



DRAINAGE STRATEGY REPORT.

Proposed Residential Development.

**Springbank Luxury Boarding,
Birch Hill Lane,
Wardle,
Rochdale.**

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Revision:

Revision	Date	Reason
0	August 2018	Original.

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1 Introduction.

Reference:

To accompany a planning application, ref No. 18/00674/FUL; for a "New dwelling at Springbank Kennels, Birch Hill Lane, Wardle".

Rochdale & Oldham Strategic Flood Risk Assessment.

Hierarchy & requirements

- *Drainage from new developments should incorporate storage, with residual discharge of surface water to the following networks in order of preference:*
 - *Infiltration drainage (e.g. soakaways)*
 - *Discharge to a watercourse*
 - *Discharge to a public sewer*
- *Development should deliver Greenfield runoff on Greenfield sites up to a 1 in 100 year storm event, considering climate change. Development should aim for a reduction in surface water runoff rates of 30% (50% for critical drainage areas) for Brownfield sites up to a 1 in 100 year storm event, considering climate change. Development should be designed so that there is no flooding to the development in a 1 in 30 year event and so that there is no property flooding in a 1 in 100 year plus climate change event*

Purpose of Report:

To appraise the existing site and local drainage infrastructure, assess the suitability of the proposed development, and to give recommendations for drainage design & management.

The report provides high level recommendations and flows for agreements, which are to be developed for construction in the detailed working design stage of the development.

1.1 Plans.

1.1.1 Location Plan.

The location of the Proposed Development is on an existing Site on Birch Hill Lane, Wardle, Rochdale. The Site coordinates are E: 391882, N: 416768.

The Site is located in a rural location, down a historic country lane, and on the fringe of Wardle Village which is located to the NW.

1.1.2 Site Plan.

Refer to the Proposed Plans in the Appendix.



The Site is currently used as a commercial kennels and cattery. It comprises the existing office & kennels/cattery building to the NW side, a central yard; and a pigeon loft in the location of the Proposed Dwelling.

There are also outdoor caged cat/dog runs in the adjacent field to the E.

The proposal is for the construction of 1No. single-storey 2 bedroom masonry dwelling to the E side of the Site.

1.2 Surveys.

1.2.1 Existing and Proposed Topography.

No topographic survey of the Site has yet been undertaken.

2 Assessments.

2.1 Existing Surface & Foul Water Systems.

The Site is in a rural location and as such it has no connection in to the United Utilities public sewer network.

Surface water runoff from the existing building and hardstandings connect in to a Site soakaway in the adjacent fields which is under the same ownership. The existing soakaway was installed approximately 20yrs ago but details of the construction are unknown.

The existing foul water from the development currently flows to a septic tank with outflow to soakaway which is emptied approximately annually.

Refer to appendix for the approximate location of existing septic tank & SW soakaway locations.

2.2 Proposed Surface & Foul Water Systems.

Ground conditions have been assessed from BGS geological mapping data which indicate the N part of the Site to be underlain by Polymict Deposits due to hill-wash/solifluction. The S part of the Site is in an area of no glacial cover.

Due to the superficial boundary cover through the Site, the Polymict Deposits over the N part are estimated to be relatively thin.

Although glacial cover it not shown on maps, there is likely to be a weathered zone to the bedrock most likely comprising clay/sand or combination of the two due to the underlying undifferentiated Coal Measures.

As the capacity of the existing soakaway is not known, it will have to be tested for capacity, and if necessary a new soakaway will be required for the new development.

The proposed footprint of the building development is only approx. 80sqm, and thus a relatively small soakaway is estimated to be required, dependent on the permeability of the underlying soil/strata.

2.3 Proposed Foul Water System.

The proposed development will require FW drainage.

The proposed foul water drainage for the development may be connected in to the existing septic tank, as required although the de-sludging cycle will need to be optimised.

2.4 Climate Change Impacts.

Climate change allowances to be made in line with current EA guidance on all rainfall events.

3 Recommendations.

Sustainable urban drainage systems will be used in the design of the new building.



Regarding surface water, the existing building already benefits from a surface water soakaway in the adjacent field to the E side of the Site, so it is already evident that the Site is suitable for soakaway systems.

The proposed dwelling will add to the surface water run-off and the existing soakaway should be tested for capacity and if necessary a new soakaway may need to be constructed to cater for the additional run-off.

Soakaways should be constructed in line with Building Regulations Approve Doc. H, which generally requires the design to be capable for a 1:10yr rainfall event, and constructed not less than 5m from any building structure/road or other soakaway.

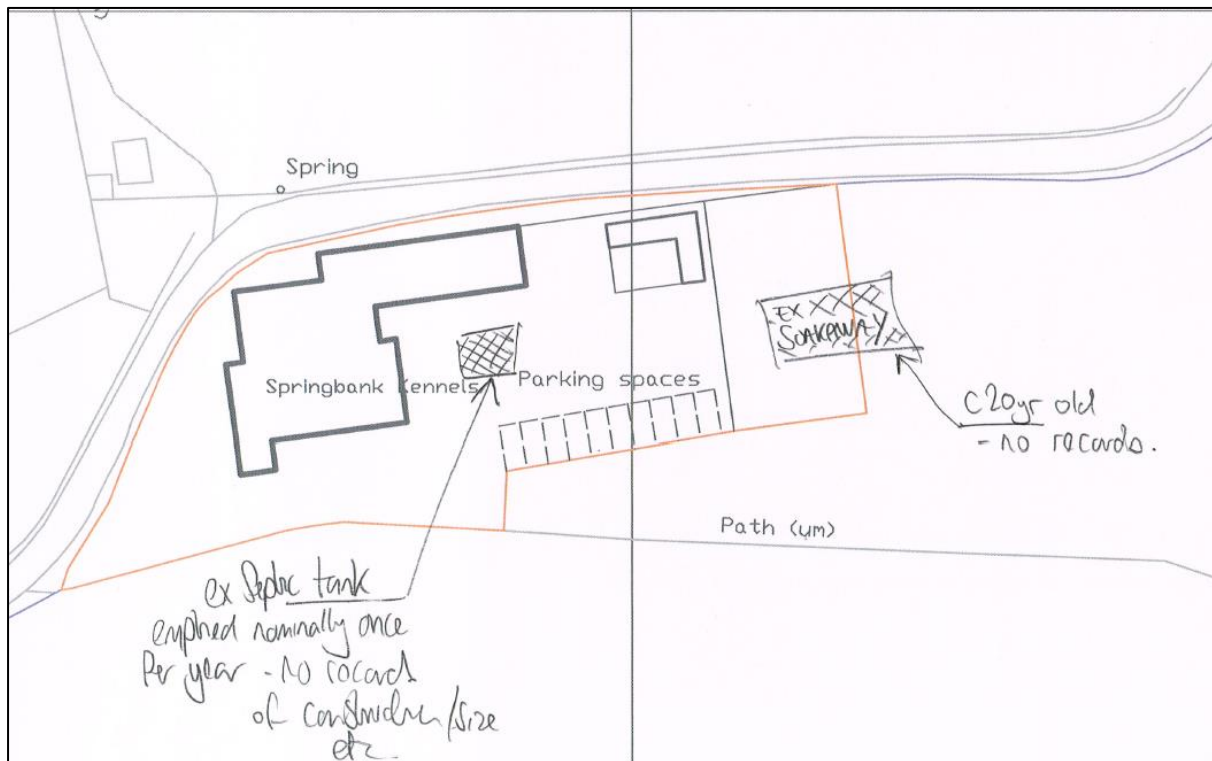
Trial holes and subsoil permeability tests should be undertaken to attain the necessary percolation rates to inform any soakaway design.

The foul water from the new development can be connected in to the existing FW septic tank as required. The tank is currently de-sludged once per year so the maintenance time between emptying will have to be reduced to suit the new regime.

The above will be subject to more accurate calculation as part of the UK Building Regulations Approvals and inform the detailed design.

4 Appendix.

4.1 Existing Plan Sketch.



4.2 Proposed Plans.

