We have a number of specific requirements relating to aspects of a pumping station being offered for adoption. Below is a simple list of those that we often request as part of the technical review process and later in the adoption process.

**Valve chamber**
Southern Water requires a minimum of 4 lids.

**Wet well chamber**
Southern Water requires twin lids.

Must be benched with the inlet pipe a minimum of 100mm above the benching.

**Non-return valve (NRV) chamber**
Drain Back Valve - Southern Water requires a (cat) flap valve in the wet well only.

**Air valves** in the valve chamber will require their own vent pipe (*No mushroom vents to be fitted on the access covers*)

**Rising main pipe wall thickness**
Southern Water requires the use of a minimum SDR17 pipe wall thickness. This is the best engineering practice for high pressure jetting.

**Compound gates**
The gates must open outwards to 270 degrees.

**Access road hatching**
In certain circumstances Southern Water will require yellow hatching to the front of the pumping station (where the gates are) to prevent vehicles from parking and impeding our 24/7 access.

**Telemetry units (outstation)**
Please contact Developer Services to discuss our current requirements.
Tanker tracking
Southern Water requires a tanker tracking drawing with each application. The access details are reverse in and drive out of the station.

Street lighting
Please provide a drawing showing the location of the street lighting near the compound gates. *(as this may be an obstruction for tanker access)*

Junction box
All cables to the wet well must go through a junction box.

Lifting chains
Wet well submersible pumps that has a handle suitable for the Southern Water 2 tonne Lifting Hook shall be fitted with a length of 6 mm diameter non-rot nylon cord threaded through the lifting handle with both ends secured with 'swivel catch hooks' at the top of the well at opposite sides. Any pumps that are larger than 13.5Kw, or have no suitable lifting handle, will require lifting chains supplied with the appropriate certification:

Chain block
This is required for wet wells deeper than 6m.

O & M manuals
3 copies to be produced and sent to Developer Services at least one month prior to agreed handover date.

These must include the Asbestos Free Statement and the Hazardous Zone Drawing.

Certification
1. Electrical & Lifting (including proof loading)

2. A Birthing Certificate must be supplied for all davit arms.

These must be in Southern Water’s name with a minimum of 4 months expiry.
Requirements for a Pumping Station submission- To comply with Sewers for Adoption 7th Edition & Southern Water’s MED 4006

A copy of the following drawings:

- Proposed pumping station compound layout plan and details scale either 1:200 or 1:500;
- Proposed pumping station construction details scale 1:20;
- A complete set of electrical drawings comprising, schematic and layout drawings of each enclosure/panel;
- Rising main long section drawing;
- Tanker tracker drawing;
- Position of street lighting drawing;

Type of pumping station i.e. Type 1, 2 or 3 and whether it is a foul water or surface water pumping station.

Technical Submission which details:

1. Specification;
2. Design Strategy;
3. Hazardous Area Classification;
4. Design Inflow & Proposed Discharge;
5. Rising Main/Surge Analysis;
6. Emergency Storage;
7. Retention Times & Chemical Dosing;
8. Pump Duty and Selection;
9. Pump Station Layout;
10. Pump and Level Control Cabling;
11. Control Equipment;
12. Telemetry Equipment;
13. Access covers;
14. Lifting Equipment;
15. Penstock Valve;
16. Baffle Plate;
17. Services;
18. Any Necessary Appendices.

– to include hydraulic calculations.

All the relevant design calculations for the pumping station/s and rising main/s e.g. flow upon which the design calculations are based, recommended start and stop levels for the pumps, total head, inlet and discharge diameters on storage capacity etc.

Full details of the recommended pumps.

Characteristic curves, including the system curve, provided for the selected pumps with duty point rating clearly marked.

If carried out a copy of the capacity check provided by Southern Water identifying the level of flow into the system and the point of connection.

Details of the gate access.

The position of the junction box.

Details on the compound fencing i.e. type of material to be used.

Position of the bollards.

A drawing to show the wet well benching and wet well capacity/storage/time to spillage.

Floatation check.

Please note that this list is not exhaustive and we may require additional information dependent upon the pumping station

**Payments**

Please also note that after technical approval of the S104 application we will request a further fee at a later date, but prior to handover for the signage, padlocks, monitoring and configuration of the telemetry unit.