Self-Lay Policy
Supplementary document
Design practices, schedule of permissible materials and construction arrangements

February 2018
Version 1
# Contents

1. **Introduction and background** ................................................. 4  
   1.1 Southern Water contact details ........................................... 5  
   1.2 Accreditation ..................................................................... 5  
   1.3 Introduction - Contestable and Non-contestable Works ......... 6  
2. **Self-Lay procedures** ............................................................ 7  
   2.1 Initial enquiry ..................................................................... 8  
   2.2 SW initial enquiry response .................................................. 8  
   2.3 Change from an S41 mains requisition to a self-lay S51 enquiry .... 9  
3. **Guidance on design and construction** ................................. 10  
   3.1 Contestable Work (open to competition) ............................... 10  
   3.2 New Mains ....................................................................... 11  
   3.3 New Services .................................................................... 13  
   3.4 Communication Pipes and positioning ................................. 14  
4. Non-Contestable work (not open to competition) ..................... 15  
5. Standards and specification ...................................................... 16  
6. Pre-Construction ..................................................................... 17  
7. Connections - Non-Contestable and Contestable Works ........... 17  
   7.1 Operation of Southern Water valves ...................................... 17  
   7.2 Connection examples .......................................................... 18  
   7.3 Point of connection – option one ........................................... 18  
   7.4 Application for connection at point of connection ................ 19  
   7.5 Point of connection – additional and mains flushing requirements 19  
   7.6 Point of connection of self-lay phases ................................... 20  
8. Services: service connections and required information .......... 21  
   8.3 Temporary building supplies (“TBS”) connection ................. 23  
9. Schedule of Permissible Materials ............................................ 23  
10. Pre-Start Meeting .................................................................. 23  
    Site guide and agenda ............................................................. 23  
11. Works inspection audits .......................................................... 25  
12. Work inspection walk-off ......................................................... 25  
   12.1 Joint Inspection of Work: pre-connection ............................. 26  
   12.2 Post vesting inspection audit ............................................... 27  
13. Work programme and phasing ............................................... 27  
14. Self-Lay Agreement ................................................................. 27
14.1 Easements .................................................................28
14.2 Application for vesting of mains .........................................28
15. During the defects liability period .......................................29
16. Payment of the Net Asset Value ..........................................29
17. Commissioning and handover ...........................................30
   Commissioning ..................................................................30
18. End of Defects Liability Period ...........................................32
19. Appendices .....................................................................32
1. Introduction and background

Southern Water (“SW”) supports its customers in having the choice in relation to how water mains and services are provided, and are committed to allowing Developers and Self Lay Providers (“SLPs”) to install water mains and services throughout its area of operations.


In accordance with section 51A of the Water Industry Act 1991 SW will agree to adopt a new self-lay water main and/or services that have been installed by an approved SLP subject to the following:

1. The work has been carried out in accordance with section 51A of the Water Industry Act 1991.
2. The work has been carried out in accordance with the current UK Water Industry Research (UKWIR) WRc Code of Practice for the Self-Laying of Water Mains and Services – England and Wales: Edition 3.1, May 2017
3. The work has been carried out in accordance with this SWSLP, which is our focused supplementary addendum to the COP; covering Design Practices, Schedule of Permissible Materials, construction arrangements, and all related documents to this policy document.

The SWSLP also provides SLPs and Developers with all related technical advice and information necessary to support SLPs’ in the delivery of self-lay mains and services within the SW area of Operations.

4. The Code of Practice can be found at http://selflay.wrcplc.co.uk.

This SW Self-Lay Policy is to be read in conjunction with the following and any later enactments thereof:

2. Relevant British Standards.
6. All relevant Legislation, including but not limited to the Regulations detailed in paragraph 1.14 – Regulations, of the COP.
7. In case of any conflict between the above SW is to be consulted for advice, but generally the order or precedence will be:

- The COP
- British Standards
- The Agreement
- This Southern Water Self-lay Policy
- CESWI
8. The Adoption Agreement shall be entered into between the Undertaker who is Southern Water Services Ltd (“SW”), the Self-Lay Provider (“SLP”), the Developer, the land owner, and (if applicable) any adjoining land owner before commencement of work.

Note: SW will not be responsible for any obligations and/or arrangements entered into between any Developer and an SLP or any third party.

9. In the event of a SLP requesting SW to step-in to undertake such work this shall be undertaken by SW subject to the SW standard “Terms and Conditions applicable to new mains, services and diversions”. A copy of these can be found on SW’s website.

The Government’s programme to develop more houses across the UK is supported by the Water Companies’ commitment to provide Developers with greater transparency of how they will support this activity and improve their services to Developers.

Consequently improvements to service and performance levels will be measured across the Industry by comparing Industry levels of delivery against a consistent set of Industry standards relative to various related activities. SLP expectations are to be measured relative to these Industry standards and these will be based on comparing water supply and sewerage performance targets for a range of services. SW supports the measure of these service standards and will report on them.

1.1 Southern Water contact details

Registered Address: Developer Services
Southern Water Services Limited Southern Water
Southern House Sparrowgrove House
Yeoman Road Sparrowgrove
Worthing Otterbourne
West Sussex Hampshire
BN13 3NX SO212S

Contact email: Developerservices@southernwater.co.uk
Contact Telephone for Developer Services: 03303 030119
Our self-lay policy, application form, and other information can be found on the Southern Water website by following the link: www.southernwater.co.uk/self-lay

1.2 Accreditation

Southern Water has a legal responsibility for safeguarding the security and continuity of the public water supply network and the water quality in its area of operation.

Consequently only an SLP that has received full accreditation for the services relevant to the installation of water mains and/or services through the Water Industry Registration Scheme (WIRS) administered by Lloyds Register will be permitted to design and/or construct water mains and/or services in order to safeguard the integrity of our water supply and distribution network.

All work undertaken by an SLP (and/or any contractors they may appoint) is to be done so in a safe manner compliant with all relevant Health and Safety standards such that there will be no adverse effect on SW’s customers or on water quality.

Developers can opt to appoint an SLP to design and/or construct a new water main and/or to install new service pipes and meters; but all work shall be carried out by an accredited SLP (and installers) who shall be accredited in one or more of the following activities;
a) Design
b) Project Management
c) Simple mains connections
d) Installation of mains
e) Installation of services and meters.

A list of accredited SLPs can be found online at: lr.org/en/energy/utilities-and-building-assurance-schemes/water-industry-registration-scheme/

Accreditation applies to designers and SLPs and their installers; who are required to satisfy the accreditation criteria set out in WIRS. SW requires to be satisfied that all installers of self-lay mains and services are competent and will not compromise the integrity of the public water mains network and water quality before we agree to the construction of mains and service installations.


Work is not to be sub-contracted to companies who are not accredited in accordance with the COP and by installers who do not have appropriate qualifications to work on the installation of mains and/or services.

Prior to any work commencing, the SLP shall email copies of all installers National Hygiene Cards, appropriate qualifications/accreditations and the Identification card to shown person registered under the ‘Considerate Constructors’ Scheme’.

Thereafter, during routine site inspections, if installers are not able to show this information on demand to SW or SLPs they shall not continue work until SW is satisfied with their qualifications and accreditation.

1.3 Introduction - Contestable and Non-contestable Works

(a) Certain works associated with the installation of new water mains and services are open to competition and referred to as “Contestable”, and some works are restricted to the Water Undertaker and referred to as “Non-Contestable”.

Developers and SLPs are directed to the following as forming part of SW’s Self-Lay Policy which shall apply to the installation of all water mains, services, and associated apparatus to supply new developments.

- The forms associated with the various stages of progression of a Self-lay scheme (editable .PDF documents can be found in the SW Website under the Self-lay portal.
- SW Design Guide for SLPs
- SW Meter Location and Installation Guide
- Self-lay Process Diagrams – See SW website Self-lay portal
- The Schedule of Permissible Materials – Appendix Three to this document
- Mains Commissioning and Handover – Appendix One to this document
- Construction Drawings – Appendix Four to this document
- Example of Asset Payments – Appendix Five to this document

(b) SW is committed to offering Contestable and Non-Contestable services on equivalent terms to all its customers subject to its commitment to ensure these are provided to a high quality of workmanship in terms of Permissible Materials and Construction.
Non-Contestable Work includes: Connections between a self-lay main and the connection with SW’s existing mains network (i.e., the source main and connection), network reinforcement work, pipe sizing and design approvals.

Contestable Work includes: Work from the initial source connection to SW’s existing mains network onwards:

i.e. From where the Non-contestable connection pipework finishes the connection to a self-lay main, and further connections between subsequent self-lay mains sections or phases; (subject to SW assessment of any risk to existing customers continuity of supply and water quality) is Contestable Work.

SW therefore reserves the right to step-in when SW considers there is any risk to our customer’s security of supply and/or to water quality.

- Service connections to self-laid water mains are considered as Contestable work.
- Service connections to supply plots from an existing public water main are considered as Contestable work subject however to SW reserving the right to step-in when, in SW’s assessment, there is a risk to SW’s customer’s security of supply and water quality; (i.e., possibly due to the age and condition of the existing main, the mains pressure, or whether the main is classified as a trunk main, etc).

SW’s assessment will be made following receipt by SW of an SLP’s notification that it is applying to undertake service connections onto an existing SW Water Main; and the result of this assessment will be notified to the SLP in a timely manner.

(c) Contestable work can cover design, the installation of new mains and associated diversions (that do not impact on our customers and/or water quality), and new services to a new development site.

(d) If a diversion of any existing main or apparatus and/or a decommissioning and abandonment of an existing main and apparatus on SW’s water supply distribution network is required when such a diversion has the potential to impact on our supply to customers and/or water quality such work will be considered by SW as Non-Contestable. It will be the Developer or SLP’s responsibility to remove and dispose of as necessary any mains or apparatus SW notifies as decommissioned and therefore abandoned.

While SW is committed to the expectation that a SLP is able to undertake all elements of Contestable Work, if the SLP is unable or unwilling to undertake any parts SW will discuss such and if required can offer its services, subject to related charges for undertaking work identified.

2. Self-Lay procedures

There are six main stages in the provision of new water supplies applicable to self-lay. Additionally the SLP may be involved at the pre-development stage (which the Developer normally undertakes prior to appointing an SLP). The self-lay delivery procedural stages are:

a) point of connection enquiry
b) application and terms issue (including design)
c) terms acceptance
d) mains construction
2.1 Initial enquiry

If an area to be developed has not yet achieved planning approval stage or a SLP merely wishes for SW advice on whether a proposed development site can be supplied with water, the SLP can send SW a development enquiry before making a full application. In our detailed response we will confirm where the development is to be supplied from based on the development location relative to any impact on SW’s existing water supply/distribution network and the location of the development.

Any party involved in a self-lay development can make an application for a development enquiry by completing a pre-development enquiry form (see point of connection “capacity check” form SLF-B0 that can be found on the SW Website). This enquiry allows a simple check by SW as to whether the proposed capacity to supply the proposed development can be provided close to, or adjacent to, the proposed development site. SW will provide a preliminary point of connection location to SW’s existing water supply distribution network. If SW determines that there is a lack of available capacity in the existing network adjacent to the site a further more detailed network modelling assessment shall be required.

If the enquiry is then to be actively progressed the Developer submits an application to SW with the following supporting documents:

a) A location plan.
b) A site layout plan at a recognised scale, (SW’s preferred scale is 1:500, or else, as a minimum at 1:1250).
c) Full details of the proposed development including proposed flow and storage details that may be known or assessed.
d) The current application fee which can be found on our website.

Following receipt of information in respect of being satisfactory to SW, SW shall undertake a detailed network modelling assessment. This assessment is referred to by SW as a “level 2” capacity check and the SLP and/or Developer shall provide additional information necessary to enable SW to complete this assessment. The SLP and/or Developer is directed to SW’s Website (portal) for Self-lay, level 2 “Indicative hydraulic assessment”, where the required additional information is entered electronically by the SLP or Developer. SW shall either confirm or amend as necessary the point of connection relative to supplying the development site. SW’s response to this level 2 enquiry will be to either confirm or amend the previous preliminary assessment of the point of connection location and provide an indication of any network reinforcement work which may be required.

2.2 SW initial enquiry response

Following receipt of the application form for a water main and service connection (SLF-B1) from a Developer we will confirm receipt and provide a reference number. The application will then be assigned to a member of our Developer Services team who will be the main point of contact for the Developer at this stage.

This process is the same for the Developer regardless of whether they have decided to opt for a Section 41 mains requisition or a Section 51 self-lay requisition, under the Water Act.
However, as an enquiry proceeds and once the Developer has confirmed one of these options a further dedicated point of contact with be provided by SW.

The application fee covers the work we need to do to respond to an enquiry. If the flow requirements are such that more extensive modelling and network assessment is needed charges apply as set out in SW’s published charging structure.

The more information that can be provided about the development, the type and density of units, expected water usage, topographical details, ground condition (contaminated or otherwise) etc, the more detailed and specific our response will be. However, the standard response will include:

a) a copy extract of our water records for the area
b) confirmation of any apparatus we have that could be affected by the proposed development
c) information relating to the provision of water to the development
d) indicative details of any offsite works (reinforcement of our network) to supply the development
e) an indicative design proposal (based on the site layout drawing and other information provided by the Developer with an initial enquiry and on our modelling and assessment of development supply requirements). Design work will be charged by SW based on its standard published charges.
f) SW’s estimated cost and Offer of terms with relevant terms and conditions based on an indicative design requested from the Developer to provide the water mains and services to a development site.

2.3 Change from an S41 mains requisition to a self-lay S51 enquiry

If a Developer initially contacts SW under Section 41 to requisition a new main to supply a new development site, requesting an initial indicative design proposal, and cost for a new mains extension, please note the following:

a) The initial design that SW returns with its offer of terms is indicative but may be used by the Developer to seek an alternative quote from an SLP for the supply and installation of new mains and/or services.
b) The SW related offer of terms to provide a section 41 requisition new mains extension will include a network modelling exercise and survey of the proposed site, the surrounding area and any supply or other effecting considerations (ie network reinforcement, mains to be abandoned etc).
c) If the Developer appoints a SLP the initial design proposal provided by SW, in response to a section 41 requisition, the SLP will be deemed to have assumed all liability and responsibility associated with said design; which is then to be confirmed by the SLP as a detailed design proposal (with construction drawings also the responsibility of the SLP) relative to the final site layout.
d) The SLP shall also provide confirmation of adopted highway and service strips for mains and/or services. The SLP is to submit the detailed design proposal to SW for
approval, and SW will mark up by return any aspects that do not satisfy its specification and/or its requirements. In addition SW will also offer advice in this respect.

e) The SLP shall be deemed to have assumed all responsibility for design and delivery of mains to satisfy the final approved site layout plane and design in accordance with this SWSLP.

f) The SLP may wish to submit proposed design changes to SW for consideration. This is to be provided at scale 1:500 unless otherwise agreed with SW.

g) Design changes proposed by the SLP will be assessed by SW and SW will mark up by return any aspects that do not satisfy our specification and/or requirements and in addition SW shall also offer advice in this respect.

h) SW will advise the Developer and the SLP what documents, forms, and notifications will apply to this change in enquiry from section 41 to section 51 in response to a request for such.

3. Guidance on design and construction

3. Contestable Work (open to competition)

3.1 Design

1. Design for on-site mains, off-site mains (subject to applicable exceptions and SW assessment of the impact on security of supply to customers and water quality), and services (exceptions likewise apply) as further detailed under:

a) Design of on-site self-lay site specific mains and updates of design based on feedback from SW and the Developer are subject with design in accordance with the SWSLP – See also the SW Design Guide, the SW Meter Location and Installation Guide, and the Schedule of Permissible Materials, in particular.

b) Design for off-site reinforcement mains is Non-contestable. The requirement for design in a) above must ensure that our levels of service with regard to customer supplies and water quality are not compromised.

c) Design of diversions are not considered Contestable work by SW.

d) Where a self-lay design includes work in an adoptable highway or a street is for Contestable work the SLP is responsible for serving the necessary notices and obtaining the required approvals from the highway authorities or street managers and providing this information to SW as part of the SLP request for SW to approve a design.

e) Self-Lay designs relating to water mains and services are subject to approval from SW which must be obtained prior to commencement of work; and the accepted final design and construction drawings shall be referenced within the Self-Lay Agreement.

f) Liaison with the local fire authority/fire and rescue service on location of fire hydrants and requirements unless SW has undertaken the design for the new mains and services to a site. If SW has issued a Developer an initial indicative design in response to a Section 41 requisition, but the Developer then opts for a section 51 self-lay installation the SLP will assume all responsibility for the design, which includes liaison with the local fire authority/fire and rescue service for location of fire hydrants.
g) The sizing of pipework to new development sites is governed by the requirement that there should be adequate supply to satisfy customer demand at all times whilst at the same time ensuring that water quality is not compromised through the use of pipe sizes that have the potential to compromise quality and levels of service. SW will assess sizes of mains included as part of any proposed design of mains to supply a development area and advise the SLP accordingly.

h) The sizing of new services is dependent on several factors including; flow, velocity, capacity, storage pressure, demand. When a SLP applies to SW for a Section 45 service connection to be made to a self-lay main by SW and/or when the SLP applies to SW under Section 51 to install self-lay connections to any main the SLP is responsible for design of the sizing of the service and adequate storage for any plot to be served.

i) Notwithstanding the above, for domestic use only, SW will, when requested by the SLP, offer guidance on the size of service connections. This guidance will be based on the information provided by the SLP, the location of the development, and SW’s network modelling for the development. SW shall have no design responsibility nor accept any liability for the sizing of a service connection pipe.

j) All SLP materials proposed and incorporated into the final construction of a design and all construction work to install work in accordance with a design, to be approved by SW, shall comply with this SWSLP and the COP.

2. The SLP obtains third party easements in accordance with SW required stipulations which must confirm SW future access arrangements for operational needs and protection of asset work and issues a copy to SW relative to any subsequent construction works being completed and prior to a request for vesting.

3.2 New Mains

a) The installation of on-site site specific water mains for both domestic and non-domestic water supplies on a development site.

b) Mains shall be laid on one side of a road with service crossings to plots on the other side of the road. In no circumstances will duplication of mains (i.e. on opposite sides of a road) be accepted by SW.

c) If an existing SW main crosses under a new development site, typically within gardens, the existing main (i.e. a trunk main) and related apparatus shall be protected by an easement when the existing main is not able to be diverted by SW for operational reasons. If the main crosses under any private land a copy of the easement shall be lodged with the deeds to the property.

Notwithstanding the above, no work by the SLP shall be commenced within an easement (protecting an existing SW asset) without SW prior approval in writing.

d) New mains shall be installed in accordance with the “NJUG Guidelines on the Positioning and colour coding of Underground Utilities apparatus – issue 8: 29th Oct 2013”.

In certain circumstances relative to the design of some developments the installation of an over-sized main for a development is considered as network reinforcement to supply a larger area of development and is required to be installed within such specific development.

In such cases the above NJUG document is to be considered as providing minimum guidance in terms of relative positioning of new water mains to other Undertakers’ apparatus. Therefore, the Developer and the SLP shall ensure that access to such a main be considered in any development design to allow SW unrestricted access to affect future connections and/or repairs or alterations to the main, unhindered by the proximity of other Undertakers’ apparatus. Failure to satisfy this requirement, such that SW incurs a
consequential cost to access such a main shall result in SW seeking recovery of these costs from Developer and/or the SLP.

e) Mains designs and installations shall comply with NJUG publication, volume 4 ‘Guidelines For The Planning, Installation And Maintenance Of Utility Services In Proximity To Trees’ together with BS 5837:2012 Trees in Relation to Construction.

Planting often occurs after mains have been installed, but it is essential that only grass or ground cover plants with limited root systems are planted over the mains. If trees or shrubs are to be planted they are to be positioned to avoid both root damage to the main and with a consideration to mitigate problems arising from subsequent repair and maintenance excavation.

f) If special engineering constraints or considerations apply SW will discuss these with the SLP and if necessary, to overcome these constraints and/or to protect water quality and security of supply to its customers, SW may determine the work should be designated as Non-Contestable,

Note: If the SLP proposes to install non-domestic service connections the SLP is to notify SW in its final design and in any application for service connections so that SW can advise on the procedures applicable to Water Retailers and non-household services.

g) Making routine in-line mains connections between self-lay site specific mains relative to a development with the exception of the initial connection to the SW (i.e. source) main supplying the development as further explained in this document.

h) When work has not been installed in accordance with this SWSLP and/or the COP and/or when mains and services have not been installed in accordance with the “NJUG Guidelines on the Positioning and colour coding of Underground Utilities apparatus – issue 8: 29 October 2013” the SLP shall rectify the failure and install mains and/or services and related apparatus in accordance with this SWSLP doc and the COP at no cost to SW. SW charges may also apply.

i) Note: The above also applies if following installation of mains and services the Developer and/or SLP allows other Undertakers’ apparatus to be installed on top of SW mains, services, or apparatus which prevents SW from accessing mains, services, or apparatus for future work. Where other Undertaker chambers have to be installed above any SW future asset this must be identified by the Developer and/or the SLP at the pre-start meeting and a solution agreed between the parties.

j) SW will undertake routine work inspection audits jointly with the SLP who will excavate trial holes when deemed necessary by SW for the SLP to prove that mains have been installed in a compliant manner during construction work.

k) Swabbing, pressure testing and disinfecting of new self-laid mains (information provided to SW as Appendix One – Commissioning and Handover). SW reserves the right to take additional samples as necessary to protect water quality.

l) The SLP provides drawings at *1:500 scale when required by SW for detailed connection and/or pipe/fitting arrangements and/or to prove that thrust block / anchor restraints are compliant with the COP and this Policy. *or as otherwise agreed by SW.

m) The design of thrust blocks shall comply with the Civil Engineering Specification for the Water Industry (CESWI), SW Design Guide for SLP’s, and CIRIA report No. 128 - Guide to the Design of Thrust Blocks for Buried Pipelines. The SLP is to provide SW with detailed design proposals relative to thrust blocks, anchor restraints, and supports, and is responsible for their design and construction to all applicable standards and specifications. SW will not approve thrust or anchor block or anchor restraints but will comment on such as necessary.
n) If mains, fittings, and related apparatus are installed without SW approval of a design the SLP is to demonstrate at its own cost that the mains and/or services have been installed in accordance with this SWSLP document.

o) If materials are installed that do not comply with the Schedule of Permissible Materials the SLP shall replace them with approved materials compliant with the Schedule of Permissible Materials – as until Permissible Materials have been installed in accordance with this SWSLP the mains and services shall not be commissioned, or adopted by SW.

p) As the Developer is in control of managing the programme for new service connections he is to co-ordinate with the SLP and SW to ensure there is sufficient turnover in any new main.

q) SW shall have no design responsibility nor accept any liability for the sizing of mains when the design is carried out by the SLP or when, in the event that the design was carried out by SW, the information provided by the Developer and/or SLP was inaccurate, insufficient, or the final installations are not compliant with the final SW accepted design of mains and services.

1. **Flushing: Turnover of water (mains flushing)**
   It is a requirement that there is always a sufficient turnover of water on all potential dead-legs of main or sectional lengths and a regular flushing of these mains shall be undertaken to satisfy water quality requirements. Operation of existing SW valves shall only be by SW personnel. The cost of such flushing work is recoverable, in accordance with the COP and its published charges, and a suitable flushing regime will require to be agreed. See also paragraph 7.5 on page 19 of this document.

3.3 **New Services**

a) Connecting service pipes to new development commissioned mains (see also “communication pipes” under for additional details).

b) New services shall be installed in accordance with the “NJUG Guidelines on the Positioning and colour coding of Underground Utilities apparatus – issue 8: 29th Oct 2103”.

c) Where the SLP installs an external meter in a verge or footpath in accordance with the order of precedence stated the SLP is to ensure that the meter reading face is between 300mm and 500mm below top cover level, using extension pieces as required and that the final installation/chamber is clear of obstructions, the meter is centrally located within the chamber and readily readable.

d) When a service strip, footpath, or easement will not permit meter chambers to be sited at the back edge of such a service strip, footpath or easement any meter chambers that require to be sited within a vehicular location due to a site’s design shall be as specified in the Schedule of Permissible Materials.

e) Connecting service pipes to the existing public water supply network water mains when there is no risk to SW existing customer supplies or water quality and therefore considered Non-contestable by SW.

f) Fitting water meters (see Schedule of Permissible Materials for meter details) on service pipes.

Note: Meters that SW will accept are listed in the Schedule of Permissible Materials. The correct Permissible Materials shall be provided by the SLP at all times relative to any work in contaminated and/or non-contaminated ground as failure to satisfy this shall mean that the SLP will be required to remove non-compliant materials and replace such. This could delay the commissioning of a self-lay main, the release of related Asset Payments, and Vesting.
3.4 Communication Pipes and positioning

a) Mains shall generally be located on the side of the highway serving the most properties to minimise the length of communication pipes.

b) Communication pipes crossing roads shall be installed in ducts. Best practice is that a single duct is installed for a single service pipe crossing a road, directly relative to the entry point of supply pipe into a property. However, when dictated by a design of mains relative to a design of service pipes a maximum of two meters may be supplied from a single communication pipe connecting to a two-port manifold when a crossing can be installed to the boundary delineating two properties (i.e. long side communication pipe). Duct ends shall be clearly marked and be at a depth specified by NJUG and at the positions identified in the final approved site layout design for mains and services. Note: If a site layout design changes the location of ducts to suit shall change to match any re-design.

c) Where a communication pipe is connected to a main on the same side of a public road each meter arrangement shall have its own communication pipe (short side communication pipe).

d) See the SW meter Installation and Location guide: The position of new service pipe installations/stopcocks shall be no more than 300mm from any private property boundary and within the area to be adopted by the Highway Authority, normally the road, footpath, or service strip.

e) SW requires that when multiple properties are served by a communal (private) driveway the individual supply pipes are to be brought out to the back edge of the adoptable highway or service strip and the meters shall be installed on a manifold in a chamber. If any single connection is unable to be connected to the manifold it shall be installed in its own chamber. Additionally it is a requirement that each and every property shall have right of access, with an appropriate easement lodged with the deeds to the property, to maintain and repair their supply pipe.

f) Service pipes supplying one property shall not cross property owned by another property unless there is no other viable option, and the SLP shall consult with SW in this instance so that an acceptable solution is agreed.

g) The new meter chamber is to be installed at the level to suit the final footpath or service strip and at the back edge of the footpath or service strip. The complete (single length) of service pipe is to be installed at an angle of 90o to the water main to which it is to be connected to assist future location of the service pipe and ferrule connection with the main.

h) Whenever multiple services or pipes in a common excavation are connected (within a manifold chamber) the SLP shall verify that each supply pipe is clearly tagged to indicate which property each separate supply pipe supplies.

i) When there are multiple installations, typically in a common excavation and/or to a manifold (two to six port) the SLP shall ensure that the following is adhered to;

- service tappings on any main are to be installed at a minimum of 250mm apart,
- service pipes are laid ‘side by side’ with no intertwining of pipe,
- the first tapping shall serve the first property, the second tapping the second property and so on; such that the line of ferrule / top-tee and meter chamber correspond and that the communication pipe is installed at a 90o angle to the supply main.
- Continuous lengths of pipework shall be used from the connection with the main to the meter chamber (communication pipe) and then from the meter chamber into the property (supply pipe).

j) The SLP is not to install individual meter chambers when more than two supply pipes are brought out to the position of the proposed meter chamber(s) as e.g. a two to six port manifold is the preferred option when there are multiple services (unless otherwise accepted by SW) as paragraph (e) above.
k) Small diameter rail pipes will not be installed where a distribution main is within the same road.

4. **Non-Contestable work (not open to competition)**

SW is responsible for the integrity and continuity of its public water supply network to its customers to ensure that supplies and water quality are not compromised. Consequently any mains connection of a self-laid main to an existing public water supply network main which forms part or all of the source main to a new development site (and/or related works mains reinforcement work) will be considered by SW as Non-Contestable work such that any work that has the potential to impact on the security of supply to our customers and water quality and on our Statutory and Regulatory obligations and our levels of service relative to these considerations will be considered as Non-Contestable work.

We will administer all applications for new service connections and related Infrastructure and other charges, and mains connections, and will be available to willingly discuss any proposed development scheme and co-operate with Developers and SLP’s to encourage an efficient and appropriate service for delivery of design and installation works.

In accordance with our published standards we will aim to provide a written response to an applicant for a service connection within 14 days of receipt of application for a water supply, which will confirm our assessment and decision relating to any additional requirements.

SW’s response to a request for a water supply includes the following:

a) Quotations for Non-contestable and/or Contestable works, as applicable

b) Detail of Asset Payments: Under the Self-Lay delivery of work a SLP will provide us assets which (subject to an approved design and satisfactory installation) will form part of the public water supply network if and when adopted. The Net Asset Payment due the SLP will be set out and be made relative to the value of the installed assets to us and the income likely to be generated from such. An example of how Net Asset Payments are calculated is detailed in Appendix Five to this document.

c) Installation of a new service connection is dependent on compliance with the Water Regulations governing and receipt of any relevant payment due to SW.

Note: Notification to SW for a trench inspection requires a 10 day notice to book an appointment. Failed trench inspections and Water Regulations will be re-inspected following SW receipt of a further 10 day notice (unless a cancellation of another appointment allows for a repeat inspection sooner). All inspections are chargeable in accordance with SW’s published charges (even aborted or cancelled visits including the failure by the SLP to be ready on the day of a booked appointment).

d) Assessing the existing capability of the public water mains supply network to consider the impact of development of any area on the security of existing supplies, water quality, flow, pressures, and therefore the need for up-sizing of site specific onsite or offsite mains, or for reinforcement mains, or other work to provide additional capacity to the existing water distribution network relative to a development area.

e) The assessment of what is necessary and associated design relative to the re-location of existing main and services when these may be compromised or disturbed by a new development.

f) Design and installation of all network reinforcement works.

Note: In the event of multiple areas of development requiring reinforcement of the existing mains supply network the apportionment of additional costs relating to such will be charged in accordance with the “Charging Rules for New Connection Services (English Undertakers) pursuant to the Water Industry Act 1991, sections 51C, 105ZF
and 144ZA". SW will aim for a co-ordinated approach with Developers’ and SLPs’ requirements for a water supply required by date relative to off-site reinforcement works.

g) Specifying and design of district meter installations prior to the point of connection with any new site specific new self-lay main (i.e. for monitoring of leakage and security of supply).

h) Checking and approval of final water main design proposals submitted by an SLP proposed for on-site of a new development area.

i) SW will aim to provide a feedback on designs submitted by an SLP within 14 days of receipt of all required information needed to assess and comment on such. Such approval will not be unreasonably withheld but maybe subject to clarifications and/or appropriate conditions.

SW requires to have received a pre-development “point of connection” enquiry relative to the above in order for any substantive response or advice to be issued which will include confirmation by SW of the final “point of connection” of a self-lay main to SW’s existing distribution and supply network for the purposes of supply the proposed development. This SW confirmation will be based on the information provided by the SLP and Developer with the pre-development enquiry and will be subject to further assessment and change if the final development details vary from the initial pre-development enquiry provided information to SW.

j) Determining, by liaison with the Developer and SLP, the timing of service pipe connections to a new main, particularly relative to the requirement for SW to check the installation and safeguard existing supplies.

k) Decommissioning redundant mains following a diversion and associated work on the existing water supply distribution network.

l) Any diversion of an existing main when there is the potential for the supply to our customers and water quality to be compromised.

m) Any work on a main designated by us as “strategic” (ie trunk mains, leading distribution mains, high risk mains, and any related pumping or treatment works).

5. Standards and specification

See also Appendix Three: Schedule of Permissible Materials.

The self-lay mains will, subject to our acceptance of having been installed in a satisfactory and compliant manner, be ultimately transferred by the SLP to SW by a process called “Vesting” (adoption) by SW of the assets installed by the SLP in accordance with the Self-Lay Agreement.

As the Statutory Undertaker we are responsible for the current and future integrity of the public water mains supply distribution network and as such we require that all installations (Contestable and/or Non-Contestable) are installed to provide a resilient future network and service to our customers.

We will willingly discuss any aspect of a scheme’s details and design with Developers and SLPs to ensure efficiency of delivery. We will constantly seek to interrogate our processes and delivery of our service, and be open to develop and improve our processes.

The Design Guide, and the Meter Location and Installation Guide forming part of the SWSLP is to assist SLPs and Developers in the design and delivery of compliant work to
the same required standards that SW and its contractors’ deliver when providing a similar a service to Developers under Requisitions for new mains extensions and service installations.

6. **Pre-Construction**
   a) Before construction work is able to commence it is a requirement that the Self-Lay Agreement must be in place and be signed by all parties to the Agreement. See SW web site for an example Agreement.
   b) If new services only are to be the subject of a request for vesting (adoption) the Self-Lay Agreement for Services can be used. See SW web site for an example Agreement.
   c) A pre-start meeting has occurred that includes SW, the Developer, and the SLP.
   d) All required information required by SW detailed within this SWSLP has been provided and appropriate responses and/or approvals been confirmed in writing. This includes a list of proposed materials to be installed by the SLP compliant with the Schedule of Permissible Materials.

7. **Connections - Non-Contestable and Contestable Works**
   The site specific connection to an existing main (the existing source of water to a new development area from SW’s existing water supply distribution network) is a Non-contestable connection that will be undertaken solely by SW.

   The source main will be identified by the diameter of site specific main that is determined necessary to supply the new development area. The location of an identified existing main with an equivalent internal diameter, to the site specific main, dictates the nearest practicable point of connection to the existing water supply distribution network to supply the development.

   Important Note: SW shall not process a request for a connection to a new self-lay main from the existing water supply distribution network until such time as any identified defective work that will impact on the commissioning of the new main has been corrected and the new main signed off by SW as suitable to be connected (ie testing and sampling passed in accordance with required commissioning and handover criteria (see Appendix One to this SWSLP).

   SW reserves the right to instigate legal proceedings against any SLP that undertakes a connection in breach of the stated commissioning and handover criteria, and without SW sign-off/approval.

7.1 **Operation of Southern Water valves**
   The operation of all valves on SW’s existing water supply distribution network is Non-contestable work due to the risk of disruption, contamination, or discoloration to SW’s customers and it is SW’s responsibility to ensure that supplies to its existing customers and water quality is maintained and not compromised.

   This risk could also apply to the operation of valves on sections or phases of self-lay main associated with contestable connections when the valve is on a preceding commissioned section or phase and has therefore been vested by SW. This particular risk will be managed on a case by case basis by SW and the SLP notified if the SLP is to be permitted to operate valves relative to these connections.

   Therefore the planning of connections needs to provide SW with adequate notice to arrange for valve operations as SW operates a “Safe Control of Operations” policy that
shall be followed in the operation of all valves and relative to all connections of mains and it is expected that this will be discussed, recorded, and arrangements planned, at the pre-commencement meeting.

In some cases SW reserves the right to further mitigate risk associated with all connections by installing an additional non-return valve (but the cost of such will not be passed onto the SLP).

### 7.2 Connection examples

a) **Scenario One:** The connection point: In the event that the diameter of existing main adjacent to or fronting the site/development area is the same as the diameter of main needed to supply the development it will be defined as the “specific point of connection”. (The connection to the SW source main at this point is Non-contestable Work).

From this point the mains into the development area will be deemed as site specific “on-site” mains and are Contestable Works.

b) **Scenario Two:** If SW determines this adjacent main is not suitable (i.e. determination based on SW assessment, including, network modelling and other relevant factors) then the nearest main on the existing water supply distribution network of the same diameter will be considered by SW as the nearest viable “point of connection” and will hence be considered as the alternative “specific point of connection” (The connection to the SW source main at this point is Non-contestable Work).

The mains necessary to be installed from the alternative “specific point of connection” to the site/development, both outwith and within the development are deemed in this scenario to be site specific mains and Contestable Works.

Note: in this scenario the site specific main outwith the development area will typically be installed in adoptable highway and/or private land.

c) **Reinforcement work:** If SW determines that the site specific main to be installed outwith the confines of the area being developed (historically this would have been termed an off-site main) is to be up-sized then SW will consider this as network reinforcement and Non-contestable Work.

Network reinforcement work may also include other associated work by SW on the existing water supply distribution network, including pumping stations, zoning meter and/or pressure reducing installations.

### 7.3 Point of connection – option one

At the determined specific “point of connection” the Non-contestable connection is typically made by an under pressure connection (“UPC”) but SW operational considerations may dictate that this connection is by open-cut in order to install additional valves and the like on the existing main.

Such work associated with an open-cut connection shall be considered by SW as network reinforcement Non-contestable Work. Accordingly; provided that the installation of additional valves is not necessary to supply a development, this work would be installed by SW at no additional cost to the SLP.

a) Any need for controlling valves either side of any new connection to an existing SW main will require a mains cut out connection.
b) From the specific point of connection SW installs a main to terminate just within the development site boundary (except when this main is site specific Contestable Work).

Note: The termination point inside the site boundary shall be located within an adoptable road, footpath, or service strip (of minimum width 1.8m) or in land covered by a suitable easement sufficient to contain SW apparatus. All fittings shall be located in a footpath or verge and not in road unless otherwise accepted by SW in the approved site design.

c) Prior to the termination point of pipe SW may opt to install a District Meter Arrangement installation (“DMA”) on a by-pass.

SW will terminate its Non-contestable Work connection and associated pipework with a temporary washout attached as drawing WM-D 425 in Appendix Four.

Note: SW may opt to install a temporary non-return valve as an alternative or additional valve to the control valve detailed in the drawing; and with this option SW will include a temporary washout as drawing WM-D 425 (the temporary valve is not shown on this drawing as this is optional).

d) The SLP will lay the self-lay main from, or to, this point and terminate the self-lay pipework. This should typically include a temporary control/sluice valve and washout.

e) A standpipe arrangement consisting of an approved SW metered standpipe. SW’s supplier is “Water Services (Aquam)”. To contact, telephone 0844 984 2788, or email southernwater@waterservicest Ltd.com on each washout, with a non-return valve on the pipework between the two washouts as drawing WM-D 425 shall be installed for any draw off of water from SW’s existing main to the self-lay main for the purposes of commissioning the SLP main(s).

7.4 Application for connection at point of connection

a) Point of Connection – option one: Subject to the SLP submitting Form SLF-H1 and SW sign-off that the self-lay main is passed as fit for potable water use SW will remove its temporary fitting(s) and any SLP installed temporary fittings (returning such to the SLP) and the pipework shall be bridged through (connection made). This connection will be considered as Non-contestable Work.

b) Thereafter, all subsequent connections between self-lay main sections/phases will be Contestable Work. All such Contestable connections will adopt the standard arrangement of drawing WM-D 425 (excluding optional additional valve) and no bridge through connection shall be made without the issue to SW of Form SLF H1 and subsequent SW sign-off that the main is Defect free and all commissioning requirements satisfied.

Note: Form SLF-H1 (and Appendix One: Commissioning and handover) details all of the required actions to enable a main to be commissioned and ready for SW to agree to a mains connection.

7.5 Point of connection – additional and mains flushing requirements

Site specific considerations may dictate and be assessed by SW as requiring an alternative arrangement to that as specified by said drawing WM-D 425. Such will be as per the alternative arrangement specified by drawing WM-D 424 (also attached in Appendix Four hereto) which may also be amended with the addition of a second spade valve ie a double spade valve arrangement (“DSV”) or by some other approved backflow protection device.

Note: There is no additional cost to the SLP with this alternative option if SW determines it is necessary to further safeguard water quality.
If a DSV is installed it will be installed in a permanent 600 x 900mm chamber and space within the adoptable footpath, service strip, or easement will be required to be provided by the Developer. The DSV will have the spades installed by SW to create the air gap and these will be locked off to ensure security of supply until the final connection is made; whereupon SW will remove the spades.

When the arrangement as said drawing WM-D 424 (single or double spade) is used SW will undertake the installation and terminate the pipework beyond the chamber with a double flange pipe that is blanked off or left with a temporary washout, and subject to the SLP submission of Form SLF H1, satisfactory commissioning, and SW sign-off that the self-lay main is passed as fit for potable water, SW will unlock and remove the spades (ie connection live).

a) The SW connection to the source main may be applied for in advance of the SLP requiring a connection to a new self-lay main, subject to b) under.

b) Turnover of water (mains flushing): It is a requirement that there is always a sufficient turnover of water on all potential dead-legs of main and/or sectional lengths and a regular flushing of these mains shall be undertaken to satisfy water quality requirements. Operation of existing SW valves shall only be by SW personnel. The cost of such flushing work is considered by SW as recoverable (until such time as the development demand is sufficient) in accordance with its published charges and a suitable flushing regime will be agreed at the pre-start meeting.

c) Water may however be turned over sufficiently by the SLP or Developer as follows, subject to SW approval and monitoring of the agreed work, such that if turnover of water is not compliant with the need to protect water quality SW reserves the right to revert to a flushing regime:

- By, prior to any end washout on any section/phase of main, the Developer installing a new service connection that can be turned over (ie be used for building water supply subject to acceptance by SW and account set-up as a temporary non-household service); or

- Alternatively, by means of a temporary or permanent sluice valve installed on the end of the section of main followed by an approved SW metered standpipe on a washout (but not on a hydrant).

The Developer is responsible for ensuring that all required permits and agreements are in place and for identifying where water can be flushed to and for disposal of flushed water and if SW is flushing whether water is required to be de-chlorinated first.

### 7.6 Point of connection of self-lay phases

Form SLF-H1 Part One is used to request and/or notify SW of on-site routine in-line connections between phases/sections of self-lay mains.

These connections are Contestable work.

The SLP provides SW a minimum notice period for this connection of 10 days and identifies the date that the SLP is requesting a connection to be made. This date is subject to any applicable SW constraints that may impact on the requested connection date.

Note: prior to the SLP notification for a connection - the point of connection with SW’s appropriate source main (see Form SLF-F3) will need to have previously been confirmed by SW and appropriate notices issued. Prior to any connection being made the required pre-inspection audit of work to be commissioned and connected shall have been completed and SW approval for a connection been confirmed to the SLP in writing.
8. **Services: service connections and required information**

8.1 SW’s aim is to promote security and consistency of supply to our customers by developing and enhancing a resilient mains and services distribution network and the installation of new services in accordance with the following supports this

a) Installation is in accordance with the approved design, the SWSLP, the SW Design Guide for Self-Lay Providers, and the SW Meter Location and Installation Guide.

b) Materials shall be compliant with the Schedule of Permissible Materials to the SWSLP.

c) All new services have been inspected and have passed the Water Supply (Water Fittings) Regulations 1999 and the Water Supply (Water Quality) Regulations 2000, including Regulation 31.

- See form “Notification of Proposed Works for the Granting of Consent (Regulation 5)” that the SLP is to issue SW to obtain consent for works to be inspected. A link to this form can be found on the SW Website in the Self-lay portal. The SLP is to provide SW with 10 days’ notice of a request for a Water Regulation / trench inspection by sending the completed form electronically to water.regs@southernwater.co.uk. Appointments are booked by contacting SW on the contact telephone number 01962 726042.

- Consent must be granted by SW before a Water Regulation trench inspection audit can be booked, and no service connection shall be made without SW consent. The inspection audit will include a check on use of compliant pies and fittings and depth/location of pipework. A subsequent visit will include checking that compliant boundary boxes / chambers have been provided / installed.

- Failed audits/inspections require another bookable appointment (and a 10 day notice period also applies unless another cancellation allows for this to be sooner) but there is no requirement to submit another related application form if the Water Regulation inspection audit fails. A pass is notified to the SLP, which will then allow a service connection to be made. Any applicable charges are in accordance with SW’s published scale of charges.

- SW consent is a mandatory requirement of the Water Regulations, to ensure that there is no risk of contamination to SW’s mains supply distribution network (including from internal plumbing systems after the meter) prior to connection.

- As part of the Inspection audit walk-off the SLP shall demonstrate that all new supply pipes have been installed and tagged/meter reference etc. relevant to the communication pipe to the property being supplied (individually; and particularly, in any multiple port meter chamber).

8.2 The following information must be provided by the SLP in order that a service can be vested by SW in a timely related period. Notification is to be within five days of the completed service connection

Note: to notify SW see “Notification request for routine Inline Connection and subsequent vesting of self-lay mains and services (form SLF-H1 Part Two) and use Appendix 1 to provide the following:

Details of new and/or any exchange of services to a new main or to the existing water supply distribution network are to include:

1. SW reference number (including SPID number for Non-Household connections).
2. the plot number and proposed postal address.
3. the date the plots pipe are ready for inspection/connection and occupancy
4. confirmation of pipe size.
5. confirmation of meter size and type.
6. confirmation of domestic or non-domestic supply.
7. confirmation of connection to be to an off-site main.
8. confirmation of connection to an on-site main.
9. the date the meter was installed.
10. the meter location.
11. Occupier address and previous address if within SW region of supply
12. the meter serial number.
13. the meter reading.

- See also “Commissioning and handover” paragraph 17 on page 30 - Proof of testing in respect of new service pipe laid between the highway boundary and the entry to the premises when the internal diameter exceeds 50mm / 63mm external (and length >15m); which shall be disinfected, samples taken, and analysed by a UKAS accredited analytical laboratory before the service can be connected to a new main.
- Any incomplete Form SLF H1 – Part Two Appendix 1 will be returned to the SLP and the vesting of the installed asset will be delayed pending provision of satisfactory information.
- All new service pipe installations must be inspected and pass the Water Supply (Water Fittings) Regulations 1999. The SLP is to notify SW that when plot(s) are ready for inspection using the SW notification of proposed work form (Guidance notes are included in this form).
- Water fittings and installation Regulations consent for new services can be requested following an application for a new service connection and all SW connection and related charges paid. If the SLP installs the service connection then SW related charges (no connection charge) apply and must have been paid.

A 10 day notification is required to inspect/audit a trench and installation of the service.

- Failure of SLP/Developer to meet appointment: In the event that more than two appointments for a trench inspection are received for the same plot but the SLP or Developer is not ready when SW visits to undertake the inspection then in such instances SW reserves the right to charge for subsequent visits.

A minimum number of trench inspection/audits will generally be expected and this will be agreed between SW and the SLP.

Failed inspection/audits require another bookable appointment (and a 10 day notice period also applies unless another cancellation allows for this to be sooner) and will also be charged by SW in accordance with its published scale of charges.

Service connections can be applied for Developers as a requisition under Section 45 of the Water Act for connection to a commissioned self-lay main as an alternative to installation by the SLP.

Note: if related service pipe ducts have not been installed correctly and/or if other Undertakers apparatus has not been installed as NJUG specification such that SW incurs an additional cost to make a connection to the main these costs will be recovered by SW as a separate charge.

New services shall not be connected until the main fronting the plot to be supplied has been commissioned.
8.3 Temporary building supplies ("TBS") connection

A TBS connection is classified as a Non-Household ("NHH") connection and the process of applying for and management of TBS relative to SW and an appointed Retailer is detailed in the Self-lay process flow-charts within the SW web site.

All TBS connections shall either be disconnected when no longer required for building purposes and/or the connection may be taken over to supply a new development plot. If a previous existing service pipe was used with the TBS it shall be renewed with a compliant material and any related dead ends disconnected.

9. Schedule of Permissible Materials

Southern Water Services Ltd ("SW") provides a list of approved Materials that are consistent with those that SW would install using its own personnel and/or contractors if mains and services and the like were requisitioned from SW for installation pursuant to Sections 41 and 45 of the Water Act and for other works.

The SLP shall only use permissible materials from this Schedule of Permissible Materials. We can provide a standard asset list ("SAL") of approved suppliers on request.

The SLP is not restricted to procuring materials from SW’s list of approved suppliers as they may use an alternative Supplier when they can demonstrate to SW that the materials are of the same standard and specification as those listed in this Schedule of Permissible Materials, subject to;

- Materials and Products provided by the SLP shall comply with Regulation 31 of the Water Supply (Water Quality) Regulations 2000.
- Whereas a supplier may satisfy Regulation 31 in respect of supplying an alternative and similar Permissible Material to those SW obtains and installs from its approved suppliers, SW requires that materials installed relative to the installation of mains and services are of a consistent design and construction standard for Health and Safety and Operational considerations in particular. This is particularly applicable to preferred pipe material and diameters, water mains fittings, service pipe fittings, meters, meter chambers, fitting chambers, covers and frames.

Therefore, if alternative materials or suppliers are used without our written approval (prior to work starting and/or materials being installed), the Self-Lay Agreement won’t be completed, and SW won’t adopt the mains/services until all non-compliant materials have been replaced to SW’s satisfaction.

10. Pre-Start Meeting

Site guide and agenda

A pre-start meeting shall be held before any work is commenced on site for the installation of new mains and/or services. SW will expect that the following organisations will be represented as any non-attendance may impact on a works commencement date and program of work.

a) The Developer
b) The SLP
c) The SLP appointed contractor
d) SW Assistant Project Manager (as a minimum)
e) Any other interested party (attendance of other Undertakers is recommended to ensure that all parties are aware of proposed design layouts, particularly in case of conflict).

As a guide to Developers, the SLP, and contractors, SW will issue a Site Guide at this pre-start meeting. Please contact by email the following SW Asst. Project Managers to arrange for this meeting and to initiate related discussions:

Hampshire and Isle of Wight: dean.abbott@southernwater.co.uk
Kent: stephen.goodwin@southernwater.co.uk
Sussex: glenn.smither@southernwater.co.uk

This meeting will also require to identify and agree:

1. Provisional and/or confirmed dates for construction of work on-site and/or for any off-site reinforcement work,
2. Final “construction drawing” – being the final accepted design for the proposed mains and services locations and required road ducts (scale 1:500 unless otherwise accepted by SW),
3. Traffic management and access,
4. NRSWA requirements,
5. Land entry requirements and notices,
6. Confirmation of any related mains to supply the site that require to be laid from outside of the site boundary (i.e. site specific work to connect the development to an appropriate connection point on the existing water supply distribution network) and/or any related SW reinforcement work; that needs to be completed prior to the point of connection between the self-lay main(s) and the existing SW mains network.
7. Any constraints on working,
8. Confirmation of Permissible Materials to be supplied,
9. Construction requirements (including ducting requirements for mains and/or services),
10. Access for inspection and audits of work compliance,
11. Confirmation of site layout design and housing and related final detailed design proposal for installation of mains and service and compliance with SW Design Guide for SLPs,
12. Minimum requirements for lengths of mains to be installed at any separate site visit.
13. Confirmation of Developers build programme with particular relevance to installation of mains and necessary valving.
14. Provisions for variations to the design (change control),
15. Provisions for connection of mains and/or services,
16. Requirements to maintain turn-over of water on commissioned mains for water quality purposes,
17. Provisions for any step-in work required by SW and procedure for SW reimbursement of incurred costs,
18. Who is to supply the meters (and any associated meter carriers) – SW or SLP; and arrangements applying.
19. Any specific SW requirements to ensure that the work is installed in accordance with this SW Self-Lay Policy.

20. Details of UKAS Laboratory to use and arrangements for sampling.

21. Confirmation of requirements relating to Cement Mixing Silo’s. SW guidance document is included with the “site guide”.

22. Confirmation of how the SLP will notify SW on a daily basis of the locations they have been working on; where work is temporarily suspended, or on-going; what work is programmed for the day of notification, and the following week. This notification is to include contact names and telephone numbers for all SLP personnel or contractor gangs.

23. The minutes of this meeting must be documented. The organisation that is to document the meeting must be agreed at the commencement of the meeting and the meeting notes must be issued to all attendees within 5 days of the date of the meeting but in any event prior to any proposed work commencement date.

A copy of these minutes and any subsequent meetings between SW, the Developer and/or the SLP will be retained on file by SW against the records for the scheme.

11. Works inspection audits

During the period of installation SW will undertake in conjunction with the SLP when possible routine site visits to inspect the self-lay work to ensure that the work is being laid in accordance with this SWSP with regards to standards of construction, Health and Safety, and Permissible Materials being compliant with the approved design. The cost of these and all other inspections/audits carried out by SW are control point checks that are included in SW’s published rates and charges with no separate charge applying unless specifically specified as an additional charge and chargeable in accordance with SW’s published rates.

This will include inspecting that personnel employed in working on potable water mains can prove on demand that they have the appropriate and current qualifications, certifications, and an EU Skills National Hygiene Card.

It is expected that the SLP will immediately correct any aspect of the work that does not comply with the SWSP specification, standards, and use of Permissible Materials that is identified to them. No installation by an SLP that does not meet the required specification and standards will be connected to our network or hence adopted until a compliant installation is completed by the SLP.

While SW audits are for ensuring that a compliant installation is constructed we will also offer advice and assistance to support the SLP as necessary to deliver the work in accordance with the required specification and standards. We will also record and report our audit findings for accreditation purposes – which will routinely be reported to the Accreditation body.

The SLP must maintain a Water Industry Registration Scheme (WIRS) accreditation. We may also require the SLP to show during the work they have maintained the requirements of Lloyd’s Register, which is the list of approved SLPs registered as WIRS providers.

The SLP must ensure that the contractors they employ and the resources used are fully accredited and satisfy required qualifications and standards.

12 Work inspection walk-off
12.1 Joint Inspection of Work: pre-connection

Prior to the SLP being ready to notify SW, using Form SLF-H1 for a mains connection necessary to commission a new self-lay main the SLP shall contact SW to undertake a joint inspection audit of the self-lay main and related works.

Reasonable notice to attend site to carry out this inspection audit is required (but generally SW will aim to agree a visit within 5-10 days of SLP contact).

This “pre-mains connection Inspection audit” is to identify any work that is faulty and therefore non-compliant with the approved design and this SWSLP and which needs to be corrected prior to connection of the new main (with the existing water supply distribution network) which would hold up a connection being programmed.

Additionally this inspection audit identifies work that would not prevent a connection being made (i.e. faulty covers, frames) but which needs to be corrected in order for SW to use the asset post connection. Such faults (unless assessed by SW as requiring immediate rectification) are to be corrected with 20 days of the connection date by the SLP unless otherwise agreed or instructed by SW.

Faults which will impact on a mains connection being made (main commissioned) shall be rectified by the SLP prior to the SLP being able to request a mains connection (using form SLP-H1).

Note: faults identified by inspection audits must be corrected by the SLP at no cost to SW and ones which can be delayed until after the mains connection are to be recorded in the post vesting inspection audit (date to be agreed with SW).

Following all and any inspection audits all identified faults must be listed using the SW Work Inspection audit form and when corrected must be signed off by SW. This form will thereafter be updated by SW to record any Defects during the Defects Liability Period and will be included with any report submitted to the Accreditation body when SW reports on the performance of an SLP.

The Work Inspection audit form shall record by reference to photographs, sketches and notes;

- Confirmation that all installations are in accordance with the approved design, the SWSLP, Good Industry Practice and fit for purpose, and the Water Regulations.
- Materials used are compliant with the Schedule of Permissible Materials.
- The condition status of the installed mains and fittings and related chambers.
- Any part of the installation that is suspected, by reasonable deduction, as possibly not constructed compliant to the SWSLP. SW may require the SLP to expose the installation to inspect the construction.

Relative to the above, it may be agreed at a pre-start meeting that the SLP leaves the constructed installation exposed (open trench) at certain points along the line of the new mains to be installed for an SW trench inspection audit.

If a Developer or SLP requires SW to step-in to resolve any aspect of construction that it is not in a position to satisfactory complete in a timely manner we will assist. Reimbursement of SW’s reasonable cost will be managed by the SLP or Developer signing SW’s appropriate recharge forms and SW will issue an invoice in due course.

If any work is identified as defective; which may also include the position and depths of required ducts which services are to be installed through, SW will require ducts to be re-positioned to suit. This work could impact on the commissioning of mains and connections between such. SW accepts no liability for any Developer or SLP costs associated with any
12.2 Post vesting inspection audit

To be read in conjunction with Appendix One.

Following the issue by the SLP to SW of the request for vesting application - SW will contact the SLP to undertake a mutual post vesting site inspection audit (and date) to inspect for Defects that may have become apparent since the pre-inspection audit walk-off and/or to manage identified pre-inspection audit connection faults that did not impact on the connection being made (main commissioned).

The post vesting site inspection audit will not hold up the issue of the vesting Certificate and start date of the Defects Liability Period.

This Inspection audit is to be arranged for a date following the connection date, but a reasonable time lapse is recommended of no more than 5 days.

13. Work programme and phasing

1. SW understands that a scheme design can change from that which might have been originally proposed and accepted and that a works programme may be affected such that mains and services can be laid in phases.

Where the Developer and SLP are aware that a scheme will be delivered in phases then these details must be provided to SW and detailed within the Agreement. This will assist SW’s ability to manage water supply demand to our customers and to new development.

2. If parts of a self-lay main are to be constructed in phases and commissioned SW must be notified of each section to be made “live” for commissioning and hand-over (subject to formal vesting procedure); and the final section of mains on a development site must be clearly identified to SW to denote the conclusion of a specific Agreement.

3. As-laid drawings are to be supplied at the time of hand-over.

4. For each section of main that is “handed over” as a commissioned main, and duly connected to the existing live water mains network, SW will issue a Vesting Certificate to denote the commencement of the Defects Liability Period for that phase/section to be adopted by SW.

Sectional or phased work Vesting Certificates will be collated and attached to the Agreement together with the final Vesting Certificate.

14. Self-Lay Agreement

SW’s standard Self-Lay Agreement for mains and services and for services only can be found on our Website in the section for Self-lay.

The Agreement shall be signed by all parties before the work commences on site. It is the Developer’s responsibility to ensure that the signed Self-Lay Agreement is in place before commencing any work that it is intended that SW be requested to vest/adopt.
14.1 Easements

SW accepts that in some instances that mains or services cannot be installed in new development sites in a road, footpath, or a suitable service strip that will be adopted by the local Highway Authority; such that mains or service may be installed in private land.

Notwithstanding that SW as the Undertaker can serve a notice under the Water Act to enter private land and or an unadopted street it is SW’s requirement that all mains and services that do not finish up on installation in an adoptable highway or service strip and which consequently are installed in private land be protected by an appropriate easement. This is also intended to provide customers with a proper record of what may be relevant to private land owned by them and to facilitate good communication with SW in the event of a need by SW to access such land for future maintenance and repair work.

A form of “Grant of Easement” that SW expects to be used is provided for information purposes with the Self-lay Agreement. This sample document is for use between SW and the private land owners.

The SLP will ensure that all required easements are in place and registered against the deeds of a property relative to all pipework that is installed in a communal private (non-adopted) road, communal driveway, or other land.

14.2 Application for vesting of mains

Following a satisfactory mains connection the SLP can apply for the self-lay mains to be vested by SW. On receipt of this application, deemed by SW to be on receipt of written notification by form SLF-H1 Part Two SW; will, within the period of 7 days:

- issue the Vesting Certificate
- issue details of the relevant relating Net Asset Payment.

14.2.1 Routine inline connection form and subsequent vesting

The SLP uses Form SLF-H1 Part One “Notification request for routine Inline Connection to notify SW of a need for a mains/services connection and Form SLF-H1 Part Two for notifying SW of an application for subsequent vesting of self-lay mains and services”: as follows,

14.2.2 Point of connection to existing network

Form SLF-H1 Part One is used to request and notify SW for a site specific connection to SW’s existing network (source main supply to the development) relative to a connection to the existing water supply distribution network. The SLP identifies the date that the SLP is requesting a connection to be made. This date is subject to any applicable SW constraints that may impact on the requested connection date.

This connection is Non-contestable work.

The SLP provides SW a minimum notice period for this connection of 10 days and additionally completes the form to show the date that the SLP is requesting a connection to be made. Notice period subject to any applicable constraints.

Note: prior to the SLP notification for a connection - the point of connection with SW’s appropriate source main (see Form SLF-F3) will need to have previously been confirmed by SW and appropriate notices issued. Prior to any connection being made the required pre-inspection audit of work to be commissioned and connected shall have been completed and SW approval for a connection been confirmed to the SLP in writing.
15. **During the defects liability period**

SW and the SLP will monitor ongoing Developer activities that may have compromised the integrity of the vested asset(s) and to ensure that any changes to a development have not compromised access to maintain such assets.

The SLP is to correct all Defects identified to it by SW unless the SLP otherwise requests SW to assist and to undertake this Contestable element of work to correct the Defect on behalf of the SLP; subject to SW being duly reimbursed its reasonable costs. SW reserves the right to step-in and correct any Defect when the SLP is unable to undertake the work in a timely manner such that SW’s level of service to its customers is compromised and such would impact on SW’s supply to its existing customers or to water quality.

Such step-in work, or work instructed of SW by the SLP, will be managed in terms of cost reimbursement by the issue to the SLP of SW’s “third party cost recovery form”.

Damages caused directly by the Developer will be invoiced directly to the Developer unless the SLP instructs SW otherwise.

16. **Payment of the Net Asset Value**

SW’s procedure and process relative to the payment of the Net Asset Value relating to work completed in a single phase or a number of phases or section is as follows;

1. **No phasing:** if mains have been installed and commissioned in one complete phase or section of work SW will make the asset payment on completion of this one complete phase or section subject to the installation having been constructed in accordance with the SWSLP, with a satisfactory final connection to the existing water mains supply distribution network.

   In this scenario of a single phase or section of mains a single Vesting Certificate will be issued.

2. **Phasing:** if mains are installed in several sections of work a payment will be made for each phase or section completed and commissioned subject to a compliant construction and satisfactory connection to the previously commissioned extension of the water mains supply distribution network.

   Interim payments: will be calculated as a percentage of the final total Net Asset Value due on adoption by SW of the self-lay Water Mains.

   The interim payment will be calculated by multiplying the meterage of the phase or section to be commissioned as a percentage of the total meterage of the site specific main(s) and the corresponding percentage of the total Net Asset Value.

   In this scenario a Vesting Certificate will be issued for each complete phase or section of work, referenced by the Agreement.

3. **Value of Net Asset Payment**

   a) When all fittings and meter chamber covers and frames are not completed and installed relative to a final permanent surface and location and able to be operated by SW the payment due relative to the final phase or section will be capped at 90% of the total Net Asset Payment for the total of the self-lay Water Mains; and, payment of the final 10% will be made when the SLP notifies SW that the final permanent (adopted or otherwise) surfaces have been installed on the site such that the surface boxes of installed mains fittings and or chambers and meter chambers have been set to the final permanent
surfaces, the final location is as per the approved design, and appropriate marker posts also installed.

Or,

When all fittings and meter chamber covers and frames are completed and installed relative to a final permanent surface and location and able to be operated by SW the payment due relative to the final phase or section will be the balance due up to 100% of the total Net Asset Payment due for the total of the self-lay Water Mains.

In the scenario of phased or sectional completion of mains a Vesting Certificate will be issued for each satisfactorily commissioned phase or section of work.

- The SLP is to identify the final location of any mains fitting or meter chambers when in particular changes to the original site design and associated mains and services layout may have been made by the Developer such that the initial design assumption as to final location may have changed and/or when as a consequence the final location of fittings or chambers is not compliant with the SWSLP such that they may require to be “re-sited” or that appropriate legal arrangements for access are provided. SW’s determination in this regard will apply as it has a future responsibility to access and maintain these assets.

4. The above will not delay the vesting (adoption of the main) by SW. However, the SLP shall re-locate, re-position or replace effected apparatus when instructed by SW during the Defects Liability Period and within 10 days of SW’s instruction; failing which SW reserves the right to rectify such non-compliant work and to charge its reasonable costs to the SLP.

5. Services that are connected to the new self-lay mains, if installed by the SLP (in accordance with SW’s Self-Lay Policy) are excluded as per the COP in the calculations of Net Asset Payment.

17. Commissioning and handover

See also Appendix One – Mains Commissioning and Handover.

This details the requirements for all aspects of commissioning a new water main and services (mains swabbing, chlorination, sampling and pressure test information etc) and handing over to SW as a compliant new asset that can then be applied to be adopted.

**Commissioning**

In the design of a water main regard shall be given to the process of commissioning and any associated procedures or tasks that will be required to commission the main. Such considerations may include, but not limited to the following:

- Pressure testing
- Disinfection
- Biological and chemical testing
- Swabbing

Substantial volumes of water can be required for testing, swabbing, disinfection and flushing of mains and the adequacy and availability of water should be established as early as possible. The number and location of sampling points to confirm effective disinfection shall be agreed, but should be made available at intervals not exceeding 500 metres, and at every outlet.

The SLP and/or the Developer shall be responsible for discharge and disposal of all testing water and shall require and obtain approval from the Environment Agency and SW.
1. Water mains and fittings (including fire hydrants)

All mains fittings and chambers are to be installed and located in accordance with the SWSLP and the final design drawing for the site (subject to accepted variations) that are to be confirmed prior to commencement of self-lay work by a construction drawing that the SLP is to issue SW at the Pre-start meeting.

2. Photographic records

A photographic record of the installation of mains and services is to be made by the SLP to confirm that mains, fittings, connection, and services have been supplied in a manner compliant with the specification and required standards. The photos shall be clear and unambiguous and linked to a specific section of main and or plot number.

This photographic record shall be made available to SW (and in particular to those auditing the work) and provided to SW electronically on request.

3. As-laid drawings

See also the SW Design Guide for SLPs.

An as-laid drawing is required for all sections or phases of commissioned mains and for the complete site. Service pipe and meter locations are to be subsequently supplied to SW in an approved format.

The as-built drawings must be issued to us in an electronic format that is compatible with our systems and records and accordingly the following current standards apply. If requested the SLP is to provide a hard copy of all documents.

a) Auto CAD 2004 (or later) compatible DWG files (including all supporting layers and backgrounds).

b) PDF copy of CAD Drawing.

c) GIS data - the location of all new SWS assets must be accurately captured on site by GPS.

d) The drawings must comply with SW drawing semiology and be appropriately scaled, accurately show the location of the apparatus, detail all fittings, the material types used and pipe diameters.

e) As-laid drawings must clearly show the location of all installed mains, services and meter chamber positions, diameter of pipe, locations of Sustainable Underground Drainage Systems (“SUDS”) and material (including any distinction between protected or otherwise due to contaminated ground) of pipe.

f) Drawings are to be accurate to within 0.1m.

g) Electro-fusion and/or mechanical joints: If approved in writing by SW (which is the only occasion when they shall be used) electro-fusion or mechanical joints have been used, these shall be accurately described and shown on the as-laid drawing and all supporting information required by SW shall be provided by the SLP prior to a main being commissioned and connected to the existing water supply distribution network.

An SLPs failure to obtain prior written SW acceptance by an SLP to use Polyethylene electro-fusion or mechanical joints and in doing so to also provide substantive information to SW to support such usage, for SW assessment, or to use such without SW approval shall delay mains commissioning, connections, and associated vesting of mains. SW reserves the right to instruct the SLP to remove non-compliant / SW approved Work (including fittings and joints) and to install approved and compliant Work at no cost to SW.
h) As-Laid information for services: See Form SLF-H1 Part Two (Appendix 1) to record all details, and additionally if roads have been “named” provide such relative to plot number/house number.

18. End of Defects Liability Period

The SLP is to notify SWS by giving notice in writing (email) 2 months prior to the end of the Defects Liability Period.

Following receipt of this notification SW will contact the SLP to arrange for a site walk date to inspect/audit the installed assets detailed within the Agreement for that site and SW will subsequently notify the SLP the end date of the Defects Liability Period and issue with this notification a summary of all Net Asset Payments made and associated date.

Any installation that has been compromised since the commencing of the Defects Liability Period shall be recorded and any compromised asset rectified to SW’s satisfaction. Liability for associated cost will be considered to be the responsibility of the SLP and/or the Developer.

19. Appendices

- Appendix One – Mains Commissioning and Handover
- Appendix Two – Inline Connection & Vesting Form SLF-H1
- Appendix Three – Schedule of Permissible Materials
- Appendix Four – Construction Drawings
- Appendix Five – Example of Asset Payments

These Appendices are available to view in SW’s Website in the Self-lay portal.