



**MICHAEL EVANS
& ASSOCIATES LTD**
Civil and Structural Engineers
& Design Consultants

24-190 – Hillmoren, Alter Stones Lane, Leicester **Construction Phase Drainage Plan**

Cut-off ditches to be installed around the perimeter of the construction areas to capture surface water runoff during the Construction Phase of development.

Location of cut of ditches likely to alter during the demolition and construction phases to suit the expanding working areas. Outfalls from the cut of ditches to the existing watercourse channel/s to be at the low point of the channel to an existing outfall and/ or to the proposed outfall which will be utilised to serve the proposed development, it to the watercourse along the southern boundary of the site, as indicated on drawing 24-190-101.

The infiltration rate at the site is not suitable for the disposal of surface water from completed development at the site, however some lower rates are infiltration would still occur. The ditches are to be left unlined to allow some natural infiltration to occur.

Ditches to be laid at a shallow gradient to allow any silts within the construction runoff to settle within the ditches rather than discharging offsite. Catchpits to be installed prior to the outfall/s, and checked and emptied periodically to ensure that silts are captured and disposed of without discharging into the watercourses.

All oils and pollutants to be safely stored and contained on site to ensure that any spills do not discharge into the surface water drainage networks.

The drainage network is to be installed during the early phases of the construction programme, and so should be function during a large proportion of the construction phase.

Surface Water from Building A is to be harvested and used as part of the process water within Building B. During the construction phase, when the water is not being used for processing, flows will be directed via the overflow into the main site surface water drainage network. Modelling has found that some additional flooding occurs from the network during this scenario, with water exiting the network at Manholes S17, S23 and S27 totalling approximately 145m³ during a 1 in 100 year + climate change event. Flooding from these manholes will follow the overland flow routes shown on drawing 24-190-101 and be directed to the landscaped areas of the site, which will act as natural rain gardens.

Once the construction phase drainage has been completed, the cut off ditches can be removed.

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