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Planning Application Submission:

Additional Drainage Details
for Barns:

A and C (App Ref:P193616F)

and

B and D (App Ref: P193520F)

Grove Farm, Sellack, Ross on Wye, Herefordshire HR9 6LZ

Rev. v1.0 January 2020

Project Name:

Grove Farm

Project

Grove Farm, Sellack, Ross on Wye, Herefordshire HR9 6LZ

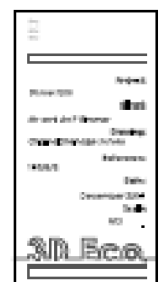
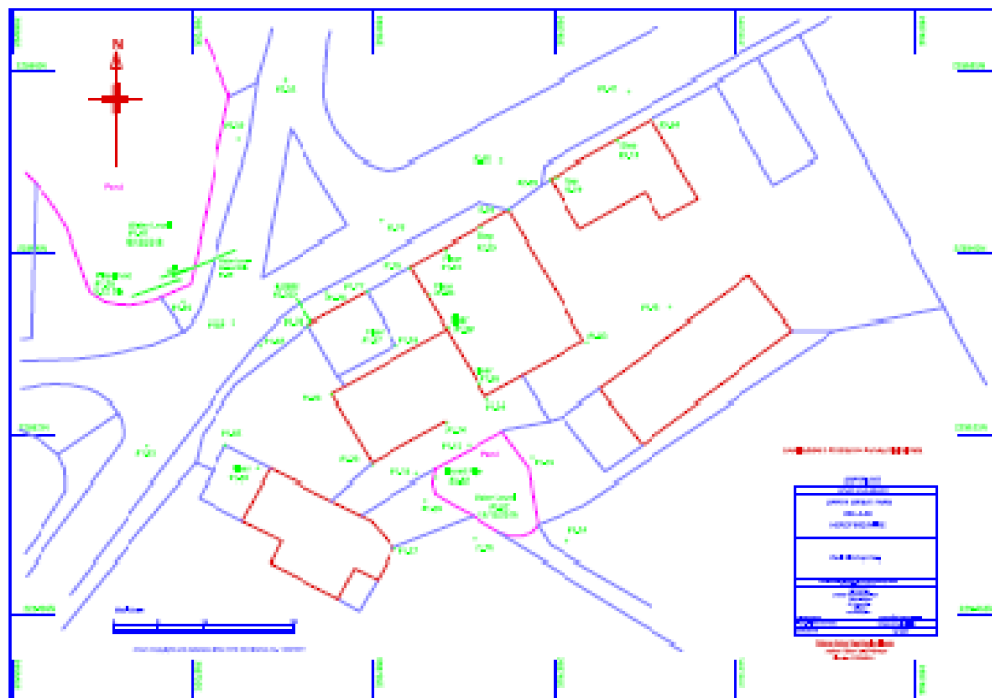
Change of Use of barns to form new residential dwellings.

Additional information requested in relation to the sites potential for flooding.

Information provided:

- Drawing 19005/31 - Detailed site / drainage survey undertaken by Jonathan Tasker - Land Surveyor.
- Drawing 19005/19 - Drainage Plan (Barns B and D)
- Drawing 19005/30 - Drainage Plan (Barns A and C)
- Percolation Test Results and supporting photographs

Drawing 19005/31:



Percolation Test Results

Percolation Test Recording Sheet

- These tests should be carried out within and be representative of, the proposed infiltration area which should be at least 5m from the intended building and any boundary.
- Excavate 2 percolation holes, not less than 5m apart, 300mm square to a depth of 300mm below the proposed invert level of the effluent distribution pipe. Where deep holes are necessary, the hole should conform to this shape at the bottom but may be enlarged above the 300mm level to enable safe excavation to be carried out.
- Fill the 300mm square section of the holes to a depth of at least 300mm with water and allow it to seep away overnight. It is important to saturate the soil surrounding the test hole to simulate day to day conditions in an operational drainage field.
- Next day, refill the test sections with water to a depth of at least 300mm and observe the time (T) in seconds, for the water to seep away from 75% to 25% full level.
- Extreme weather conditions should be avoided when testing.
- In evaluating your test results please note that where the Vp value does not fall between 15 secs/mm and 100secs/mm then infiltration trench or bed systems may not be possible.

| Trial Hole | Depth below ground level | Depth of Water (minimum 300mm) | Time taken between 75% & 25% full (seconds) (T) | Percolation Value $V_p = T/150$ (Vp) | Occupant Capacity (P) | Minimum Area $A = P \times V_p \times 0.25$ (A) |
|---------------|--------------------------|--------------------------------|---|--------------------------------------|-----------------------|---|
| 1 | (Test 1) 400 | 350 mm | 5700 | 38 | — | — |
| | (Test 2) 400 | 350 " | 6000 | 40 | — | — |
| | (Test 3) 400 | 350 " | 6800 | 45.33 | — | — |
| 2 | (Test 1) 420 | 400 " | 6100 | 40.67 | — | — |
| | (Test 2) 420 | 400 " | 6300 | 42 | — | — |
| | (Test 3) 420 | 400 " | 6900 | 46 | — | — |
| Average Vp 42 | | | | Average A — m ² | | |

NB For wastewater that has received secondary treatment followed by settlement, the area may be reduced by 20% i.e. $A = P \times V_p \times 0.2$

Site Location: BARNES @ UPPER GROVE COMMON - SOLARAK

Description of ground strata: OLD RED SANDSTONE

Warrant Ref. Number if known: _____ Date test carried out: 11TH / 12TH DEC 19

Name of person carrying out the test: MARK HINES.

The water table is more than 1m below the bottom of the distribution pipes and I further confirm that there are no wells, springs or water abstraction points within 100m of the proposed infiltration area. (Signature)

Sign: (Signature) Date: 12/12/19

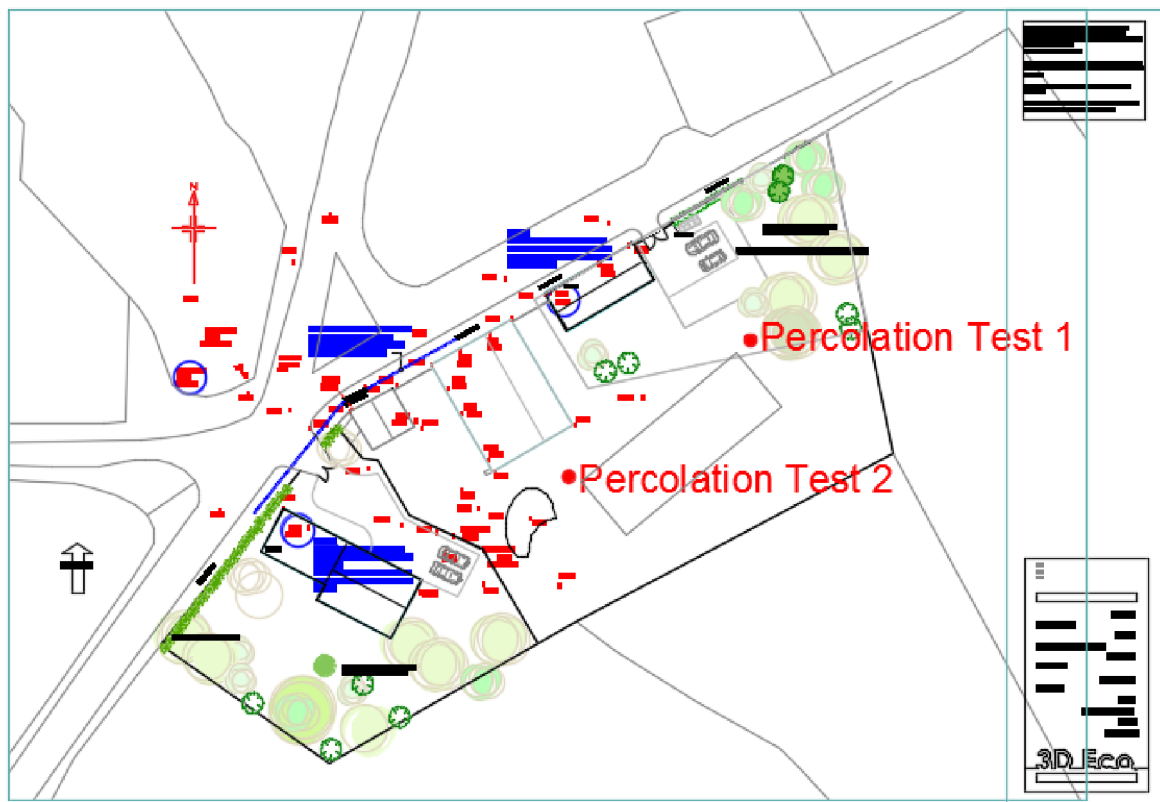
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Percolation Test Photographs





Percolation Test Locations



John N. Pickup

Registered Architect and RIBA Client Design Advisor

January 2020