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Cheddar Parish Council Church Street Cheddar Somerset BS27 3RA

Our Ref: 13281

30 July 2019

Ref: Sharpham Road Playing Fields, Sharpham Road, Cheddar, Somerset, BS27 3DR

Further to our recent visit to the above address, we are now pleased to submit the following report and estimate.

Further to your proposed extension to the sports facilities as shown on Robinson :Brice drawing Nos: 485/010 and 488/050 of march 2019

We understand that you have won a grant towards extending your pavilion in two directions.

Unfortunately, both the entrance hall in the main hall will be directly over the two existing septic tanks, soak away and IC's So all of the present foul water arrangements will need to be diverted or replaced.

But its water is to provide a gravity serve mains connection to the playing field complex within a period of 3 to 5 years as part of a network expansion program in connection with the Hinkley point PowerStation staff accommodation. Therefore whatever you replace The existing septic tank with, will only be a temporary measure.

In terms of sizing the proposed temporary septic tank, this is a very difficult for the amenity sites such as yours. It's easy to oversize a unit and based on the fact it only operates for 3 to 5 years it's probably best to block on a smaller scale. The Southway will be part of which we will need to get the right as this is an actual quantity which needs to be discharged into the ground. If you take the approach of emptying the whole septic tank prior to any major event at the site, this will carry you through on a temporary basis until such time that the main sewer connection is made.

The minimum size up to type that would suggest would be 18, 000 space litres (this will be based on the equivalent domestic PE of 88 persons).

It will also give you ample size and storage to use this as a rainwater tank in future years.

The tank will be located on the right-hand side as you enter the site between the hedge and existing pavilion, this would be a convenient location and in readiness of the mains water sewer connection in future years.







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We will erect a small compound area for materials and van parking we will fence of the whole area safety reasons. When we excavate the hole, we will also use edge safe fencing around the house as additional protection. We don't allow for any site security cameras as part of our works.

We will provide a chemical loo for our staff, however under CDM revaluations 2016, the engineers should have access to mains power for kettle and microwave for rest purpose and showers in the event of needing them. To negate the need for us to hire, can we agree to have access to the pavilion showers and power supply?

For the effluent to be received in the 18, 000 litre septic tank, we will need to divert the existing drains to the new tank, we allow for these works.

After the septic tank will install a single pump, lift chamber, which will take the gravity fluid from the septic tank. This pump shall pump the fluids through approximately 150m of 50mm mdpe pipe around to a proposed soak away.

The design of the soak away is going to be the difficult part.

- 1, Because it's only temporary
- 2, The flows fluctuate Incredibly, that is hard to put an actual quantity.

For the purpose of starting point, assuming we are looking at the equivalent of 50 PE And using the environment agency percolation test guidelines the following calculation should be used:

 $A = p \times Vp \times 0.25$ (Meaning soak away length = PE x porosity x 0.25)

In order for us to properly design the length of the soak away, we need to attend and carry out some percolation test holes in the area the soak away. This would likely take two days to men and will be charged at £750 per day.

For the sake of budgeting, we are assuming a soak away of 150 m in length.

At this stage we have allowed for any internal electrical connection within the pavilion. We are allowing SWA cable and ducting to reach the outside rear edge of the building.

Welfare provision and security

- Hire of chemical toilet six weeks
- Fencing to work
- Utility search with SSE, BT, line search, gas, virgin media, Wessex water CDM Compliance construction phase plan/risk assessment and method statement

Point A-B new IC 900mm ID Average depth 1.2m







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Excavate for and install a 900mm inside diameter PCC IC Complete with multichannel UPVC bade with 6 No 110mm Incoming sockets to divert the flow and remove IC.

Connect in the new flows from the bar/kitchen, five no WC's, urinals and six washbasins as shown on Dwg No 488/010.

Surround the IC With 150mm of C20 ready mix concrete. Fit a heavy duty PCC cover slab and heavy duty MA60 ductile iron cover and frame securely grouted on.

Excavate for and install a second 900 MM inside diameter PCC IC complete with 160 MM channel base incoming straight, outgoing straight blanked off ready for final connection to Wessex Water mains sewer at a later date. The present outflow is to use a 45° channel outlet left-handed (The base is to be installed in reverse fashion to achieve these flows) Excavate for and install 30m of 160MM outside diameter HS pipe between point A and point B. This pipe is to have a bed surround and cover of 10mm of clean limestone backfield with selected subsoil and then the topsoil replaced.

Point C supply & installation of 1 No 18m3 capacity synergy waste water septic tank.

In the corner of the field at point C excavate a hole 4.5 m long x 3.6 m wide x 4 m deep and remove the spoils to a temporary stockpile. Level the base. Provide and lay 150mm of C20 ready mix concrete as a level base. Receive lift in and position one no septic tank. Commence filling with clean water and surround with semi dry C 20 ready mix concrete keeping the water approximately 300 MM head of the surround. Continue until 150 MM minimum cover to the tanks is achieved excavate for an installed one know 600 MM inside diameter GRC Settled effluent pump chamber complete with a single pump.

Reduce the outlets of the septic tanks from 160 MM outside diameter 210 MM outside diameter and continue the twin 110 MM pipe to the pump chamber in Leeds. Lay the pipe and make good. Rachel access to ground level and fit the approximate size circular galvanise covers and frames.

(2 No Roding eye types or dip tubes). Install 3 No 600mm Inside diameter galvanised cover and frames complete with safety frames for the septic tanks and pump chamber. Complete the backfilling using selected spoils and topsoil.

Point A-C Supply and install a single phase SWA cable Inside the 100 MM ID black Flexi duct.

Check the Parish Council are to provide a switch fuse within the old a new section of the building ready for the supply to be settled effluent pump. In the common trench with the gravity sewer pipe provide and lay 100 MM inside timer to black Flexi duck complete with drawstring. Draw cord and the SWA cable. Connect to the pump chamber control box and pump. Test on completion. 40 linear metres in total.

Point C-D 115m x 50mm black MDPE pumping main for the settled effluent pump to the soakaway reception chamber.







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Mark out the route of a post mean avoiding as many obstacles as possible. Cut and left the turf 450mm wide and set to one side. Excravate a trench for 150mm wide x 600mm deep.

Provide and lay the 50mm black MDPE 12 bar pipe with a bed surround and cover 2-4mm of limestone grit.

Lay marker tape "pipe below.' Backfill using the Selected excavated spoil us and compact. replace the topsoil and turf. Make a connection at Point C To the outlet of the pump station and at point D to the side of the soak away 450 MM inside diameter dispersal chamber. Test on completion.

Point D-E Soak away reception chamber and 150m of soak away trench

Excavate for and install 1 No 450mm Inside diameter twin wall reception chamber complete with a welded in base and 63mm spigot To receive the pumping main connected by a plasson coupler, 90° elbow on the inside to directs the flow to the bottom. 1 no 110mm Outside diameter spigot In the base to connect to a single 110mm Half perforated UPVC soil pipe in 6 m single socket Lengths.

Cut and remove turf X minimum 900 MM wide. Excavate to remove approximately 50 MM of topsoil and set to one side X 200 MM depth. Excavate a trench 900 MM wide X 600 MM in the subsoil.

Provide and lay 40 MM a clean limestone. Place the 110 MM perforated pipes with the holes on the lower half. Surrounds and cover with further 100 MM of 10 MM of limestone. Fit a Roding I at point a race to the surface with an access chamber. Provide and lay TS1000 Fabric to cover the whole service. Finally replaced the topsoil compact grade and replaced the turf. Haul any surplus spoils to a temporary tip site.

Removal of all spoil from site to licensed tip - 80m³ total in solid 7.5 no 11m³ Eight wheelers including tip charges and loading.

Total cost of £37,500 plus VAT

To include, labour for all men on site, materials, plant hire and CCTV equipment if required. Removal of all waste leaving site clean and tidy.

A 10 year guarantee applies to the integrity of the liner.

If you would like to accept these works and go ahead, or if we can be any further assistance please do not hesitate to contact us on 0800 611 8277 or email us on info@prodrainage.co.uk quoting your job reference number 13281.

Yours sincerely

Dani Evans Office Supervisor







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