## SEWERAGE SECTOR GUIDANCE

### CHANGE PROPOSAL FORM

Please complete the form below to submit a change proposal to the Sewerage Adoption Panel.

**Name of Proposed Change:** Correction to maximum depth of inspections chambers

### Section 1 - Proposed Change

A. Please outline the details (including any relevant supporting documentation) of the proposed change.

*The maximum permitted depth of inspection chambers of 3 metres in SFA7 (2012) was retained in the draft Design and Construction Guidance throughout the consultation process (see 14/2/19 DCG consultation draft), until the final consultation draft (25/3/19) where it was changed to 2 metres. Errors were also introduced at this stage into the selection process in Figure 1 affecting the use of shallow concrete manholes.*

**Change:**
- The maximum depth for (Type D) inspection chambers to 3 metres.
  - Figures B.18 – B.21 back to 14/2/19 consultation draft
  - Clause B5.2 to back to 3 metres
  - Figure 1 back to 14/2/19 consultation draft

B. Has the proposed change been considered previously (including during any prior consultation process)? If so, please provide details.

No. The maximum permitted depth of inspection chambers of 3 metres in SFA7 (2012) was retained until the final consultation draft (25/3/19) where it was changed to 2m.

Whilst this change was included in the final package of documents (25/3/19), it was the only technical change made to the DCG consultation draft (14/2/19). Most water companies, their customers (housebuilders) and chamber manufacturers were not aware of the change and the errors introduced to the selection process diagram (Figure 1) as a result. The final consultation closed on 31/3/19.

The BPF Pipes Group, members of which manufacture inspections chambers for use with clay and plastic pipes, worked closely with the team preparing the update to SFA / DCG to ensure consistency of guidance with national standards and the accuracy of all manhole / chamber diagrams. We are therefore disappointed that such a major technical change to industry practice was not discussed with the manufacturers of these products prior to including it in the final consultation package nor highlighted to water companies, customers and manufacturers during the final consultation.

C. Does the proposed change need to be considered by a specific date? If so, please explain why?

We have only been able to identify one water company with an addendum varying the provisions in SFA7 (2012) in this respect. We are not aware of any problems which have arisen from these provisions and the reason for the change is unclear.

After 1st April 2020 and without a change to the DCG:
- customers installing access points up to 3 metres deep to serve 4-20 properties will no longer be permitted to install inspection chambers and will need to use Type A or Type B manholes.
D. Does the proposed change raise any health and safety issues? If so, please provide details.

Yes.

To meet the requirements of the Confined Spaces Regulations 1997, preference is for working at ground level i.e. to carry out work without man entry wherever possible. However, where access is required, this needs to be carried out safely.

Inspection chambers to a depth of 3 metres have been permitted for use in the public sewer network since the publication of Sewers for Adoption 7th edition in 2012. This reflected the need to minimise entry into confined spaces to carry out operational activities.

Over the years, there has been confusion over the safety provisions relating to access to drains and sewers. This was not helped by conflicting information in Building Regulations, Sewers for Adoption and the British Standard BS EN 752: 2008: Drain and sewer systems outside buildings - Sewer system management.

- The clear opening size into a sewer will impact on accessibility and the safety of operational staff / public.
- Limiting the depth of chambers from 3m to 2m will not impact on safety.

The UK water industry, inspection equipment contractors and product manufacturers worked together to develop clear and consistent guidance on clear openings to prevent access or where access is required, provide enough space for safe ingress / egress. This is included in the National Annex to BS EN 752: 2017 (NA6.4.3). For inspection chambers greater than 1 metre depth safe egress cannot be achieved, so the National Annex recommends that the clear opening is reduced to prevent access. Conversely, for shallow manholes (<1.5m), the National Annex to BS EN 752 recommends that the clear opening is increased to permit crouching during work.

These safety recommendations were mirrored in the revision work for SFA7, then the DCG and was included in the typical drawings (B18 – B25), see 14/2/19 consultation draft.

E. Please provide any further information relevant to the change proposal.

Performance: Plastic inspection chambers for adoptable systems are manufactured and third party certified to BS EN 13598-2. The performance requirements and testing are consistent across all shaft depths. Chambers specified to BS EN 13598-2 with a shaft depth of 2m or 3m perform in the same way. Limiting the depth to 2m does not affect the performance of installed products.

(Notes: Members of the BPF Pipes Group can provide detailed information on the performance testing, including structural integrity, resistance to vertical deformations and leaktightness, if it is helpful.)

Standards: At the same time as SFA7 was being updated leading to the DCG, BS EN 13598 Parts 1 and 2 have been under revision. These have now been published by BSI (July 2020). One of the key improvements secured by the UK during the revision was the clarification of scope to avoid confusion between Parts 1 and 2. This will help sewerage companies and their customers as all inspection chambers and manholes for the public sewer network will be covered by the revised BS EN 13598: Part 2.

Note: Inspection chambers to the updated BS EN 13598 Part 1 will be only for use in private drains i.e. located in pedestrian areas above the ground water table, to a maximum depth of 2m from ground level to invert of the main channel. The performance requirements for these shallow chambers are not as demanding as those under Part 2 which are intended for use in pedestrian or trafficked areas outside of the building structure.
**Section 2 - Scope of the Proposed Change**

A. Which section(s) of the Sewerage Sector Guidance and Model Adoption Agreement does the proposed change concern? Please provide specific references to the relevant documentation.

Appendix C Design and Construction Guidance

Figure 1
Figures B.18 – B.21
Clause B5.2.

B. What consequential amendments to the Sewerage Sector Guidance and Model Adoption Agreement would be required as a result of the proposed change? Please provide specific references.

None

**Section 3 - Rationale for the proposed change**

A. What is the nature and effect of the current position/existing arrangements?

SFA7 (2012) permits the use of inspection chambers to a maximum 3m depth. The proposed changes does not vary this provision.

B. What is the nature and effect of the proposed change?

The correction will permit the ongoing use of inspection chambers to a maximum 3m depth which has been commonplace since the publication of SFA7 in 2012.

C. Why is the proposed change necessary?

Without this correction, the changes made in SFA7 to address safety by facilitating above ground working will be reversed.

Water companies would need to specify Type A or Type B manholes for all access points up to 3 metres deep to serve 4-20 properties instead of using inspection chambers. There will be increased product purchase (manholes, larger covers) and labour costs associated with this.

D. What is the desired outcome of the proposed change?

Correction to continue provisions used since 2012 i.e. use of inspection chambers to a depth of 3 metres.
Section 4 – Impact on the Principles and Objectives of the Code

A. Outline, how and why the proposed change maintains consistency with the principles and objectives of the Code for Adoption Agreements, and any relevant statutory or regulatory requirements?

Regulatory - requirements of the Confined Spaces Regulations 1997, preference is for working at ground level i.e. to carry out work without man entry wherever possible. Changing from inspection chambers to manholes does not support this.

Principles and objectives of the Code – In the consultation to the Code, June 2017, it was noted that "water companies take different approaches to the provision of services with respect to Adoption Agreements. [ ]. This means there are issues of consistency of approach and many water companies have their own specific arrangements in place. These company-specific arrangements are not always transparent and can create unnecessary complexity."

The use of inspection chambers was one topic where there was good consistency in approach (with only one water company to our knowledge varying from this) and no call for changes to the provisions.

The lack of transparency shown in making changes to the final consultation draft with minimal response time does not seem to support the aims of the code.

Section 5 – Impact on Customers and Sewerage Companies

A. What is the impact of the proposed change (be it positive and/or negative) on Customers?

Customers (housebuilders) would avoid unnecessary increase in costs, changes to supply contracts and amendments to layouts due to increased space requirements.

B. Is there any evidence of customer concern relating to the proposed change? If so, please provide details.

No – see notes about lack of awareness.

C. What is the impact of the proposed change (be it positive and/or negative) on Sewerage Companies?

The change is necessary to allow water companies and their customers to continue with current best practice after 1st April 2020, benefiting from non-man entry working and costs associated with the installation of inspection chambers.

D. Estimate how much notice Customers and Sewerage Companies may reasonably require to be able to meet any new requirements arising from the proposed change.

None – this will ensure that current arrangements continue.

E. What is the suggested implementation date of the proposed change?

Immediate (1/4/20)
Section 6 – Stakeholder Engagement

A. Please outline any informal/formal consultation undertaken with relevant stakeholders likely to be affected by the proposed change, including details of any responses provided by stakeholders.

Our discussions with water companies and housebuilder indicate that none are aware of the significant technical change introduced during the final one-week consultation and now included in the published Design and Construction Guidance.

Section 7 – Applicant’s Details

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