



PROPOSED IMPERMEABLE AREA PLAN - NOT TO SCALE
IMPERMEABLE AREA = 25000m²

ATTENUATION POND TO BE LOCATED IN THE PUBLIC OPEN SPACE
STORAGE REQUIRED FOR THE 1/100 YEAR STORM + 30% CC = 1700m³
POND TO BE 1m DEEP WITH 1/3 SLOPED SIDES AND 300mm FREEBOARD
HYDROBRAKE TO RESTRICT TO 16.8l/s
MD-SHE-0184-1680-1000-16680

YORKSHIRE WATER ADOPTED PUMP STATION
RISING MAIN LENGTH TO BE APPROXIMATELY 505m AND PUMP TO NEAREST FOUL SEWER IN HATFIELD LANE

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Drainage Strategy
The site is located within flood zone 1 with a low risk of flooding from rivers or the sea.
The existing site is a grassed field.
NPPF guidelines require that surface water arising from a developed site should as far as practicable be managed in a sustainable manner to mimic the surface water flows arising from the site prior to development.

Surface Water:
We have followed the SUDS Hierarchy and due to the site being next to the flood zone, it is assumed that percolation would not be viable. As there is a watercourse within the clients ownership we are proposing to discharge to here subject to any consent from IDB or relevant authority.
The existing site is Greenfield so it is our proposal to discharge to Greenfield rates of 1.4l/s per H.a. The site area is 12 H.a which equates to 16.8l/s. Restriction will be achieved by Hydrobrake MD-SHE-0184-1680-1000-16680

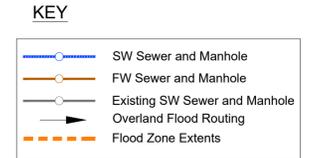
The proposed impermeable area for the parcels of land which would be residential are 36000m² we have assumed a 50% mix of landscaping to impermeable area in these parcels so 18000m² has been assumed.

The roads have an impermeable area of 7000m² so total area = 7000m² + 18000m² = 25000m²

Based on the discharge rate of 16.8l/s and the impermeable area of 25000m² the total volume required for the 1 in 100 Year Storm +30%CC is 1700m³.

Attenuation to be an open pond 1m deep with 1/3 sloped sides with 300mm freeboard

Foul Water:
The foul water is proposed to drain by gravity to an adopted pump station where it will discharge by rising main to the nearest sewer in Hatfield Lane subject to a S106 agreement with Yorkshire Water



No.	Revision	Date	Drwn

Status: **PRELIMINARY**

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Project: **HATFIELD LANE, BARNBY DUN**

Drawing title: **Drainage Strategy**

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