
**Budds Farm Wastewater
Treatment Works – Erection of
Digester and Pumping Station
Kiosk**

Planning Statement

Planning Portal Reference:
PP-

May 2017

Budds Farm Wastewater Treatment Works – Erection of Digester and Pumping Station Kiosk

Planning Statement inc. Design
and Access.

Planning Portal Reference:
PP-

May 2017

Issue and Revision Record

Revision	Date	Originator	Checker	Approver
A	30.5.17	Luke Mosson MRTPI	Abigaile Carter	Sergei Ireson

1 INTRODUCTION

This document is in support of a Planning Application relating to the proposed erection of a new digester and pumping station kiosks at the existing Budd's Farm Waste Water Treatment Works (WTW), Southmoor Lane, Budd's Farm, Havant, Hampshire PO9 1JW.

This scheme forms part of Southern Waters' Asset Management Plan 6 (AMP 6) Programme. This is a major programme of refurbishment and upgrading of various existing wastewater treatment works and associated sewer infrastructure required by the water industry regulator OFWAT (Office of Water Services), and the Environment Agency, to be put in place between 2015 and 2020. Each of the schemes must be completed by dates specified by the Environment Agency and OFWAT.

The development is required to provide sufficient hydraulic and biological capacity at the WTW for the projected population growth forecasts for the area. An additional 5000TDs of sludge capacity is required at Budds Farm WTW, to enable the site to process the predicted future sludge volumes. Beneficial use of the new treatment plant is required by no later than August 2019.

As a sewerage undertaker, Southern Water is obliged to provide the appropriate facilities for the treatment of wastewater to the required standard by the Water Resources Act 1991 and the Urban Wastewater Treatment Regulations 1994.

2 CHARACTERISTICS OF THE DEVELOPMENT

2.1 Site Location

The proposed CHP is located within the operational Budd's Farm Waste Water Treatment Works (WTW), Southmoor Lane, Budd's Farm, Havant, Hampshire PO9 1JW.

Access to the site will be via Southmoor Lane off the A27. The majority of the site consists of concrete structures, buildings and areas of hard standing with part of the site boundary consisting of established trees. There are number of small mown grass areas within the site as well as larger grassed area to the west of the main works.

The new asset proposed will be located entirely within the confines of the operational site.

The site falls within the local authority area of Havant Borough Council and Hampshire County Council.

2.2 Existing WTW development

The existing WTW is a typical wastewater treatment works serving surrounding area.

The wider WTW has an area of approximately 17ha and currently includes the following operational infrastructure:

- Workshop and mess room
- Inlet for cake imports
- 2 sludge reception tanks
- 2 SAS Sludge holding tanks
- 7 drum thickeners
- 1 blended cake mixing tank
- 2 thickened Sludge storage tanks
- 2 digester feed pumps within kiosk
- 4 digesters
- 2 post digestion storage tanks
- 2 feed centrifuge pumps within a kiosk
- 2 centrifuges
- 1 land-cake silo
- Polyelectrolyte Plant

- Lime Plant
- Gas Store
- CHP Unit
- Gas Burner/Flare Stack

2.3 Extent of Proposed Development

There are numerous works which will be required in order to meet the requirement to process an increased quantity of waste at the site to meet future need. In order to provide a complete picture, we have set below the full extent of the works being undertaken as part of the project. This includes both work which will be undertaken under Southern Waters Permitted Development rights as well as that requiring planning permission. Those requiring planning permission are shown in green, the rest will fall within our PD remit.

SAS Thickening

- Replace the existing 5 No. drum thickeners with 5 No. drum thickeners of a larger capacity.
- New thickeners to be located on existing elevated platform. Modify platform penetrations to suit new thickener units.
- Extend existing elevated platform by the addition of a GMS platform to provide access to new thickener units.
- Provide dedicated flocculation tanks upstream of each new thickener unit.
- Provide dedicated sludge collection tank immediately downstream of each new thickener unit.
- Replace thickener feed pumps associated with each thickener unit and modify pipework to suit new layout.
- Replace thickened sludge transfer pumps associated with each thickener unit and modify pipework to suit new layout.

Sludge Digestion

- Provide new sludge digester and associated chambers, access structures and pipework.
- Modify site road layout to accommodate new digester.

- Modify control of existing feed system to accommodate additional digester.
- Install external mixer system to digester.
- Install recirculation pump, heat exchanger and associated pipework adjacent to the new digester
- Install hot water pipework between existing heat exchanger/boiler building and new heat exchanger
- Provide interconnecting pipework between existing digester feed system and new digester and from new digester to the existing post digestion tanks.
- Provide interconnecting pipework between the new digester and the existing biogas system.

Sludge Dewatering

- Modify centrifuge feed pumping station to accommodate additional feed pump.
- Replace existing kiosk with new pumping station kiosk.
- Install new centrifuge feed pipework between new centrifuge pump and dewatering plant
- Replace existing 2 No. centrifuge units with new larger capacity units
- Provide new sludge cake conveyors between new centrifuge units and the existing conveyor system feeding the cake silo.

Chemical Dosing

- Upgrade poly dosing plant serving the drum thickeners.
- Upgrade poly dosing plant serving the centrifuges.

2.4 Requirement for EIA Screening

It is considered that the proposed works do not constitute schedule 1 development. Due to the proposed development area (including the temporary compound), the development does not exceed the size threshold of 1000m² where in accordance with Paragraph 11 (c) of Schedule 2 of the Town and Country Planning (Environmental Impact Assessment (EIA) Regulations (2011) development of this size may require an EIA and a screening for EIA should be carried out.

The proposed development is not considered to have any significant effects on the environment by virtue of the proposals size and when set in the context of existing digesters of a similar size on the site and wider current use of the land. Due to the nature of the works within a large operational wastewater treatment works, it is assessed that the proposed development would not be classed as EIA development.

A preliminary assessment has been conducted by a qualified ecologist, which provides a range of basic advice to be followed during construction. An assessment of the construction phase in terms of vehicle movements has also been undertaken. It is not considered that either of these aspects will have any significant temporary or permanent environmental impact on the site or surrounding area.

2.5 Planning Requirement

The development of the kiosk requires planning permission as it is an above ground walk-in structure, which can be interpreted as a building over 29m³ in size. The digester will require planning permission by virtue of its height, which exceeds that of the 15m allowance permitted under our PD rights. The size of the proposed elements falling within the planning application are shown in **table 1** below.

The other parts of the permanent development, as set out above fall within the necessary parameters of the Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO) benefiting from Southern Water's Permitted Development rights as a Statutory Undertaker under Part 13.

These elements specifically fall within Part 13 Water and Sewerage Class B development by or on behalf of a sewerage undertaker, paragraph g of Schedule 2 of the GDPO which states:

"any other development in, on, over or under their operational land, other than the provision of a building but including the extension or alteration of a building."

Two temporary contractor's compounds will be required for the duration of the construction period and will consist of site cabins, material storage areas and welfare

and storage facilities. The compounds will cover a total area of approximately 2200m².

It is considered that the compound is Permitted Development under Class A of Part 4 (Temporary Buildings and Uses) of Schedule 2 of the Town and Country Planning GPDO (2015) which states that:

“The provision on land of buildings, moveable structures, works, plant or machinery required temporarily in connection with and for the duration of operations being or to be carried out on, in, under or over that land or on land adjoining that land.”

Table 1: Proposed items for the Millbrook WTW development

Item No.	Item of Development	Description	Planning Requirement	Height (m) (Above Local Ground Level)	Width (m)	Length (m)	Material	Finish	Foundation Depth (approx) (m)
1	Pumping Station Kiosk	Housing electrical equipment for pumping station.	Permission Required	4.1	6.5	8.2	GRP	Dark Green (Satin finish) 14C39 to BS4800	1m (max)
2	Digester	New sludge digester for anaerobic digestion.	Permission Required	16.7	16.5		Concrete	Grey matt corrugated cladding	3m (supported by piled foundations)

2.6 Construction Programme

Construction activities will be limited to between 07:00 to 18:00, Mondays to Fridays and 07:30 to 13:00 on Saturdays. There will be no work on Sunday or bank holidays.

In the event that longer working hours are necessary it would be appreciated if the grant of planning permission would allow a variation in working times with the agreement in writing of the Planning Authority.

The scheme will be completed in stages as shown in **Table 2**.

Table 2: Proposed construction programme

Project Task	Time Programmed
Commencement of site mobilisation: Setting up site compounds and storage areas and topsoil stripping.	Sept 2017 (2 weeks)
Commencement of construction phase - to include new excavation and construction of new structures	Sept 2017
Completion of commissioning of new works	Sept 2018
Completion of site demobilisation and reinstatement of compound.	Sept 2018 (2 weeks)

2.7 Materials Management

Detailed matters concerning construction waste will be addressed at the implementation stage by the Applicant with their appointed contractors as part of the site management organisation. The development process will seek to ensure that the creation of waste is minimised and that every effort is made to avoid needless waste generation.

Surplus materials will be taken off site under the appropriate waste classification by a licensed waste carrier and disposed of at a licensed waste facility.

Any waste materials from the proposed development will be managed in accordance with the Environmental Protection Act (1990) and the waste handling procedures under the contractor's project environmental plans.

2.8 Hazardous Materials

There will be no change to the hazardous materials currently kept on site for operational purposes upon completion of this development.

Diesel is stored in bunds on areas of hard standing in accordance with guidance detailed in The Control of Pollution (Oil Storage) (England) Regulations (2001) and/or EA Pollution Prevention Guidelines (PPG 2) 2004 Above Ground Oil Storage Tanks and PPG 26 (2011) Drums and intermediate bulk containers.

Spill kits are kept on site and members of staff trained in their use.

2.9 Traffic Management and Access

2.9.1 Existing Traffic Movements

There are currently traffic movements to and from the site associated with the operation of the WTW. These traffic movements consist of cars, light vans and tankers.

Site traffic accesses the site from the existing access into the WTW off Southmoor Lane and typically via Harts Farm Way and the A27.

2.9.2 Traffic Movements During Construction

During the mobilisation phase of construction, there will be approximately 5 two way Heavy Goods Vehicle (HGV) visits per week. There will be approximately 10 (5 in - out) light van/vehicle movements a day for construction staff. These movements are associated with setting up of the site compound and delivery of plant and equipment.

In the construction phase, vehicle movements will consist of daily access to the site from site personnel and delivery of plant, machinery and equipment. Typically this will be 16 light vehicle movements per day (8 two way movements) 6 HGV movements per day (3 two way) and one concrete wagon per day (two movements - although this will only be for part of the construction period). On a few occasions throughout the project a greater number of vehicle movements will be required on specific days to facilitate concrete pours for main structure bases and deliveries of major pieces of plant and equipment. These will be identified within the construction programme and specific details included within the traffic management plan.

Parking for the vehicles will be accommodated within the WTW site where sufficient space can be provided for loading and storage and accommodating necessary temporary welfare facilities, site office etc, parking space for site operatives and visitors.

There will be no construction traffic associated with the scheme on Sundays or Bank Holidays (unless otherwise agreed in writing with the Planning Authority). Traffic movements will be managed in accordance with best practice and incorporated within the contractor's project environmental plan.

Construction traffic will access the site from the existing access into the WTW off of the Southmoor Lane. The additional HGV traffic can easily be accommodated by the access during the construction period. A practical approach to vehicles entering and leaving the site will be implemented by the contractor to avoid any delays occurring outside the site.

Every reasonable effort will be used to ensure that deliveries take place outside of peak traffic hours. However a degree of flexibility with these time bands will be required should there be an unplanned event (such as late delivery of concrete) or an emergency situation that would require site presence and activity beyond those times. This would however be exceptional. If the Council considers that an hours of use condition is required, it is requested that this makes allowance for unplanned and emergency use.

2.9.3 Traffic Movements during Operation

On completion, operational traffic movements to the WTW will not increase beyond existing levels and will continue to be purely for operational and maintenance operatives.

2.10 Construction Management

The contractor's project environmental plan will be prepared as part of the proposed development to be used on site to manage and minimise the potential environmental impacts of construction activities. The plan is compiled by the site construction manager with inputs from the planning, public relations and environmental teams.

Good working practices will be stipulated in the plan that will form part of the contract with the civil engineering contractor and will be audited and enforced by Southern Water.

2.11 Wheel washing facilities

This will be provided within the site in accordance with standard contractors practice.

2.12 Site Lighting

Permanent low level external lighting at the site will be required during its operation. Lighting units/luminaries will be selected that are appropriate for their location to reduce light spill and glare to a minimum as per recommendations specified in the Institution of Lighting Engineers (ILE) Guidance Notes (GN) for the reduction of obtrusive light (GN01) (ILE, 2011).

Specifically designed lighting equipment shall be selected that minimises the upward spread of light near to and above the horizontal.

All Lighting shall comprise low energy LED Luminaires, with day-light sensing control. Lux levels shall be in accordance with the Chartered Institute of Building Services Engineers (CIBSE) Lighting Guide (LG) 01 (2012) and LG7. Lighting circuits shall be sourced from a dedicated lighting distribution boards.

The external lighting will be internally focused and low level within the site and will only be used where necessary to facilitate operation staff, it will typically only be used during the beginning and end of the working day during the darker winter period and would be turned on when not required. It is not considered that it will have any adverse impact on the surrounding area.

2.13 Site Restoration

All areas temporarily impacted upon by the proposed development will be reinstated to their existing condition upon completion of the development.

3 POTENTIAL IMPACTS ON THE ENVIRONMENT

A Southern Water ecologist carried out a preliminary ecological appraisal of the site and its surrounds to identify any ecological constraints associated with the proposed works. The site visit identified the habitats and features of ecological interest, including any evidence of protected species or their habitats. In addition to the site visit, a desk study was conducted to determine any known ecological constraints within or close to the site. A search of the MAGIC (Multi-Agency Geographic Information for the Countryside) website and local council website was undertaken to obtain information on any designated sites close to the site. Information was also obtained from Southern Waters GIS constraints tool.

The preliminary ecological appraisal is based on drawing JN.639264.0Z0703 – site layout plan.

4.1 Designated sites

The southern part of the site is adjacent to the Langstone Harbour Site of Special Scientific Interest (SSSI) and the Chichester and Langstone Harbours Ramsar, Special Protection Area (SPA) and the Solent Maritime Special Area of Conservation (SAC). Works to construct the kiosk will be in the northern part of the site approximately 250m from the designated boundary.

Manor Farm and Broadmarsh Playing Field are located 800m and 400m from the working area and are Sites of Nature Conservation Importance (SNCI) which are classed as non-statutory designated sites.

The work within the WTW site is very minimal and will take place within the operational areas of the site and will not affect any statutory or non-statutory designated sites.

4.2 Site Description

The majority of the site is mostly made up of buildings and concrete structures with areas of hardstand. The western part of the site contains scrub and tall ruderal habitat mostly containing bramble scrub and larger areas of nettle beds.

The southern part of the site contains three large lagoons that are known to be important areas for wintering wildfowl species that use the lagoons as high tide roosts.

The area where the kiosk is proposed is all within hardstand and will not affect any habitats of ecological importance.

4.3 Assessment

The site's ecological value has been evaluated broadly following guidance issued by the Chartered Institute of Ecology and Environmental Management (CIEEM 2013)¹, which ranks the nature conservation value of a site according to geographic scale of reference: international, national, regional, county/metropolitan, district/borough, local/parish or of value at the site scale. In evaluating the nature conservation value of the site the following factors were considered: nature conservation designations, species/habitat rarity, naturalness, fragility and connectivity to other habitats.

All works as shown on the design drawings are minimal and will take place within areas of hardstand within operational areas of the site and will not affect any habitats of ecological value.

Works will not affect any nature conservation designations. No rare or habitats of principal importance will be affected by proposed works.

The majority of the site contains habitats that have very limited potential to support protected species, for example, operational areas, hardstand and mown grass. Works are confined to operational areas within the site within areas of hardstand and the potential for the works to impact on protected species is low.

The Budds Farm WTW site is currently considered of value within the immediate vicinity of the site only, but the lagoons within the southern part of the site are considered of local value due to supporting wintering birds, however, no works will affect the lagoons.

4.4 Archaeology and Cultural Heritage

A review of mapping produced by Havant Borough Council (HBC) indicates there are no scheduled monuments present at or in vicinity of the proposed development and wider WTW site.

¹ Guidelines for Ecological Impact Assessment in the UK (2013). Chartered Institute of Ecology and Environmental Management

Online mapping produced by HBC indicated that there were no conservation areas or areas of archaeological interest at or in the vicinity of the proposed development and wider WTW site. Given the works are being undertaken on an area within the existing works it is considered that the risk of encountering archaeological remains on the site are low.

In the event that items of archaeological interest are found during the excavation works, the works will stop and Hampshire County Council archaeologists will be contacted.

3.5 Landscape and Visual Assessment

The WTW site is located in a largely commercial area. To the north of the site lies the Havant lorry park, to the west of the site lies an area of parkland beyond which are commercial units, an aggregate processing facility, electricity sub station and small boat dockyard beyond the Solent Way. To the south of the site, a further area of parkland is bounded by the Solent Way. To the east of the site lies a large commercial park with a variety of business units including Langstone Technology Park. Those units located closest to the WTW accessed from Southmoor Lane include a car and van rental agency and repair centre.

Much of the site is screened from view by a mature tree line which runs along the eastern, northern and sections of the western boundaries, although elements of the taller plant can be seen beyond these. Similarly, an established band of trees screen the site to the south limiting views into the site from the adjacent park area. The Solent Way footpath runs along the coastline to the north, west and east of the site, however views into the site itself or relatively limited given the existing tree screening which runs adjacent to much of the footpath.

The proposed kiosk will be located on the site of an existing building, and will in essence replace this, so in principle there will be no greater impact from a visual perspective. The positioning of the kiosk immediately adjacent to the much taller existing digesters and being situated close to the mature tree band between the site and the Solent Way mean that views of the kiosk are very limited. It is not considered that the proposed kiosk will have any adverse impact in visual terms by virtue of the existing built form surrounding the proposal and the very limited views from which the kiosk can be seen.

The digester, given its height, will clearly be visible in the wider landscape. The digester will be of comparable height that of the existing digesters which it will be situated opposite and will therefore be viewed in the wider context of these.

The digester will be constructed in concrete and finished in a matt corrugated cladding to match the finish of the existing digesters. The matt grey finish is considered to provide the most subtle appearance to the large structures in the wider landscape.

The existing digesters are shown in **figures 1 and 2** below.



Figures 1 and 2: Showing the existing digesters. The new digester will be constructed in concrete and clad to match the finish of the two existing structures.

While the level of built form proposed is significant, it is situated within not only an existing WTW site, with numerous structures of a similar height, but also within a largely commercial wider setting that has a number of other industrial structures dotted throughout.

The 3D renders shown in **figures 3 and 4**, shows the existing structures on the site and the adjacent commercial uses against which the digester and kiosk will be viewed in the wider landscape and industrial context.



Figure 3: Extract from Google Earth showing the context of the existing site, looking south-east across the existing WTW and adjacent commercial area, notably the aggregate processing facility.

A public foot path runs along the Solent way to the west of the site, however given the mature tree line, views into the site from the footpath are very limited.



Figure 4: Extract from Goole Earth showing the context of the existing site, looking east across the existing WTW.

3.6 Odour and Dust

The proposed digester will be a sealed unit and will be connected to the existing odour control system on site. There will therefore be no adverse impact on odour caused by the proposal.

During construction there is a risk of nuisance dust emissions which are associated with the excavation and handling of materials. Normal site practise of dust control by wetting dust generating activities or areas, covering stockpiles of excavated material and wheel washing practices will be carried out if necessary. These will be incorporated within the CEMP (Construction Environmental Plan). After the construction has been completed there will be no increase in odour and dust from the site.

3.7 Noise

The WTW is located in a commercial area with minimal noise receptors located in the vicinity. The surrounding uses are not considered to be noise sensitive. There are no residential properties located within the vicinity of the site that would be impacted by the proposed additional digester given all moving parts are contained within the structure.

Neither the proposed digester or associated control kiosk will be noise generating.

3.8 Controlled Waters

3.8.1 Groundwater

The proposed development is not located within a groundwater source protection zone (SPZ).

The construction works will be carried out in accordance with the contractor's project environmental plan to ensure no pollutants enter the groundwater system.

3.8.2 Surface Water

There are no surface water bodies located in close proximity to the proposed development. Run-off or spillages from construction activities will be avoided through careful site management guided by the contractor's project environmental plan which will follow EA pollution control guidelines.

Surface water drainage systems on the site will remain unchanged. Surface water will be directed into the existing surface water drainage system on the site, which is then returned to the head of the works for processing.

3.9 Flood Risk

EA mapping shows that the western boundary of Budds Farm WTW is classified as a Flood Zone 3 risk area for flooding by rivers and sea, but an area that benefits from flood defences. It is not considered that the proposed works will have any impact on the flood resilience of the overall site, or elsewhere.

A flood risk assessment has been prepared to accompany this submission and is provided for reference.

3.10 Local Disturbance

No impact is envisaged from the operation of the WTW site, surrounding businesses may be subject to minor noise disturbance during construction from machinery and vehicle movements, however in the context of the surrounding commercial uses this is unlikely. This will be minimised by good working practices such as avoidance of night-time and weekend working.

Due to the nature of work being carried out and the available site access, no disturbance to local road users is expected during construction within the WTW site.

4 CONCLUSION

The proposed installation of a new digester and kiosk at Budds Farm is part of essential upgrade works to ensure that the site is able to meet the predicted population growth in the region.

It is assessed that the proposed development is in keeping with the existing development and setting of the WTW and that the proposed development will not materially impact any surrounding sensitive receptors, throughout either the construction and operational phases.

There are no significant impacts associated with the proposed development. It is considered that the proposed development does not constitute an EIA development.

Good working practices and careful supervision during construction will ensure that potential risks to identified sensitive receptors will be minimised and impacts prevented.

These practices will be stipulated and addressed in the contractor's project environmental plan. Southern Water processes also ensure good site management during operation and compliance with existing environmental permits, licences and consents.

In order to meet the tight project programme, we would be grateful to avoid any pre-commencement conditions being imposed on any approval. We are happy to discuss any outstanding issues during the determination period to, where possible, avoid pre-commencement issues being imposed.