

AGENDA ITEM 10

Drainage Control for new development under the Building Regulations

Developers are advised by the Water Authority to contact them at an early stage to discuss the provision of drainage especially for the provisions of Adoption to Public Sewers. In their advice they suggest this should be done even before a planning application is made.

This is presumably to make sure wherever possible that the sewers can follow the lines of new highways for new housing developments and/or to determine what may need to be done in relation to the robustness of the existing public sewer system.

Developers are given good guidance from Severn Trent to the procedures.

Among many items able to be downloaded from their website is

- Protocol on Design, Construction and Adoption of Sewers in England and Wales. Published by Dept for Environment, Food and Rural Affairs in April 2002

This coincides with the date (1st April 2002) that the new guidance to the Building Regulations (Approved Document H) for Drainage and Waste Disposal superseded Section 18 of the Building Act 1984. (amended by SI/2001/3335)

The drains that are proposed to become public sewers (i.e. responsibility of the Water Authority) are required to be inspected for acceptability by the Water Authority during their formation.

If the water authority is unhappy with the developers design and construction they may not accept adoption of the drain. If this is the case then the drains will be designated private sewers and become the joint responsibility of all that benefit from the system until it reaches a public sewer.

Any drains foul or surface that are not proposed to be public sewers (private sewers or drains) fall within the jurisdiction of the Building Regulations where the developer is required to agree the framework for inspection and testing with the Building Control Body (i.e. local authority building control or privately employed approved inspectors).

When a system falls under the control by SDDC Building Control the majority of drains are inspected prior to backfilling for their installation, line and level and for the adequate provision of access to the system.

It is usual for a percentage of drain runs to be tested for their air-tightness. It is left to the judgement of the surveyor doing the job to the extent he does or does not test the drains.

AGENDA ITEM 10

When a new building (with a new foul drainage system) has to enter a private drainage system before going into the public sewer, it is the responsibility of the Building Control Body to gain a reasonable level of confidence that the private drain (right up to its connection to the public sewer) being employed is suitable for the new installation that is proposed to enter it. Requiring a CCTV survey and making all reasonable efforts to inspect the existing installation can do this.

The legal frame work for dealing with drainage under the Building Regulations is Part H of the Building Regulations 2000 (as amended) deals drainage and waste disposal.

It is divided into Six distinct areas:

1. H1-Foul water drainage
2. H2-Wastewater treatment systems and cesspools
3. H3-Rainwater drainage
4. H4-Building over sewers
5. H5-Separate systems of drainage
6. H6-Solid waste storage

Details of the statutory requirements are reproduced below – these requirements are accompanied in the Approved Documents by substantial guidance.

H1-Foul water drainage

An adequate system of drainage shall be provided to carry foul water within the building to one of the following, listed in order of priority-

- A public sewer, or, where that is not reasonably practicable,
- A private sewer communicating with a public sewer; or where that is not reasonably practicable,
- Either a septic tank which has an appropriate form of secondary treatment or another wastewater treatment system; or where that is not reasonably practicable,
- A cesspool

(Does not apply to water which has been used for personal washing or for the washing of clothes, linen or other articles to collection systems for re-use.)

AGENDA ITEM 10

<i>Requirement</i>	<i>Limits on application</i>
Foul water drainage	
H1. (1) An adequate system of drainage shall be provided to carry foul water from appliances within the building to one of the following, listed in order of priority: (a) a public sewer; or, where that is not reasonably practicable, (b) a private sewer communicating with a public sewer; or, where that is not reasonably practicable, (c) either a septic tank which has an appropriate form of secondary treatment or another wastewater treatment system; or, where that is not reasonably practicable, (d) a cesspool. (2) In this Part 'foul water' means waste water which comprises or includes: (a) waste from a sanitary convenience, bidet or appliance used for washing receptacles for foul waste; or (b) water which has been used for food preparation, cooking or washing.	Requirement H1 does not apply to the diversion of water which has been used for personal washing or for the washing of clothes, linen or other articles to collection systems for re-use.

H2 - Wastewater treatment systems and cesspools

1. Any septic tank and its form of secondary treatment, other than wastewater treatment system or cesspool, shall be sited and constructed that-
 - a) It is not prejudicial to the health of any person;
 - b) It will not contaminate any watercourse, underground water or water supply;
 - c) There are adequate means of escape for emptying and maintenance;
 - d) Where relevant, it will function to a sufficient standard for the protection of health in the event of a power failure
2. Any septic tank, holding tank which is part of a wastewater treatment system or cesspool shall be-
 - a) Of adequate capacity;
 - b) So constructed that it is impermeable to liquids; and
 - c) Adequately ventilated.
3. Where a foul water drainage system from a building discharges to a septic tank, a wastewater treatment system or cesspool, a durable notice shall be affixed in a suitable place in the building containing information on any continuing maintenance required to avoid risks to health.

AGENDA ITEM 10

Wastewater treatment systems and cesspools

H2. (1) Any septic tank and its form of secondary treatment, other wastewater treatment system or cesspool shall be so sited and constructed that:

- (a) it is not prejudicial to the health of any person;
- (b) it will not contaminate any watercourse, underground water or water supply;
- (c) there are adequate means of access for emptying and maintenance; and
- (d) where relevant, it will function to a sufficient standard for the protection of health in the event of a power failure.

(2) Any septic tank, holding tank which is part of a wastewater treatment system or cesspool shall be:

- (a) of adequate capacity;
 - (b) so constructed that it is impermeable to liquids;
- and
- (c) adequately ventilated.

(3) Where a foul water drainage system from a building discharges to a septic tank, wastewater treatment system or cesspool, a durable notice shall be affixed in a suitable place in the building containing information on any continuing maintenance required to avoid risks to health.

H3-Rainwater drainage (does not apply to the gathering and reuse of rainwater)

- 1) Adequate provision shall be made for rainwater to be carried from the roof of the building.
- 2) Paved areas around the building shall be so constructed as to be adequately drained. (Limitations on application)
- 3) Rainwater from a system provided pursuant to sub-paragraphs 1) and 2) shall discharge to one of the following , listed in order of priority –
 - a) An adequate soakaway or some other adequate infiltration system; or, where that is not reasonably practicable,
 - b) A watercourse; or, where that is not reasonably practicable,
 - c) A sewer

AGENDA ITEM 10

<i>Requirement</i>	<i>Limits on application</i>
Rainwater drainage H3. (1) Adequate provision shall be made for rainwater to be carried from the roof of the building. (2) Paved areas around the building shall be so constructed as to be adequately drained. (3) Rainwater from a system provided pursuant to sub-paragraphs (1) or (2) shall discharge to one of the following, listed in order of priority: (a) an adequate soakaway or some other adequate infiltration system; or, where that is not reasonably practicable, (b) a watercourse; or, where that is not reasonably practicable, (c) a sewer.	Requirement H3(2) applies only to paved areas: (a) which provide access to the building pursuant to paragraph M2 of Schedule 1 (access for disabled people); (b) which provide access to or from a place of storage pursuant to paragraph H6(2) of Schedule 1 (solid waste storage); or (c) in any passage giving access to the building, where this is intended to be used in common by the occupiers of one or more other buildings. Requirement H3(3) does not apply to the gathering of rainwater for re-use.

H4 - Building over sewers

- 1) The erection or extension of a building or work involving the underpinning of a building shall be carried out in a way that is not detrimental to the building or building extension or to the continued maintenance of the drain, sewer or disposal main.
- 2) In this paragraph “disposal main” means any pipe, tunnel, or conduit used for the conveyance of effluent to or from a sewage disposal works, which is not a public sewer.
- 3) In this paragraph and paragraph H5 “map of sewers” means any records kept by a sewerage undertaker under section 199 of the water Industry Act 1991 – c.56

AGENDA ITEM 10

Requirement H4 only applies to work carried out –

- a) Over a drain, sewer or disposal main which is shown on any map of sewers; or
- b) On any site or in such a manner as may result in interference with the use of, or obstruction of the access of any person to, any drain, sewer or disposal main which is shown on any map of sewers.

<i>Requirement</i>	<i>Limits on application</i>
Building over sewers H4. (1) The erection or extension of a building or work involving the underpinning of a building shall be carried out in a way that is not detrimental to the building or building extension or to the continued maintenance of the drain, sewer or disposal main. (2) In this paragraph 'disposal main' means any pipe, tunnel or conduit used for the conveyance of effluent to or from a sewage disposal works, which is not a public sewer. (3) In this paragraph and paragraph H5 'map of sewers' means any records kept by a sewerage undertaker under section 199 of the Water Industry Act 1991 (a).	Requirement H4 applies only to work carried out: (a) over a drain, sewer or disposal main which is shown on any map of sewers; or (b) on any site or in such a manner as may result in interference with the use of, or obstruction of the access of any person to, any drain, sewer or disposal main which is shown on any map of sewers.

(a) 1991 c.56.

H5 – Separate systems of drainage

Any system for discharging water to a sewer which is provided pursuant to paragraph H3 shall be separate from that provided for the conveyance of foul water from the building.

Requirement H5 applies only to a system provided in connection with the erection or extension of a building where it is reasonably practicable for the system to discharge directly or indirectly to a sewer for the separate conveyance of surface water which is –

- a) Shown on a map of sewers; or
- b) Under construction either by the sewerage undertaker or by some other person (where the sewer is the subject of an agreement to make a declaration of vesting pursuant to section 104 of the Water Industry Act 1991 c.56

AGENDA ITEM 10

<i>Requirement</i>	<i>Limits on application</i>
Separate systems of drainage H5. Any system for discharging water to a sewer which is provided pursuant to paragraph H3 shall be separate from that provided for the conveyance of foul water from the building.	Requirement H5 applies only to a system provided in connection with the erection or extension of a building where it is reasonably practicable for the system to discharge directly or indirectly to a sewer for the separate conveyance of surface water which is: (a) shown on a map of sewers; or (b) under construction either by the sewerage undertaker or by some other person (where the sewer is the subject of an agreement to make a declaration of vesting pursuant to Section 104 of the Water Industry Act 1991 (a)).

(a) 1991 c. 56

H6 – Solid waste storage (not drainage related)