

Paddock Wood Growth Scheme

Appraisal of Berkeley Homes Development Wastewater Supply Options

May 2021



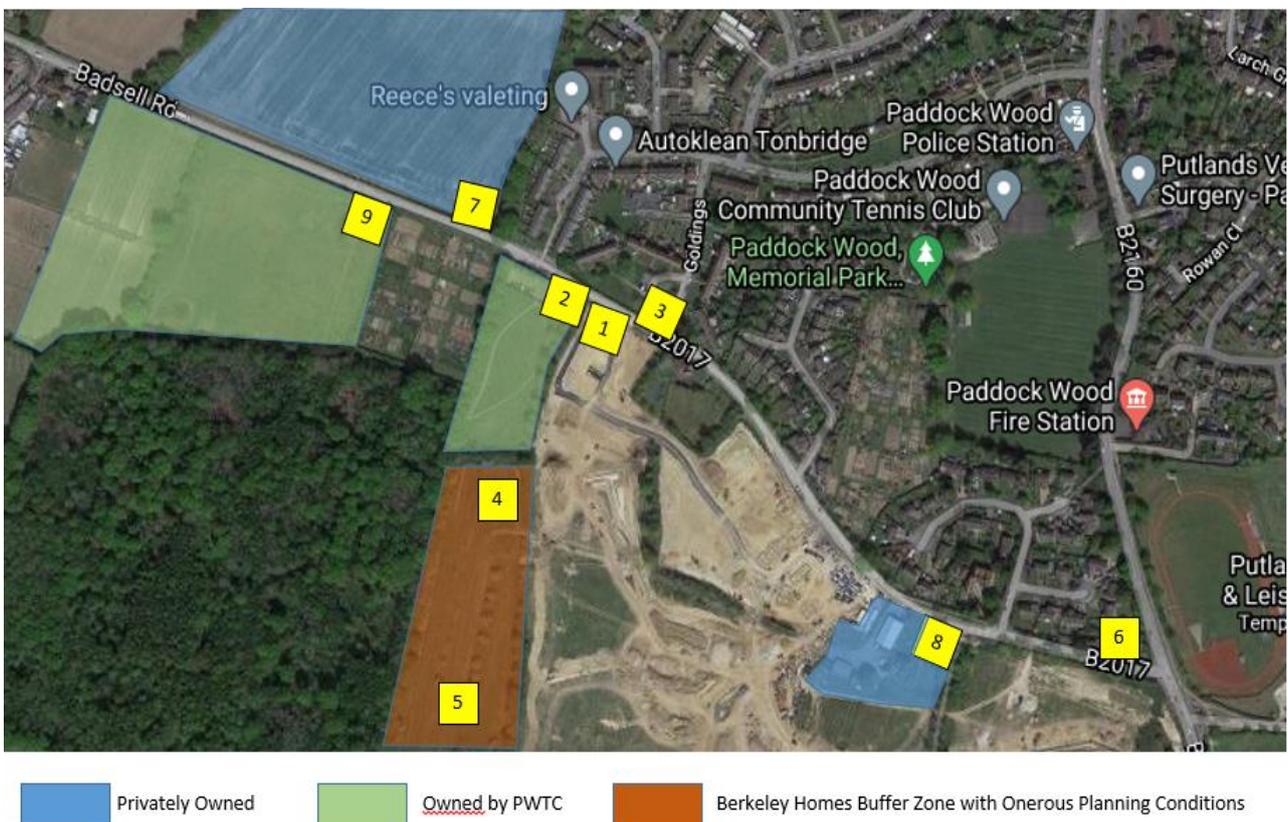
from
**Southern
Water** 

Southern Water need to build additional capacity into the network to manage the wastewater flow from the new Berkeley Homes development. The following document outlines two approaches:

- Wastewater Pumping Station, and rising main
- Network enhancement

Wastewater Pumping Station Potential Site Options

9 Wastewater Pumping Stations (WPS) potential locations have been investigated to enable wastewater flow to be transmitted along the proposed rising main. For ease of reference, please see the map below.



1. Within Berkeley Homes development site

Negotiations with Berkeley Homes were undertaken and a WPS location agreed within their site boundary. During Berkeley Homes enabling works, an obstruction was found which meant the developers Sustainable Urban Drainage System (SUDS) design had to be changed to meet requirements to protect against flood risk. The re-design of the SUDS utilised the area previously agreed as suitable for the Southern Water WPS.

2. Car park at Foals Hurst Wood Nature Reserve

The site considered for the WPS is at the eastern end of the car park, with footprint anticipated to be 20 metres by 10 metres – approximately 20% of the existing car park. The site is owned by Paddock Wood Town Council (PWTC) and Southern Water have been made aware that the town council would not want to make this site available for a WPS. It is felt by the town council, that the WPS will have a negative impact on the amenity and recreational value of the Local Nature Reserve (LNR). However, this remains a technically suitable site for a WPS and would require freehold purchase of the land from the town council.

3. Amenity land between Badsell Road and Goldings

The site considered for the WPS is located on an area of open space / amenity land to the south of Goldings and the north of Badsell Road. The site has planning permission for the erection of houses with associated car parking and is therefore unavailable for use a pumping station.

4. Buffer Zone between Mascalls Court Farm and Foals Hurst Wood Nature Reserve

This covers options 4 and 5 on the map. Two Sites were considered for the WPS within the 'buffer zone', which forms part of the Mascall's Farm development and has included detailed assessment of particular locations within this area. However, this area has important amenity, nature conservation and recreational functions provided by this buffer zone. Southern Water discussed both WPS locations with Tunbridge Wells Borough Council planning department which consider that construction of the WPS within the buffer zone would result in a loss of open space and biodiversity value and likely impact on the residential amenity of future occupiers, with particular reference to access. As such a planning application is likely to be considered unacceptable.

6. Intersection of Maidstone and Badsell Roads

This potential option was investigated but ruled out on engineering grounds. It presents a number of engineering difficulties as the pipework would have to be laid in rock (sandstone) substrata.

7. Agricultural land to the north of Badsell Road and to the West of Ringden Avenue

The site considered for the WPS is located in the south-east corner of an agricultural field and is currently within the Metropolitan Green belt, where new development is generally considered to be inappropriate. Southern Water have held discussions with the landowner and their appointed land agent and we have been advised that this land would not be made available. Southern Water could only explore compulsory purchase of this land if there were no other feasible options.

8. Land south of Badsell Road adjacent to Berkeley Homes Development

This was rejected on engineering grounds as it would require a complex insertion of 200m of sewer pipe at a depth of 7m, and the WPS would be at a depth of approximately 10m in an area of

private and commercial land ownership. In addition to the engineering challenges it would most likely require compulsory purchase orders and the demolition of a private dwelling and removal of a mature protected tree.

9. Land south of Badsell Road and west of allotments

We would need to remove 115m of mature hedge and to enable the necessary visibility splays for a new vehicular access to this site, requiring compulsory acquisition of part of the allotments with consequent visual and biodiversity impact. We would also require freehold purchase of the land from the town council.

The table below represents considerations we made when assessing sites and summarises the feasibility assessments we have undertaken when considering options to convey flows from the Berkeley Homes development.

Site	Location	Engineering	Third Party	Planning	Environmental Ecological
1	Within Berekeley Homes development	x	x	✓	✓
2	Car park at Foals Hurst Wood Nature reserve	✓	x	✓	✓
3	Amenity land between Badsell Road and Goldings	✓	x	x	✓
4	Buffer Zone between Mascalls Court Farm and Foals Hurst Wood Nature Reserve	x	x	x	x
5	As above	x	x	x	x
6	Intersection of Maidstone Road and Badsell Road	x	✓	x	x
7	Agricultural land north of Badsell Road and West of Ringden Avenue	✓	x	x	✓
8	Land South of Badsell Road adjacent to Berkeley Homes development	x	x	✓	x
9	Land south of Badsell Road and west of allotments	x	x	x	x

x - Unreasonable and/or not practicable

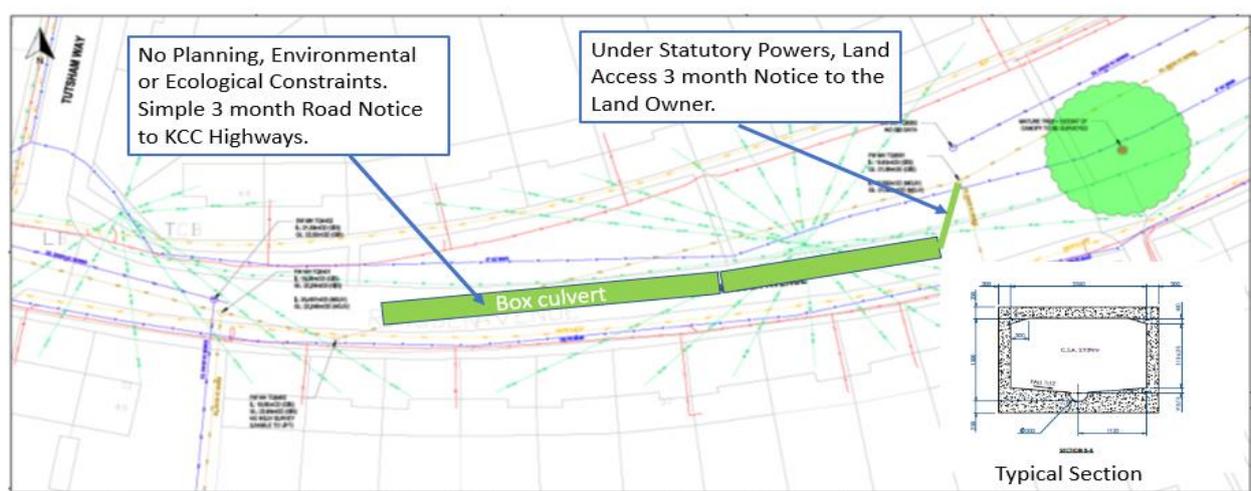
✓ - Reasonable and practicable

Alternative Network Reinforcement Option

Upgrade the existing gravity sewer in Ringden Avenue to accommodate all flows from the Berkeley Homes development.

This work would comprise a major upgrade of an existing sewer, connecting the Berkeley Homes development site to the newly upgraded Church Farm pumping station catchment and safely accommodating the wastewater from the site. There would be no visible change in Ringden Avenue once completed and no ongoing disruption to residents in Ringden Avenue.

- Extensive design and flow modelling has shown that this option will meet all drainage requirements of the Berkeley Homes development
- No loss of car park land
- Shorter (six-month) timescale for construction
- No visual impact – new sewer would be below ground, whereas pumping station would be above ground
- Carbon savings by using gravity system rather than pumped system
- Sewer would be installed in the highway and not in the verge
- Access to the sewer for future maintenance would be via manholes / inspection chambers
- Construction will be completed under a road closure notice, safeguarding our workforce, pedestrians and other road users
- 3 month notice to KCC highways and 6 month road closure for approximately 200m
- Access to adjacent properties will be maintained throughout
- We will undertake periodic surveys of the new sewer and adjoining network



Conclusion

After careful consideration of 9 options, alongside TWBC planners, we consider the only viable location for a new WPS near Badsell Road is a portion, around 20%, of the car park at Foal Hurst Wood. The pumping station will be of a larger footprint than Church Farm WPS as industry specifications now require a larger footprint for new build pumping stations.

Based on the findings presented above, Southern Water's current preferred option is the network upgrade in Ringden Avenue. As this proposal is an enhancement to our existing below ground network, and in the public highway, no planning approval needs to be sought. Subject to obtaining highway authority approval to undertake the works, we can proceed.

We have chosen to pause the progression of the works as Southern Water would welcome the town council's view on whether it would prefer to proceed with a new WPS on the Foal Hurst Wood carpark, which would require the Town Council to be willing to release the required land.

However, Southern Water have a duty of care to our customers and a statutory requirement to manage the flows from the new developments, therefore we would appreciate it if the town council could confirm their preferred option, being the WPS in the car park at Foals Hurst Wood Nature Reserve or the upgrade to our existing network, by 28 May 2021.

If we are unable to reach an agreement, Southern Water will need to progress with our preferred option to ensure the project keeps pace with the development and occupation of the Berkeley Homes Development.