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The Copeland Centre,
Catherine Street, Whitehaven,
Cumbria CA28 7SJ

DRAINAGE AND WASTE DISPOSAL - PART H

Foul Water Drainage - H1

In each case the requirement is that the first method on the list will be used - **unless** it is not "reasonably practicable" to do so, when the next method must be used (and so on).

For example, the Building Regulations will not now allow the installation of a septic tank unless it can be demonstrated that it would not be "reasonably practical" to connect to a public sewer or a private sewer.

Sanitary Pipework

- 1) Cages fitted to the top of Soil and Vent pipes must be metal in areas with rodent control problems
- 2) WC pipework should not allow light through (as it encourages damage by rodents)
- 3) Boiler condensate may connect to sanitary pipework - pipes to be min 22mm dia with 75mm trap.
- 4) Rodding points installed in Soil stacks must be above the spillover level of the lowest connected appliance.

Order of priority
1. A public sewer
2. A private sewer
3. A Septic tank or treatment system
4. A Cesspool

Foul Drainage

- 1) Includes all foul pipework up to the point of connection with the sewer/septic tank etc - which clarifies the position with regard to pipework put in at the same time as the sewer. For example, pipework from the sewer to the back of the highway (to allow for future connections) **will** require Building Regulation consent/inspection.
- 2) Pipework serving more than 10 dwellings must be 150mm diameter or greater.
- 3) Drains serving hot food premises must have grease separators.
- 4) Drains connecting into exg pipework (other than at a manhole) must use prefabricated units to avoid the use of "saddles". Where the use of a saddle is unavoidable, the hole in the existing pipe must be drilled - not broken out.
- 5) New provisions are introduced to limit the effects of surcharging drains - to prevent the foul sewage entering properties (particularly basements) in the event of flooding etc.
- 6) When planning the drainage layout for new developments, private (i.e. drains that serve more than one property) and public sewers must be positioned so as to make reasonable allowance for the possibility of future extensions without needing to build over the sewer.

DRAINAGE AND WASTE DISPOSAL - PART H (Cont)

- 7) Drains passing through walls must either use "Rocker pipes" or the hole around the drain must be filled with compressible material (in addition to the rigid sheet material already required each side).
- 8) Rodent control must be taken into account on re-developed sites. This may include sealed inspection chambers, intercepting traps, specialist rodent barriers and solid gully covers.
- 9) Where both foul and surface water sewers are available, all connections made on site must be **proved** to connect to the right one.

Wastewater treatment systems and cesspools - H2

Septic tanks and cesspools

- 1) Septic tanks must have a minimum capacity of 2700 litres (4 people) - plus 180 litres for each extra person.
- 2) Cesspools must have a minimum capacity of 18,000 litres (2 people) - plus 6,800 litres for each extra person.
- 3) Both must be sited at least 7m from the habitable part of any building (preferably downslope), within 30m of a suitable tanker access and be capable of being emptied without the need for the hose to pass through the building.
- 4) A notice must be provided within the building describing the system, emptying details and legal responsibilities.
- 5) The revised regulations now cover the outfall drainage from septic tanks - must be 15m from any building, 10m from any watercourse, away from soakaways etc and not covered by drives, roads or paved areas. The outfall drainage system must be designed following a percolation test, and is likely that consent from the Environment Agency will also be required.

Packaged treatment plants

- 1) Must be type tested in accordance with BS 7781 - and if it is electrically powered, it must be able to function adequately for 6 hours without power (or have a backup power supply)
- 2) The discharge must be at least 10m away from watercourses or buildings
- 3) A notice must be provided within the building describing the required maintenance and legal responsibilities.

Constructed wetlands/reed beds and greywater storage systems

- 1) The Approved Document now includes details of both horizontal and vertical flow reed bed treatment systems
- 2) Greywater and rainwater storage systems storing water for re-use within the building must be watertight, well ventilated and be provided with a durable and lockable access cover to allow emptying and cleaning. Where the storage system has an overflow connection to a drain or sewer an anti-backflow device should be fitted.

DRAINAGE AND WASTE DISPOSAL - PART H (Cont)

Rainwater Drainage - H3

1. As with Foul drainage, the Regulations now specify an order of priority for methods of disposal. The effect of this is that you can no longer simply choose to discharge rainwater to a sewer - even where a separate surface water sewer exists. If it is reasonably practicable to use either a soakaway or watercourse - then applicants must do so.
2. Soakaways need to be **designed**. Details of rainfall intensity, porosity tests and storage capacity are now included in the Approved Document, as are details of swales, filter drains and detention ponds which may also be used.
3. The effective roof areas for any given roof pitch have been changed - for example the effective area for a 30 degree roof pitch is now 1.29 multiplied by the plan area. Gutter sizes may need to increase accordingly.
4. Syphonic and eaves drop systems are now included in the Approved Document guidance.
5. Certain paved areas (disabled access routes, common access areas and routes to waste bins) must either be free draining (away from buildings) or pervious to allow water to soak away. If this is not possible then gullies/channels need to be provided.
6. Areas that may produce contaminated drainage need to be kept separate for treatment. For example, areas that may be affected by petrol or oil spillage should drain in the first instance to an oil interceptor.

Building over sewers - H4

- 1) The regulations have been changed, so that any application for new work or underpinning within 3m of a sewer shown on records kept by the sewerage undertaker, must be a Full Plans application.
- 2) No building should cover an existing manhole that serves more than one property.
- 3) No covered length should exceed 6m, be more than 225mm diameter or more than 3m deep
- 4) An alternative route for the sewer at least 3m from the building should be available so that it could (if necessary) be diverted without affecting the building.
- 5) Sewers should be protected during the construction process to prevent damage.

Separate systems of drainage - H5

- 1) Rainwater drainage may only connect to a foul sewer if a soakaway or a watercourse cannot be used (see H3) and a separate surface water sewer is not available
- 2) Where only a foul sewer is available, but a surface water sewer is under construction, a separate system must be constructed up to the point of connection to the foul sewer. This must allow the rainwater system to be later separated and connected to the surface water sewer without unnecessary inconvenience to occupiers.
- 3) Where rainwater drainage from paved areas may be contaminated and could present a risk of pollution, it may connect to the foul sewer subject to the consent of the sewerage undertaker being obtained first.

DRAINAGE AND WASTE DISPOSAL - PART H (Cont)

Solid Waste Storage - H6

- 1) For domestic developments, space should be provided for two containers (one for recyclable waste) having a combined capacity of 0.25m³ - generally an area 1.2m square would be considered acceptable. The location of the waste storage area should be shown on the plan, and should normally allow the containers to be sited within 25m of the collection point and 30m of the dwelling. It should be possible to move containers to the collection point without needing to pass through a building, and the pathway used should be well drained, have a maximum gradient of 1 in 12, and preferably no steps - although a maximum of 3 may be permissible if unavoidable.
- 2) External storage areas should be away from windows or ventilators and should preferably be in the shade or under cover. They should also be located so as not to interfere with pedestrian or vehicle access to buildings.
- 3) Where buildings are altered or extended, the waste storage area should be shown on the plan and care taken to ensure that the provision is not made worse. Alternatively the storage area could be moved
- 4) For non-domestic developments, the waste collection authority must be consulted for guidance on the volume and nature of waste storage required, location of storage areas and access for removal of waste etc.