage Implementation		
Prepared by:	LM	Date:	08.07.19
Checked by:	PJM	Date:	08.07.19

Introduction

This technical note has been prepared on behalf of Ariya Neuro Care LLP to part assist with the discharge of planning condition 6 under Barnsley Metropolitan Borough Council's Application No. 2018/0913 on vacant land at the former Holly Tree Apartments, Vernon Road, Worsbrough.

The proposals for the site are to build a rehabilitation focused Acquired Brain Injury (ABI) service for individuals between the ages of 18-65yrs.

The total site area measures approximately 0.18ha. An existing combined water drainage system exists on site which served the previous demolished development and associated hardstanding which is still present. The existing drainage system discharges into a public sewer in Vernon Road on the south western boundary.

Proposed Surface Water Drainage

The site currently has an existing impermeable area of approximately 0.112ha which discharges to the existing combined water public sewer in Vernon Road.

It is proposed to construct separate systems of foul and surface water serving the development. Surface water will discharge into the existing surface water public sewer recorded in Vernon Road at a restricted rate of 5.00lit/sec.

It is proposed to provide underground attenuation in the form of Geo-cellular crates within the hardstanding area at the front of the development. A Catch pit will be constructed for roof and hardstanding area treatment prior to discharging into the Geo-cellular crates, which will contain attenuation for up to and including the 100 year + 30% climate change storm events.

Phasing and Implementation of the Drainage Scheme

The proposed surface water drainage network of underground drains and geo-cellular storage crates with all associated structures will be constructed at an early stage of the development's programme as part of the site earthworks phase.

Due to the small nature of the site, the installation of the primary infrastructure will be undertaken in a contract lasting approximately 4-8 weeks.

Due to the existing site topography and proposed levels it is not envisaged that high volumes of silt transportation will be present, however a temporary solution will be placed to prevent contamination of the existing drainage system during construction works.

It is not always possible to ensure that new impermeable areas are immediately connected to the drainage system. Therefore, the following additional measures will be implemented to ensure construction runoff is appropriately managed;

- Protective coverings to help prevent runoff stripping material stockpiles
- Plant and wheel washing will take place in a designated location. The area will be tanked and not allowed to discharge into the drainage system
- Effluent shall be treated as contaminated waste and disposed offsite by a licensed waste management operator.
- Surfaces used as access roads and storage areas during construction shall be swept regularly to prevent accumulation of dust and mud.
- Should groundwater be encountered in excavations such water would not be discharged to the drainage system until the amount of suspended solids has been reduced through the controlled use of skips or tanks, which will act as stilling basins

Upon completion, any underground pipework will be jet cleaned and CCTV surveyed. Areas of surfacing will be swept and cleaned and silt / debris present removed. The Contractor will be responsible for rectifying any significant defects identified at this stage and for a period of approximately 12 months thereafter. At the end of this period a further inspection will be carried out by the Contract Administrator and on completion of any outstanding remedial works, the drainage system will be handed over to a management company.

It is anticipated that the surface water drainage systems will be completed and functional prior to occupations.