The future management of foul drains and sewers

- The transfer of private sewers & lateral drains to Water & Sewerage Companies in England & Wales
- The implementation of the Flood and Water Management Act 2010

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Specific areas covered in this presentation

- Foul Sewers
  - Transfer of existing private sewers
  - Layout of new sewers after the transfer
  - Proposed Government build standard for adoptable sewers

- Stormwater Management
  - Brief overview of the new act
  - Future responsibilities
  - Approval & adoption of new schemes
  - Proposed National Build Standard for SUDS

Sewer transfer proposals

- All existing lateral drains and private sewers that connect to the public sewer system to be adopted by the water & sewerage companies (WASCs) on 1st October 2011.
- Transfer will be automatic, although owners of private sewers will have the right of appeal.
- Powers already exist in the Water Industry Act 1991 & the Water Act 2003 and the regulations detailing the arrangements for transfer have now been approved by Parliament.
- The adoption of existing privately owned sewer pumping stations and pumping mains will be delayed until 1st October 2016

- Sewers, by definition, serve more than one property and drains serve a single property. A lateral drain is the section of pipework serving a single property which is outside the property boundary.

Typical arrangement on an existing residential development

Typical arrangement after sewer transfer
Proposed layout of sewers on new developments

Under draft proposals suggested by the water companies:

1. Private drains should be designed to discharge to the front of the property.
2. A demarcation chamber to be constructed to denote the interface between the house owner and water company’s responsibility.
3. Adoptable sewers can be 100 mm diameter serving up to 10 properties (currently adoptable sewers are required to be 150 mm minimum).
4. Sewers to be located either under roads or in front gardens to improve ease of access for maintenance.

Proposed typical arrangement after sewer transfer

Transitional arrangements for developments under construction are still to be advised. Final proposals are due to be published for public comment in May 2011.

Under draft proposals suggested by the water companies:

- Individual house connections under road
- Drain (responsibility of house owner)
- Lateral (responsibility of water company)
- Demarcation Chamber (responsibility of water company)
- Public sewer (responsibility of water company)
- Footpath
- Public Highway
- Drains located under building slab

Proposed typical arrangement after sewer transfer

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Proposed Build Standard for sewers

- A draft of the proposed build standard for sewers is due to be published for public comment (in May 2011) for enforcement in July 2011.
- The document will be published by DEFRA and will be mandatory for all water companies.
- The intention is to eliminate varying requirements between Water Companies.
- Transitional arrangements for developments under construction or in an advanced stage of design have not yet been announced.
- An Interim Technical Addendum to "Sewers for Adoption 6" has been released until version 7 is finalised.
- Initial indications suggest that the standard will include requirements for plastic sewer pipes to withstand higher water jetting pressures (as currently required by some water companies).
- There may also be additional requirements for joints in pipe systems to have greater resistance to root ingress.

Why National Standards?

The Flood & Water Management Act 2010

- Responsibility for stormwater management will be given to local authorities (County and Unitary Councils) under the supervision of the Environment Agency.
- Councils will be required to conduct an extensive mapping programme to identify how runoff is managed in each catchment area (priority will be given to those areas with a high risk of flooding).
- The act will also be used to further promote the use of Sustainable Drainage Systems (SUDS) for both new and existing catchment areas.
- The councils will become the SUDS approving body (SAB) and will also have responsibility for adopting and maintaining new SUDS schemes serving more than one property.

A national standard for the design, construction, operation and maintenance of SUDS is currently being drafted and was scheduled to be published for comment in October 2010, and still not published.
Different types of unit behave in different ways
Cannot simply substitute one for another

Proposals for the Adoption Process for SUDS on new developments
• The automatic right to connect surface water to the public sewer network will cease
• Proposals will be required to comply with the new SUDS National Standards
• Planning approval from the SAB will be required
• Where planning permission and SUDS approval are required, the applications will be submitted together
• The planning authority will notify the developer of the outcome of both at the same time
• As part of the approval process the SAB can require a non-performance bond to be paid by the developer (the bond could be equivalent to the build cost of the SUDS scheme)
• In the expected rare event that a future development has a conventional stormwater drainage system, the WASC’S will retain responsibility for adoption of the stormwater sewers where connection is made to an existing sewer.

Summary – Foul Sewers
• Significant changes proposed to the conventional way that building drainage is laid out and the pipe materials which can be used for adoptable sewers.
• The proposals will entail an overall reduction in the extent of private drainage and a corresponding increase in adoptable sewers
• Possibility of achieving uniformity across all water companies with regard to sewer design and adoption
• Expectation that drainage installation costs will increase overall but the extent is not clear until final details of the new sewer build standard are known

Summary – Stormwater Management
• Local authorities to take responsibility for stormwater management
• Stormwater drainage details will need to be submitted at a very early stage of projects
• General requirement that SUDS solutions are used with local authorities made responsible for design approval, adoption and maintenance.
• Cost implications are unknown until full details of the National Standard for SUDS are understood.

Thank you for your attention