

Construction Phase Management Plan and Risk Assessment.

Erection of 42 dwellings at Lingards Road, Slaithwaite HD7 5HY.

Planning Application Number 2020/93954.

June 2024.

1.0 Introduction.

The site is situated to the south west of the village of Slaithwaite through which the River Colne runs within the bottom of the valley.

The site is adjacent to Lingards Road which is on the valley side and slopes down towards Manchester Road (A62).

There is an existing network of land drainage within the site and that which has been exposed is recorded on Haigh Huddleston & Associates (HHA) drawing E19/7567/035 B.

There is a holding tank on site, presumably installed by a farmer at some stage in the past for collection of water for livestock, which is piped to an open 'ditch' where it is assumed the livestock took the water.

This open watercourse will remain in place within the completed development.

The geology of the site is topsoil on clay on mudstone on sandstone, the latter is known to have fissures within it which will take away ground water.

An attenuation tank with a capacity of 330 cubic meters is designed within the scheme in to hold surface water prior to it discharging into the existing watercourse/culvert at the western boundary.

On the north eastern side surface water is discharging into an adopted sewer.

Rates for these discharges have been agreed and are stated in section 2.

Once the attenuation tank is installed it will be able to hold surface run off water instead of it being held in the above ground water storage.

2.0 Water run off management strategy and methodology.

Areas where work is not being carried out will have the vegetation remaining in place so run off will be the same as before construction commenced on the site.

Where vegetation is stripped to enable construction to take place, run off water needs to be managed and the intent is shown on SB Homes drawing Sk S 03 A.

Channels will be excavated as shown on the above drawing to intercept any existing land drains crossing the site, these channels will take water into the existing tank, the size of which is approximately 4.0m x 4.0m on plan by 2.0m high which gives a volume of 32 cubic meters.

The outfall pipe from the tank is 300mm above the bottom of the tank which allows for silt settlement below it.

Silt was cleared from the tank as part of the site set up.

An additional pipe will be installed 0.4m below the top of the tank to act as an overflow, this pipe will be connected into the existing 130 x 220 stone culvert on the western boundary. This culvert discharges into the River Colne.

Straw bales will be incorporated along it's route to filter out any silt suspended within the overflow water.

A pump will be on standby to reduce the water level of the tank and into the overflow route should the need arise.

An earth bund will be created along the northern boundary to keep any excess run off water within the site and will be guided into an above ground storage area at the western end of the site and into a soakaway at the eastern end. There will also be a bund to the top side of the open watercourse to prevent uncontrolled run off water entering into it.

The strategy with the soakaway is that fissures in the bedrock will take water away and over this will be clean hardcore to allow any excess water an easy route.

Final discharge rates upon completion of the project have been agreed into the watercourse to the western boundary and adopted sewer at the north east end as 6.6l/s and 3.0l/s.

Any overpumping in extreme 6 hour 1 in 2 year event should not exceed these rates and any water should be filtered prior to it entering into the watercourse or sewer.

3.0 Risk Assessment.

Areas of risk are identified as being:

- Excess run off water
- Run off water leaving site and having adverse effect
- Silt within run off water entering into watercourses either directly or indirectly (via the existing tank)

The methodology of dealing with the above risks are covered in section 2.

4.0 Schedule of regular tasks.

The following will be carried out to monitor and ensure procedures are kept in place:

- Weekly inspections of the bund area, watercourse, water storage and interception channels to ensure there are no breaches or blockages
- Weekly inspection of the water tank to monitor levels
- Take water samples from the tank to carry out a visual inspection of the extent of suspended silt/solids and test samples every month – records to be kept of both. The level of suspended solids should not exceed 50mg/l.
- Monitor weather forecasts and prepare accordingly.