

GREAT TREADAM FARM, LLANTILIO CROSSENNY, MONMOUTHSHIRE.

PLANNING APPLICATION DM/2021/01639

SEWAGE TREATMENT/OUTFALL INSTALLATION ASSESSMENT

REVISED ASSESSMENT 13.10.2022

Further to the submission of Planning Application DM/2021/01639 a review has been undertaken of the building usage and occupation of the Hogs Head Public House, and the method of disposal of sewage effluent from the Caravan site area.

In light of the above comment the volume of sewage output has been reviewed, and the revised outputs are detailed below.

Floor space data has been assessed from recorded usage of the building and reference to The Metric Handbook – Design and Planning Data 6th Edition, and this has then been used to calculate population of relevant areas, which in turn informs the sewage flows discharging to the Treatment plant. Previously floor space data to calculate population numbers taken from the Building Regulations Approved Document B Vol.2 had been used, however, it was observed due to constraints of the building these population figures were not being achieved, and as noted in the Approved Document, floor space factors can be taken from actual data that is able to be recorded as is now the case.

Disposal of sewage effluent from the Caravan site had previously been reassessed, however, in light of the current recently updated NRW guidance during the current consultation has been further reassessed, the Caravan Site will be a site where only eco-friendly chemicals can be used, and a robust plan will be implemented to successfully manage this and prevent the use of chemicals that are unsuitable to pass through the Septic Tank. In light of this a Septic Tank will be installed to collect all sewage outfall from the Caravans and Motorhomes which will be treated by the Septic tank with the liquid outfall discharging to a drainage field. This will have an added benefit of reducing the phosphorus output from the site into the watercourse. It should be noted that the drainage field is sited outside a 200m exclusion zone for the drainage field serving Great Treadam Farmhouse, and also outside the 40m exclusion zone of the water course to the east of the drainage field.

Within the current approval under DC/2010/00626 it is noted that a daily sewage output of 13600 litres (13.6m³/day) was advised. This was subject to consultation with NRW at that time, considered acceptable and Planning Permission was granted. This permission could be implemented as approved, however, noting the comments made in the previous paragraph regarding the output from the Caravans being collected and disposed of by a licensed waste disposal company, this will result in a REDUCTION of 2000 litres (2.0m³) / day from the approved sewage output and related reduction in phosphorus output. Whilst the additional proposed Glamping Pods and Shepherds Huts within the current application will produce 600 litres (0.6m³) / day, overall, there will be an overall REDUCTION of sewage output as a result of the current application of 1400 litres (1.4m³) / day which will see a REDUCTION in the amount of phosphorus that could discharge into the water course and this must be considered a betterment and meeting the criteria in the current NRW advice to Planning Authorities.

SEWAGE TREATMENT

There is an existing Klargester Bio Disc "BJ" package treatment plant, max daily flow 20m³ serving the Hogs Head Public House, and the Glamping Pods/Shepherds Huts.

Noting the above introduction and with reference to the current British Water Code of Practice "Flows and Loads - 4" the revised anticipated population and flows discharging to the Treatment Plant as follows: -

HOGS HEAD PUBLIC HOUSE

Pub Dining Area (Bar Meals)	34 persons @ 15 litres/day = 510 litres
Pub Function Room (inc Buffets)	60 persons @ 15 litres/day = 900 litres
Large Function Room (inc Buffets)	150 persons @ 15 litres/day = 2250 litres
Owners Accommodation	2 persons @ 150 litres/day = 300 litres

GLAMPING PODS / SHEPHERDS HUTS ACCOMMODATION.

Glamping Pod (Tent)	4 no. @ 75 litres/day = 300 litres
Shepherds Hut (Tent)	<u>4 no. @ 75 litres/day = 300 litres</u>

**Total Output for Hogs Head Public House and
Glamping Pods/Shepherds Huts. 4560 litres/Day (4.56m³/Day)**

SUMMARY

Sewage Treatment - It can be seen that the projected maximum daily output of sewage only equates to 23% of the capacity of the treatment plant, and therefore the Treatment Plant is of sufficient size.

Sewage output assessment - It should also be noted that when Planning Application DC/2010/00626 was processed and approved, as part of the application it was proposed and approved that sewage treatment and outfall drainage to serve a daily output 13600 litres (13.6m³) /day would be installed as part of the implementation of the approval and acknowledged would discharge to the water course. With the re-assessment of sewage output in general to the treatment plant, along with the previously approved caravan site now being discharged to a Septic Tank and associated drainage field for treatment, it can be seen there is a considerable reduction in the discharge to the watercourse along with the related reduction of phosphorus being discharged to the watercourse.

Existing Sewage treatment installation - It is noted that the current sewage treatment/outfall drainage requirement has been installed in accordance with the approval to Planning Application DC/2010/00626

Water discharge exemption - The Application site benefits from an Existing Natural Resources Wales Water Discharge Exemption Ref: NRW-WQE072133 for 5m³ to water, and the re-assessed output is within exemption allowance.

Conclusion - It is therefore observed that as the assessed sewage daily output is still both within the existing Natural Resources Wales Water Discharge Exemption, and the capacity approved under DC/2010/00626, then both the existing sewage treatment

plant and related outfall soakaway drainage installation are satisfactory to serve the amendments detailed within the current application.

Further, with regard to the current Phosphorus situation, whilst the additional proposed Glamping Pods and Shepherds Huts within the current application will produce an additional 600 litres (0.6m³) / day, overall, noting the output from the Caravans previously approved to be connected to the treatment plant are now proposed to discharge to a Septic Tank and associated drainage field for treatment which will result in a REDUCTION of 2000 litres (2.0m³) / day from the approved sewage output and the related reduction in phosphorus output, there will be an overall REDUCTION of sewage output as a result of the current application of 1400 litres (1.4m³) / day which will see a related REDUCTION in the amount of phosphorus that could discharge into the water course.

This situation is considered a betterment and meeting the criteria of the current NRW advice to Planning Authorities and would allow the screening out of this application, as this application will contribute to IMPROVING water quality in the river SAC to which the water course connects.