

# Anglian Water's

## Memorandum of Understanding (MoU)

### Installation and repair of fire hydrants and use of water for firefighting purposes

**June 2018**

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## Memorandum of Understanding

This Memorandum of Understanding (including appendices) has been agreed between Anglian Water Services and the Fire Services within its region. Its purpose is to form a common approach and a basis for establishing an efficient working relationship between these parties. The document is formative in nature, and therefore subject to change and amendments as working practices and agreements develops.

This document is not a contract nor is it legally binding and should be read in conjunction with the current edition of the <http://www.water.org.uk/national-guidance-document-provision-water-firefighting-3rd-edition-jan-2007>

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# 1 Interpretation

1.1 The following terms shall have the meanings assigned to them:

<b>AWS</b>	means Anglian Water Services Limited and Hartlepool Water Services Limited.
<b>@one Alliance</b>	the part of Anglian Water that delivers major capital works including strategic water main.
<b>Charges Scheme</b>	means the charges scheme made annually by AWS under the Water Industry Act 1991.
<b>Commencement Date</b>	means the date when work is to commence on new main laying works, mains replacement (including diversions) and rehabilitation works.
<b>Commission Date</b>	means the date when a hydrant becomes operational and available for fire fighting purposes.
<b>Partner</b>	a third party organisation working on behalf of the Fire Service.
<b>Fire Service</b>	means the Fire and Rescue service for each area within AWS region and for this purpose includes: a) Bedfordshire Fire and Rescue Service b) Buckinghamshire Fire and Rescue Service c) Cambridgeshire Fire and Rescue Service d) Essex Fire and Rescue Service e) Humberside Fire and Rescue Service f) Lincolnshire Fire and Rescue Service g) Norfolk Fire and Rescue Service h) Northamptonshire Fire and Rescue Service i) Nottinghamshire Fire and Rescue Service j) Suffolk Fire and Rescue Service k) Leicestershire Fire and Rescue Service l) Cleveland Fire Authority
<b>Guarantee Period</b>	the period of 12 months commencing from the date of the Fire Services acceptance of the hydrant installation/repair.
<b>Inset</b>	a development where the water mains are the responsibility of an organisation, other than Anglian Water.
<b>Minor Defects</b>	means works not likely to cause interruption to supply or requiring a shut-off.
<b>National Guidance Document</b>	means the <a href="#">National Guidance Document on the provision of water for firefighting (3<sup>rd</sup> edition: Jan 2007)</a> dated January 2007 and published by the Local Government Association and Water UK.
<b>New Hydrant Installation</b>	This will include the hydrant, chamber and cover. Satisfactory installation should include: <ul style="list-style-type: none"> <li>• 2" standpipe can be fitted to hydrant</li> <li>• Correct cover installed</li> <li>• Cover to surface level</li> <li>• Chamber correctly aligned</li> <li>• Hydrant aligned and in upright position</li> <li>• Spindle cap fitted</li> <li>• Cover secured to chamber.</li> </ul>

- 1.2 Any reference to a period specified by reference to a number of days shall be calculated by including weekends and bank holidays.
- 1.3 Except where the contrary is stated, any reference to notice being given may include notification by post, email or telephone provided, that any notification by telephone is confirmed in writing within 24 hours.

## **2 Notification of proposed new development mains**

- 2.1 Subject to AWS statutory duties to lay water mains within specific periods, AWS shall give the Fire Service 42 days written notice of any new mains to be laid.

All notices will include:

- a) A site location plan in sufficient detail to identify the site and the location of the existing mains in the area, and showing any existing hydrants.
  - b) Three copies of the proposed new mains design. Plans in can be sent and returned via email.
  - c) The planning reference number, where planning permission has been applied for.
  - d) The name and address of the developer.
- 2.2 The Fire Service shall respond by returning the plan marked with the position(s) of the new hydrants required, or washout hydrants to be adopted, as soon as reasonably practicable following receipt of the notice or, exceptionally, if AWS has not been able to give 42 days' notice, prior to the Commencement Date. If responses are required urgently, AWS will contact the relevant Water Officer.
  - 2.3 Where no hydrants or washout adoptions are required, the design shall be updated with '**NO HYDRANTS REQUIRED**'.
  - 2.4 AWS shall contact the Fire Service on receipt of payment from the developer to confirm that the scheme will be commencing.
  - 2.5 The Fire Service shall issue an official order number for each new fire hydrant required, usually once the commencement date is notified to the Fire Service.
  - 2.6 The Fire Service shall notify AWS where Document B, Part 2 of the Building Regulations applies where the developer is responsible for the payment of new hydrants.

- 2.7 AWS shall notify the Fire Service of the Commencement Date for mains construction within two working days of it being agreed with the developer, and request order numbers for hydrant installations if not already received.
- 2.8 AWS shall monitor schemes that have no start date 12 months after design, to ascertain if they are likely to proceed in the future. AWS will notify the Fire Service of any schemes that are not going to commence.
- 2.9 The Fire Service shall be consulted on any change to the initial notice and design instigated by either AWS or the developer, as the case may be, which will affect the length, line, size of the main, position of a hydrant or projected flow rate.
- 2.10 Where a developer is to self-lay water mains for a new development, the designer may be the developer, but design is vetted by AWS. To ensure continuity AWS, shall liaise directly with the Fire Service regarding the design of the mains and the provision of hydrants. Orders and payments for hydrants shall be submitted to AWS in the same way. AWS shall inspect self-lay hydrant installations prior to notification of installation to the Fire Service.
- 2.11 AWS shall provide a free of charge hydrant at the entrance to the site, should the Fire Service require it, this hydrant will be subject to the same acceptance criteria as hydrants that are paid for.

### **3 Notification of new strategic mains, main diversion, replacement and rehabilitation of existing mains**

- 3.1 AWS or @one Alliance shall give the Fire Service 42 days written notice of any new mains or existing mains to be replaced or rehabilitated.

All notices will include:

- a) A site location plan in sufficient detail to identify the location of the works and existing mains and apparatus including any existing hydrants.
  - b) Two copies of the design for the new or rehabilitated main, and the proposed Commencement Date.
- 3.2 The Fire Service shall respond by returning the plan marked with the hydrants which are required, any hydrants to be abandoned, and notification of any additional hydrant required, within 35 days of receipt of the notice or, exceptionally, if AWS or @one Alliance has not been able to give 42 days notice, prior to the Commencement Date.

- 3.3 Official orders are not required for abandoned, or like for like replacement hydrants on replacement mains or rehabilitated mains, as the cost shall be met by AWS. Orders will be required for any additional hydrant requirements.
- 3.4 If the Commencement Date is not included in the original notice, AWS or @one Alliance shall notify the Fire Service of it as it becomes known. The Fire Service shall then issue an official order for each additional hydrant if applicable.
- 3.5 The Fire Service shall be consulted on any change to the initial notice or design which will affect the length, line, size of the main, position of hydrant or projected flow rate.
- 3.6 AWS or @one Alliance will be responsible for the removal of all hydrants, indicators and street furniture that become redundant as a result of renewal or refurbishment works. Hydrants on decommissioned mains shall have the lids sprayed with a blue cross, to indicate the hydrant is no longer in use, until such time the street furniture is removed.
- 3.7 Under the Water Industry Act, hydrants cannot be requested on trunk mains. The definition of a trunk main in the Water Industry Act being a water main which is or is to be used by the Water Undertaker for the purpose of:
- a) Conveying water from a source of supply to a filter or reservoir, or from one filter or reservoir to another filter or reservoir.
  - b) Conveying water in bulk, whether in the course of taking a supply of water in bulk or otherwise, between different places outside the area of the Water Undertaker, from such a place to any part of that area or from one part of that area to another part of that area.

#### **4 Acceptance of new hydrants**

- 4.1 This section shall apply to the installation and acceptance of new and replacement hydrants on:
- New mains
  - Existing mains
  - Replacement mains
  - Rehabilitated mains
  - Diverted mains.

- 4.2 Following commissioning of the new main, AWS or @one Alliance shall inspect the hydrants and either sign off the hydrant installations as satisfactory, or arrange for remedial works to be completed. All new hydrant installations shall be photographed in order to prove any damage after the installation by the developer or other third parties. AWS shall inform the Fire Service of the date of the inspection so that joint inspections can be carried out if required.
- 4.3 Within 28 days of the date the hydrant installation was signed off, AWS or @one Alliance shall notify the Fire Service that the hydrant is available for inspection, with details of location of the fire hydrant, photographs of the hydrant installation, and the as laid plan.

The as laid plan shall show:

- a) The position of any hydrants installed, or washouts adopted, together with measurements from a fixed structure, i.e. building, wall, lamp post etc.
- b) The order number (if applicable) against each hydrant on the as laid plan.
- 4.4 Within 28 days of receipt of the notice of the hydrant installation, the Fire Service shall inspect the hydrant and inform AWS or @one Alliance, of either its acceptance, or listing the defects if it is unsatisfactory. AWS shall issue an invoice following the Fire Services acceptance of the hydrant installation.
- 4.5 An incomplete surface course will not be accepted by AWS as a reason for rejection of a hydrant provided the surface box is adequately secured to the pit with concrete surround and excavation is backfilled, as per the standard drawing for hydrant installations and BS 5306 Part 1. (see Appendix 2 – Technical standards for hydrant installation).
- 4.6 If remedial work is required, it shall be carried out within 28 days of receipt by AWS or @one Alliance. AWS or @one Alliance shall notify the Fire Service that the remedial work is complete and the hydrant is available for re-inspection. The Fire Service shall re-inspect the hydrant and inform AWS or @one Alliance whether or not the installation is satisfactory.
- 4.7 AWS and the @one alliance shall notify the Fire Services monthly of remedial works outstanding and proposed plan date.
- 4.8 The Fire Service shall be responsible for the cost of the maintenance of the hydrant following the expiry of the guarantee period.
- 4.9 If a hydrant is damaged by a developer or third party subsequent to its acceptance by the Fire Service and after completion of site reinstatement, AWS shall rectify the defects and recharge the developer or third party for the work.

## **5 Inset Appointments**

- 5.1 For some new developments within the Anglian Water area, Ofwat, the Water Industry Regulator, may award an operating licence for another company to supply water to the properties within the boundary of that development, this is known as an inset appointment.
- 5.2 The inset appointment will liaise with the Fire Services directly regarding hydrant provision on their development, and will have their own Charges Scheme. The inset appointee will also be responsible for carrying out any repairs or replacement of any defected hydrants once the main is commissioned and the Fire Service have inspected and accepted the hydrants.
- 5.3 The Inset Provider will be responsible for keeping fire hydrants on inset sites in good working order when requested by the Fire Authority to do so. The Fire Authority will meet the Inset Provider's costs for this work which are undertaken on a cost recovery basis in line with statutory obligations

## **6 Washout hydrants**

- 6.1 The Fire Service may apply to AWS to adopt washout hydrants for fire fighting purposes. The charges for adoption and subsequent maintenance shall be in accordance with the standard charges applicable at the date the order is placed. See Appendix 1 – Charges.

## **7 Hydrant inspections and tests**

- 7.1 The inspection and testing of hydrants shall consist of one or more of the following examinations as detailed in Section 6 of the National Guidance Document:
  - Above ground
  - Below ground
  - Wet pressure test
  - Dry test.
- 7.2 The frequency of inspections and tests shall be based on a risk assessment approach determined by the Fire Service.
- 7.3 Flow tests and/or pressure testing may be carried out whenever required for operational purposes. AWS may apply conditions to minimise disturbance to the distribution network in certain areas. The tests should be carried out with the distribution system under a normal daytime load where practicable. On traffic sensitive streets there may be a requirement to carry out testing out of hours.



- 7.4 The Fire Service shall maintain records of all tests, a copy of which shall be provided to AWS on request.
- 7.5 When inspecting or testing a fire hydrant the Fire Service may repair any Minor Defects and shall report any defects (not repaired) to AWS as soon as practicable.

## **8 Hydrant maintenance and repairs**

- 8.1 The Fire Service shall be responsible for the cost of maintenance of all accepted installations, except where damage by a third party is proved beyond reasonable doubt or is acknowledged by AWS.
- 8.2 All defects found by AWS or reported to them by members of the public will be notified to the Fire Service as soon as practicable.
- 8.3 AWS to notify the fire service at the time if a hydrant has been capped,
- 8.4 Repair to a hydrant, which is likely to cause an interruption to supply or require a shut off, shall only be carried out by AWS or its approved Partners.
- 8.5 Repairs to Minor Defects (e.g. post and plate, renew covers etc.) may be carried out by the Fire Service or a Partner appointed by the Fire Service.
- 8.6 AWS shall permit the Fire Services to use Kluber degripant and lubricant on seized hydrant spindles, see Appendix 7 - Use of Kluber Degripant on seized hydrants regarding the use of this product.
- 8.7 No repairs shall be carried out by AWS except upon receipt of an official order, unless for practical reasons this cannot be obtained in advance. The Fire Service shall notify AWS of the type of surface that the hydrant requiring repair is located in (e.g. road, footpath, and verge).
- Upon receipt of an order from the Fire Service, AWS will carry out the necessary work in accordance with the following timescales.  
Dangerous conditions (risk to persons or properties) within 24 hours.
  - Urgent repairs (insufficient fire cover) within 21 days.
  - Routine repairs within 56 days.

- 8.8 The Fire Service may at any time prioritise repairs within any of these categories.
- 8.9 Charges for repairs or replacement hydrants shall be charged in accordance with Section 17 and Appendix 1 – Charges, and at the charge applicable on the date the order is placed.
- 8.10 The Fire Service shall be informed that the hydrant is available for inspection within 14 days on completion of repair. This notification can be by either letter or email.
- 8.11 Within 28 days of receipt of the notice of the hydrant installation, the Fire Service shall inspect the hydrant and inform AWS or @one Alliance, of either its acceptance, or listing the defects if it is unsatisfactory. AWS shall issue an invoice following the Fire Services acceptance of the hydrant installation.
- 8.12 If remedial work is required, it shall be carried out within 28 days of receipt by AWS. AWS shall notify the Fire Service that the remedial work is complete and the hydrant is available for re-inspection. Within 28 days of notice of completion of remedial work, the Fire Service shall re-inspect the hydrant and inform AWS whether or not the installation is satisfactory.
- 8.13 Anglian Water can only request an official order for fire hydrant repairs if the fire hydrant is deemed as being **not in good working order**. The definition of good working order was defined by a court judgement, Veolia Water v London Fire Service.

The fire hydrant will be in “**good working order**” if and only if it fulfils each of the following functions:

- It is fit for purpose for fire fighting;
- It does not present a risk of contamination to the water supply;
- It is not a source of danger to members of the public or potential users.

The following would be defined as **hydrant is not in good working order**:

- A hydrant ( including frame and cover, and chambers) that is in a dangerous condition either for the user or the general public;
- If the state of the hydrant is such that water is overflowing the pit as a result of a leak;
- If there is a leak through the main valve at a rate such that it cannot be evacuated through any frost valve resulting in a substantial quantity of water accumulating in the outlet bowl, with the consequent risk that it might be drawn back through the valve into the water supply;

- If the pit is filled with silt to a level above the frost valve, with the result that the frost valve will be obstructed or the pit might fill up with water to a level above the opening of the outlet.

The following would be defined as **hydrant is in good working order**:

a) if there is a minor leak either:

- through the spindle that can not be remedied by tightening the valve;
- through the main valve that is being discharged through the frost outlet and the extent of the leak is such that it does not cause the pit to fill up with water and overflow.

b) a hydrant that is missing a false spindle cap

## 9 Flow requirements for fire fighting

- 9.1 AWS shall consult with the Fire Service at the planning stage of any proposals to make changes to the water distribution system that will result in a significant change to the output of a hydrant.
- 9.2 AWS shall endeavour to provide the flow requirements for fire fighting given in [Appendix 5 of the National Guidance Document](#) on new developments and during permanent system changes and shall inform the Fire Service when it estimates that these flows will not be available. It is recognised by both parties that AWS has no obligation to meet these ideal requirements and that the purpose of the information is to assist the Fire Service in planning their requirements. Flow levels are not a reason to reject a hydrant.
- 9.3 Notice of any interruption to supply to 150 properties or more and subsequent reinstatement of supply shall be given to the Fire Service as soon as is reasonably practicable. If possible, AWS shall give the Fire Service seven days notice of works affecting a fire hydrant.

Fire service	Telephone number	Email
<b>Bedfordshire</b>	01234 845000	control@bedsfire.com
<b>Buckinghamshire</b>	01183 589319	TVFCScontrol@tvfcs.gov.uk
<b>Cambridgeshire</b>	01480 444621	control@cambsfire.gov.uk
<b>Essex</b>	01376 576000	control.usar@essex-fire.gov.uk
<b>Humberside</b>	01482 567425	control@humbersidefire.gov.uk
<b>Leicestershire</b>	0116 2292000	control_group@lfrs.org

<b>Lincolnshire</b>	01522 582222	control.supervisor@lincoln.fire-uk.org
<b>Norfolk</b>	01603 810351	control@fire.norfolk.gov.uk
<b>Northamptonshire</b>	01327 302601	firecontrol@northantsfire.gov.uk
<b>Nottinghamshire</b>	0115 9675903	control@notts-fire.gov.uk
<b>Suffolk</b>	01480 444500	controlrecon@cambsfire.gov.uk
<b>Cleveland</b>	01429 872311	control@clevelandfire.gov.uk

9.4 AWS shall by request provide the following information.

- Known areas where the available system pressure may regularly fall below 15 metres head (1.5 bars).
- Known areas with a history of water quality deterioration form adverse system operation.
- Where water may be drawn in quantity from strategic filling points.

9.5 AWS shall support the installation of domestic and residential sprinkler systems. Where the distribution system flow and pressure are adequate, AWS shall permit the use of direct feed connections to its mains and in-line booster pumps to supply sprinkler systems.

9.6 Anglian Water shall give the Fire Services access to the online mapping system, digdat; [www.digdat.co.uk](http://www.digdat.co.uk)

9.7 AWS shall provide the Fire Service with assistance during an incident if required. If the assistance of AWS is required during an incident, the Fire Service should call the AWS Duty Manager on 01522 534 500, for non-incident related calls the fire service should call 08457 145 145.

## **10 Use of hydrants and washouts**

10.1 Except in an emergency, all hydrants and washouts shall be operated in accordance with the procedure detailed in Appendix 4 - AWS procedure for the third party use of hydrants.

10.2 The Fire Service may request the attendance of an AWS representative free of charge to any incident in order to assist in obtaining a supply of water.

10.3 The Fire Service shall not operate valves on the water distribution system except where these have been specifically identified and agreed as being

available for use in fire fighting circumstances. AWS shall be notified of each occasion they are used.

10.4 AWS shall control the third party use of standpipes connected to hydrants in accordance with the procedure detailed in **Appendix 5 - Filling of swimming pools**.

10.5 The Fire Service shall never force entry to AWS's treated water reservoirs to secure a water supply for fire fighting, without consultation with AWS, due to the risk of contamination to the public water system.

## **11 Works affecting hydrants**

11.1 Where AWS is made aware of any works that may affect the depth of any hydrant outlet, or any changes that will result in the hydrant ending up in a carriageway, AWS will inform the Fire Service.

11.2 AWS will consult with the Fire Service before any fire hydrant is moved.

11.3 AWS shall inform the Fire Service on the location of any hydrants in relation to blank caps, locking devices, long term pressure loggers or any other device being attached to the hydrants

11.4 Where AWS have installed standard locking caps to hydrants to stop vandalism and unauthorised use, AWS shall inspect these hydrants on an annual basis and inform the Fire Service of any defects. Locking caps should only be fitted by AWS, and the Fire service shall notify AWS of known hydrants that are subject to vandalism

## **12 Abandonment of hydrants**

12.1 The Fire Service may request either the permanent removal or adoption by Anglian Water as a wash out, any fire hydrant that is no longer required for operational purposes.

12.2 Within 56 days of the request, AWS will remove the posts and indicator plates from the abandoned or redundant hydrant and the fittings will cease to be the responsibility of the Fire Service.

12.3 For permanent removal Costs charged by AWS shall be in accordance with Section 17 and Appendix 1 – Charges.

### **13 Workmanship and materials**

- 13.1 All fire hydrant installations shall be to the current British or European standards.
- 13.2 AWS shall determine materials for use on hydrant installations and methods of working and shall ensure that they are suitable for their purpose. Quality of workmanship and materials shall be in accordance with the relevant standards and AWS specification as set out in Appendix 3 - Guidance for use of fire hydrants for routine re-filling of fire tenders.
- 13.3 The Fire Service will be informed of any changes to AWS specifications for materials.

### **14 Liaison**

- 14.1 Each Fire Service shall appoint a contact representative and a deputy who can deal with matters arising during that person's absence. AWS shall also appoint a contact representative for each Fire Service and a person to deal with any matters arising during that person's absence.
- 14.2 Both parties shall attend formal local liaison meetings to be held on a basis agreed by both parties, and also when necessary at the request of either party.
- 14.3 Both parties shall send representatives to Regional Liaison Group (CFOA) meetings.
- 14.4 If issues concern more than one Fire Service, a joint meeting of representatives of AWS and of all of the Fire Services may be called if appropriate.

### **15 Statutory duties**

- 15.1 Nothing contained in this Memorandum of Understanding shall replace or detract from the statutory duties of either party.

### **16 Charges**

- 16.1 All charges shall be calculated in accordance with the AWS Charges Scheme current at the time when the order for the works was placed.
- 16.2 Charges shall be levied in accordance with Appendix 1 – Charges.
- 16.3 AWS may review its charges annually with revisions coming into effect on 1 April each year. The Fire Services shall be informed as early as possible and before the charges become effective.

16.4 A separate invoice shall be sent in respect of each hydrant which has been installed or repaired and where charges are payable at the actual cost rate an itemised account shall be sent. Each invoice will state the order number given by the Fire Service.

16.5 The Fire Service shall make payment within 30 days of receipt of invoice, once the work has been deemed to be acceptable.

16.6 The following table gives the description of the work to be carried out:

Description	Work to be carried out
Installation of hydrant on a new water main as part of a main laying scheme.	Install tee on main, install riser and new hydrant, install chamber sections so hydrant is accessible, fit fire hydrant frame and cover to finished level and secure.
Installation of new hydrant washout on new water main as part of a main laying scheme	Install duck foot bend on main, install riser and new hydrant, install chamber sections so hydrant is accessible, fit washout frame and cover to finished level and secure.
Installation of new hydrant on an existing mains	Excavate main, install tee or under pressure saddle on the main, install riser and new hydrant, install chamber sections so hydrant is accessible, fit fire hydrant frame and cover to finished level and secure, backfill excavation and reinstate surface.
Hydrant repair/replace	Excavate existing hydrant, remove chamber sections, isolate water supply by either interruption of water supply, hydrant wizard or freezing, remove defective hydrant, install new hydrant, install chamber sections so hydrant is accessible, fit fire hydrant frame and cover to finished level and secure, backfill excavation and reinstate surface.
Chamber	Excavate existing sectioned or brick chamber, rebuild sectioned chamber, backfill excavation, replace or renew frame and cover, and reinstate surface.
Cover and frame	Excavate frame and cover, replace, realign or adjust level, backfill excavation and reinstate surface. Includes renewal of up to two chamber sections.
Post/plate	Renew or install fire hydrant post and plate.
Minor in situ works	Repack leaking valve gland and other repairs without excavation.

Conversion of fire hydrant to washout	Replace fire hydrant cover with washout cover if possible, if not, excavate fire hydrant frame and cover, replace with washout frame and cover, backfill excavation and reinstate surface. Includes renewal of up to two chamber sections, renew fire hydrant post and plate with washout post and plate.
Permanent removal of fire hydrant on main	Excavate main, isolate water supply, remove hydrant, remove tee on main and piece through, backfill excavation and reinstate surface.
Adoption of washout hydrants	Replace fire hydrant cover with washout cover, renew fire hydrant post and plate with washout post and plate.

## 17 Dispute procedure

- 17.1 In the event of a dispute, other than in respect of charges, between AWS and Fire Service the matter shall be resolved locally between AWS and that Fire Service according to the following principles:
- 17.1.1 The statutory duties of each party;
  - 17.1.2 Best practice;
  - 17.1.3 Previous practice within the area of that Fire Service;
  - 17.1.4 Practice adopted between other Fire Services and AWS.
- 17.2 If local liaison fails to satisfy either party and without prejudice to either party's legal rights and obligations, the matter may then be referred to the Regional Liaison Group for joint group resolution.
- 17.3 If either party remains aggrieved at the guidance given, they may refer the matter to the National Liaison Group.
- 17.4 If a dispute, other than in respect of charges, cannot be resolved by reference to 17.1 above, AWS and the Fire Service may jointly agree to refer the dispute or difference to the arbitration or decision of a single arbitrator to be agreed on by AWS and the Fire Service.
- 17.5 Failing agreement to be determined by a panel comprising one member from Water UK appointed on behalf of AWS, one member from the Chief Fire Officers Association appointed on behalf of the Fire Service, together with an agreed independent chairman (or failing agreement to be nominated by the President for the time being of the Law Society) and any such reference shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1996 or any statutory modification or re-enactment thereof for the time being in force.



## Appendix 1 – Charges

All charges are available to view on our website:

[www.anglianwater.co.uk/developers/charges/](http://www.anglianwater.co.uk/developers/charges/)

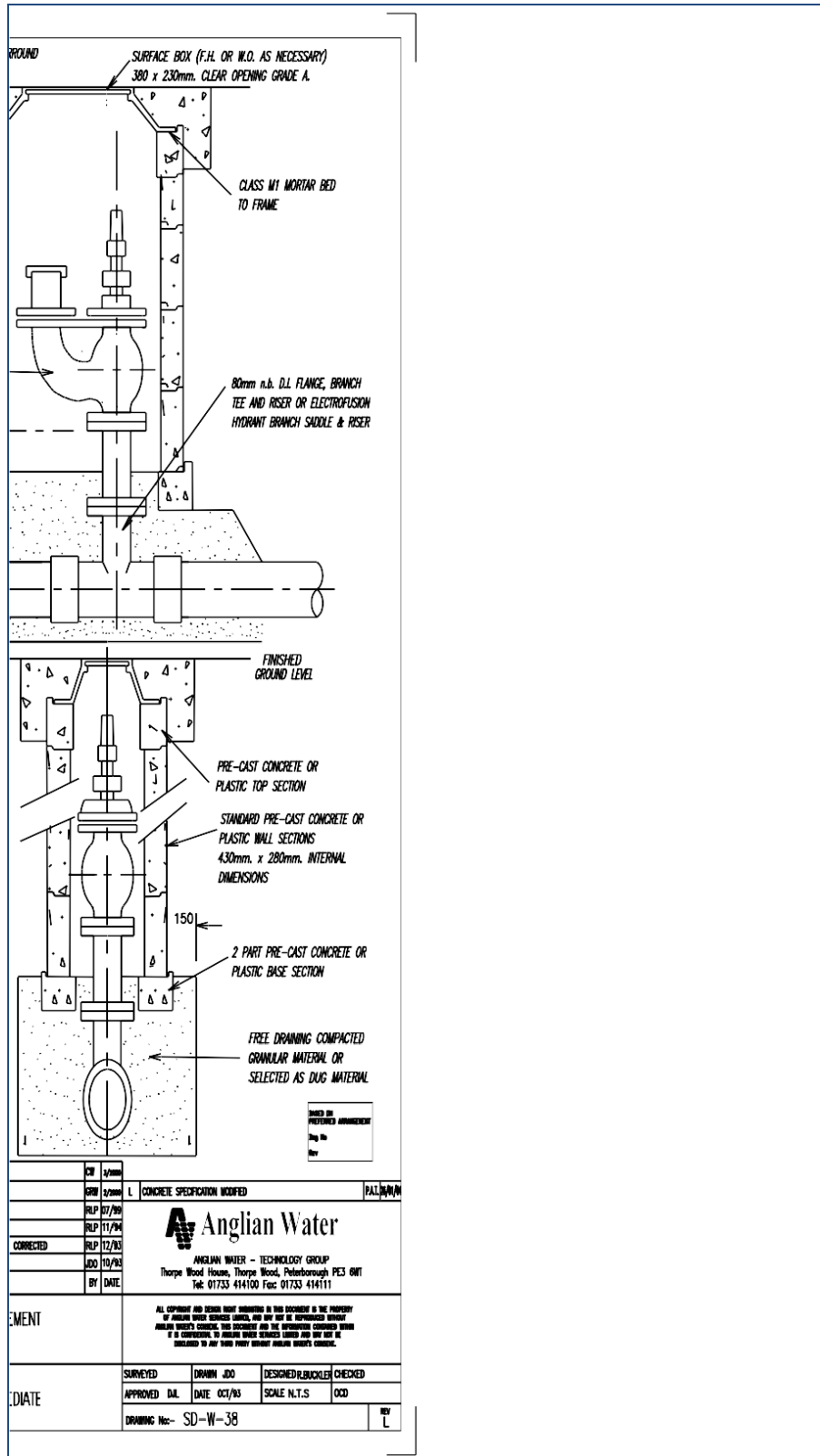
Hydrant installation		£
<b>New mains</b>		Standard charge
<b>Existing mains</b>	Additional hydrants	Standard charge
	Conversion of hydrant to washout	Standard charge
	Permanent removal of hydrant	Standard charge
<b>Mains renewal</b>	Replacements	No cost
	Abandonments	No cost
	Additional hydrants	Standard charge
<b>Mains rehabilitations</b>	Replacements	No cost
	Abandonments	No cost
	Additional hydrants	Actual cost rate

Adoption of washout hydrants	£
After minimum of 12 months from installation date	50% of standard charge
Prior to installation or within 12 months of installation	50% of standard charge

Maintenance and repairs	£
Hydrants	Standard charge
Washout hydrants	50% of standard charge

## Appendix 2 - Technical standards for hydrant installation

1. Hydrants, surface box frames and covers shall comply with the relevant provisions of BS 750.
2. Hydrant indicator plates shall comply with the relevant provisions of BS 3251.
3. Hydrants shall be of the screw-down (Type 2) pattern fitted with a captive valve closing in a clockwise direction.
4. Hydrants shall have a gun-metal or stainless steel outlet with a round thread conforming to figure 3 of BS 750. Plastic outlets are not to be installed.
5. All of the surfaces of all the hydrant components shall be protected from corrosion either by the nature of their material of construction or shall be coated in accordance with WIS 4-52-01. Internal water-wetted surfaces shall be coated to Class A standard; all other surfaces shall be coated to Class B.
6. All fasteners used in the assembly of hydrants shall be protected in accordance with Clause 2.78 of the Civil Engineering Specification for the Water Industry.
7. The frame and cover shall be Grade A to BS 750 and have a clear opening of not less than 380mm x 230mm. Hydrant box covers shall be provided with recesses for lifting keys.
8. Installation of underground washouts, fire hydrants, surface box frames, covers and indicator plates shall comply with the specification set out in BS 5306: Part 1.
9. Hydrants shall be sited in pavements wherever possible, but should not be sited at vehicle crossovers, driveways or parking areas.
10. Hydrants and hydrant chambers shall be as detailed in AWS Preferred Arrangement Drawing SD-W-38.
11. Hydrant indicator plates shall be as detailed in AWS Preferred Arrangement Drawing SD-W-41, where installed.



### **Appendix 3 - Guidance for use of fire hydrants for routine re-filling of fire tenders**

The risks to the water supply network reduce when hydrants fitted to 150mm (6") mains and larger are used for re-filling purposes, however, care must be exercised and hydrants should be opened no more than 1 complete turn of the valve key. (At system pressure of 3 bar this will deliver approximately 10 litres per second and fill a 1800 litre tender from empty in less than 5 minutes).

There are a number of areas across the Anglian Water region where routine refilling off any size main would pose a high risk to water supplies. These areas will be notified to individual Fire Services together with any restrictions that apply.

#### **Operating notes:**

1. Carry out all operations and lifting in accordance with Manual Handling Regulations.
2. Comply with all necessary NRSWA and Health and Safety requirements.
3. Check chamber lid for damage, lift lid from frame and check chamber for damage.
4. Check hydrant for damage, leaks or faults and chamber for flooding.
5. Remove dusts cap if fitted, clear any debris from hydrant outlet.
6. Securely fit standpipe to hydrant outlet - either discharge into a suitable container or fit hose to standpipe outlet and run to suitable discharge point. Slowly open hydrant ½ turn and allow water to discharge until clear, should take no more than 2 to 3 minutes, close hydrant. Do not allow hose outlet to become submerged.
7. Connect hose to tender filling point ensuring it is securely held/fixed. Open hydrant slowly, allow 30 seconds per complete turn of the key. Do not exceed one complete turn open
8. On completion of operation close hydrant slowly, allow 30 seconds per complete turn. Remove hose when water flow has stopped, bail out chamber if flooded and remove standpipe. Ensure water has stopped flowing over hydrant outlet and refit dust cap and chamber lid.

#### **Appendix 4 - AWS procedure for the third party use of hydrants**

1. It is illegal for anyone apart from AWS, the Fire Service, any person authorised by AWS or the owner of the hydrant to connect to or use a hydrant for any purpose other than extinguishing fires.
2. The use of standpipes by third parties should be kept to a minimum and will only be permitted where no other reasonable/practical alternative method of supply is available.
3. Only AWS supplied standpipes of 20mm or 65mm diameter incorporating a double check valve and meter are to be used. The standpipes will be colour coded green, marked 'Anglian Water Services Ltd' and carry a unique identifying number. Sufficient stocks of 20mm and 65mm standpipes together with valve keys and bars and hydrant security caps should be held at nominated depots within each concession.
4. Nominated staff will be responsible for administering standpipe hire in each territory.
5. Where practical AWS owned washout hydrants should be specified, where this is not possible maintenance of fire hydrants designated as regular use points will not be recharged to the Fire Service.
6. Regular use fire hydrants must be notified to the Fire Service.
7. Local Authorities, Waste Water operational personnel and similar bodies who regularly use 65mm standpipes should be encouraged to install purpose designed permanent metered filling points incorporating double check valves and air gaps for filling mobile tanks, gully emptiers, sewer jetting vehicles etc. Where this is not possible/practical specific washouts/hydrants will be designated.
8. 20mm standpipes together with a valve key and bar will be the normal issue. The issue of 65mm standpipes will be kept to a minimum and only allowed after due consideration to the risk to water quality and capacity of the main on to which it is to be fixed.
9. The flow rate, location and limitations of use, i.e. date, time AWS personnel in attendance etc. of hydrants to be used with 65mm standpipes, which must be capable of supplying the required demand without causing low pressure or velocities likely to cause disturbance within the distribution system, will be specified.

10. Each standpipe will have a hire record indicating its current status. The meter will be read at the commencement and completion of each hire or annually for long term hire agreements and the consumption recorded. Fixed point use meters will be read annually. The total consumption of all hired standpipes and fixed points from each concession will be forwarded to the Regional Leakage Manager annually for the year ending 31 March.
11. All hydrants must be inspected by the user before use and defects reported. Any defect which affects the operation of the hydrant will render it unavailable to the standpipe hirer until repairs have been carried out.
12. The hirer is responsible for ensuring the standpipe is only used in accordance with the terms and conditions of the hire agreement maintaining the standpipe in a clean and uncontaminated condition and providing protection from frost and damage during use and storage.
13. The cost of any repairs resulting from damage to the hydrant, its chamber and cover or the stand-pipe and associated equipment will be charged to the standpipe hirer.
14. The standpipe hirer is responsible for ensuring the requirements of the New Roads and Street Works Act and any other relevant legislation is adhered to.
15. The hire of standpipes to persons or company's previously the subject of improper use termination of hire or illegal use will be at the discretion of AWS. AWS will determine any appeal against refusal of hire.
16. Prosecutions will be approved by the Operational Manager and will normally only be instituted upon a second and subsequent offences, however serious first offences involving the use of 65mm standpipes, or the offenders actions has or is likely to cause contamination of the public water supply, will be considered for prosecution.
17. All non-AWS confiscated standpipes will be labelled detailing, date removed, location and users name. If they are not claimed within 12 months they will be destroyed.

## **Appendix 5 - Filling of swimming pools**

Due to the association of Fire Services having access to large quantities of water from fire hydrants, the public are likely to make requests to Fire Services to fill or top up a swimming pool or pond.

Fire hydrants are provided for use by authorised agencies/personnel and for Fire Service use in an emergency, training environment or to replenish water supplies on appliances etc.

Any request to fill or top up a swimming pool or pond should be declined by the Fire Service and the person making the request should be directed to the AWS.

However on occasions there may be overriding circumstances that need to be considered before referring the person to AWS. Such cases are where there are humanitarian reasons present e.g. a drinking water supply for livestock or to replenish a pond or lake where aquatic life is threatened. The examples are not a definitive list and a common sense approach is required in such cases.

Should the Fire Service decide that replenishment is appropriate they should contact AWS to request that such an undertaking can be made. The conditions under which the operation should be carried out must be agreed with AWS in advance.

In the event of a private water supply e.g. pond or swimming pool being used by the Fire Services as an emergency water supply during an incident, the Fire Service will undertake to replenish the water free of charge, as the consumer has already paid for the supply of water. In these circumstances the Fire Service will notify AWS before the replenishment of the supply.

The day to day liaison route between the Fire Service and AWS should be through the Brigades Water Officer. As such, all routine contact should be directed through this department. If however the matter is urgent contact can be made directly to AWS through the Fire Service Officers responsible for out of hours management of issues.

## Appendix 6 - Removal of Anglian Water Pressure Loggers

Below is a typical pressure logger that would be installed by Anglian Water on Fire hydrants



Should you need to remove a pressure logger:

1. Turn off fire hydrant
2. Push down knurled coupling shown on the picture as A
3. Pull out hose bayonet from coupling
4. Remove cap from fire hydrant outlet use valve key

Leave logger and cap in fire hydrant chamber when leaving site



## Appendix 7 - Use of Kluber Degrippant on seized hydrants

### 1. Clean

- Remove the false spindle if possible once the valve is accessed safely in the pit it is necessary to remove any dirt or debris from around the base of the hydrant.
- Use a proprietary dry, non-ozone-depleting inert gas cleaner in aerosol e.g. a compressed air duster to blow off dirt, dust & debris.
- Kluber Lubrication GB Ltd 120326 SM v4

### 2. Release (stiff or seized valves)

- Use **Kluber Degrippant** Spray (specialist food grade product to NSF H1)
- Fit directional nozzle adaptor supplied to the push button valve on the spray can
- Direct the spray in the clearance gap between the hydrant spindle and housing
- Spray in approx. 10 second bursts and allow product to penetrate.
- Repeat steps 2c & 2d three times as a minimum.
- After each application and depending on degree of stiffness it is advisable to try and turn the spindle to establish any easing per application.
- Best effect occurs by leaving Kluber Degrippant to act between 30 minutes and 48 hours depending on the degree of seizure.
- Once the spindle is freed, unwind completely and lubricate as 3. below
- Do not strike the hydrant valve to try and free the spindle – if the valve does not release, re-apply as above. If valve will not free off after a second procedure then total seizure has occurred.

### 3. Lubricate (released or new valves)

- Use a proprietary dry, non-ozone depleting inert gas cleaner in aerosol e.g. a compressed air duster to dry off surfaces
- Use **Kluberfood NH1 4-220N** Spray (specialist food grade product to NSF H1)
- as 2.a - f above direct the spray to lubricate the spindle to help prevent future seizure and stiffness.

### 4. Seal (released or new valves)

- Use a proprietary dry, non-ozone depleting inert gas cleaner in aerosol e.g. a compressed air duster to dry off surfaces
- Use **Kluberpaste UH1 84-201** (specialist food grade product to NSF H1) white compound into the gap as 2.3 above and around the spindle locknut if accessible – especially if the hydrant location is “wet”.
- Application of **Kluberpaste UH1 84 201** to the inside of the false spindle will ensure that this part can be removed easily and allow a greater degree of access into the hydrant mechanism.