

Planning List – 18th March 2024 to 20th May 2024

Reference 23/00704/FUL

Weald & Downland Museum

Erection of additional production facilities buildings, fencing and storage building for a temporary period until 9th November 2026 to align with the temporary permission granted under application SDNP/21/04570/FUL. Installation of Geogrid parking bays to provide additional parking.

Planning Officer – Lauren Cripps

Deadline for Comments – 30th May 2023

Singleton and Charlton Parish Council Comment – We have studied this application and associated documents and are pleased to add our support for this application. Our only suggestion would be to include some low level planting on the sides visible from the museum grounds, to reflect the kind of mixed native hedging that can be seen around many of the exhibits in the rural areas of the museum.

SDNP Comment -

Reference 23/03652/DCOND

Sunnyhurst, Paddock Lane, Singleton

Discharge of conditions 6 (SUDS) and 8 (single dwelling) from planning permission SDNP/22/05832/FUL

Planning Officer – Beverley Stubbington

Deadline for Comments – 14th November 2023

Singleton and Charlton Parish Council Comment –

Failure to comply with Planning Conditions: Conditions 6 of permission SDNP/22/05832/FUL requires compliance with SDNP/19/05049/DCOND, which at Condition 5 states: *‘Winter ground water monitoring to establish highest annual ground water levels and Percolation testing to BRE 365, or similar approved, will be required to support the design of any Infiltration drainage.’* The letter from Aqua Callidus Consulting shows that the BRE365 Field Permeability Tests were all carried out on 11 May 2023, ie early summer. In summary, we believe their conclusions are based on unreliable data and their recommendations are thus misguided.

The CDC Drainage Engineer stated in his comments on SDNP/19/05049/DCOND (posted 21 December 2019), *‘I would like to remind the applicant that infiltration testing should be undertaken during the wet winter months’*. On 24 April 2020, along with a report of tests carried out on 21 January 2019 by a company called Constructive Evaluation, he commented, *‘I note that the ‘Winter Groundwater Monitoring’ results have now [been] submitted which (if I have read the unusually formatted results graphs correctly) show groundwater levels peaking at around 0.3mbgl’*.

Under ‘Site Considerations’, the Aqua Callidus document states: *‘Where determined, what is the depth to highest seasonal groundwater level (GWL) from surface: 3.00 m’*. This is in clear conflict with the above figure of 0.3m.

The latest survey and report clearly do not comply with the requirement to monitor groundwater and drainage in winter. The tests carried out on 11 May involved digging holes 2.92m deep: had they been dug in mid-winter, they would of course have filled with groundwater and produced very different conclusions – as did those dug by Constructive Evaluation in January 2019.

Local observations:

Groundwater levels are a perennial problem here in Singleton & Charlton: almost every winter it causes problems with our sewers, which suffer from water infiltration. We are in regular contact with Southern Water, seeking to increase our understanding of groundwater and related issues and to nudge them towards a viable solution. In addition, many local properties have springs beneath their floors, which create dampness and occasional flooding problems. Groundwater problems typically start in December/January and continue until the end of March: by May, levels have generally fallen sufficiently for groundwater to no longer be a problem.

We also have groundwater data from nearby Chilgrove Well, supplied by British Geological Survey, which shows the level on 11 May 2023 (the date of the tests) to be 60.93m. At its peak on 17 January 2023, it reached 76.81m: a full 15.88m higher. By May it was very much on a downward trajectory, having remained very high throughout December/January/February. And while last winter was very wet, it was by no means exceptional: Chilgrove Well normally reaches at least the mid-60s in winter, often topping 70m; in 2013/14 it topped 76m, while in the winters of 1993/94 and 2000/01 it topped 77m. Of course, these were all during periods of heavy rain: precisely the circumstances in which proper surface-water management is most needed. Rainfall records show that 11 May 2023 followed a relatively dry fortnight, so all in all, ground conditions were nowhere near typical of winter conditions.

The impact of temperature:

Looking into the subject in more detail, we also learned that water is more viscous at colder temperatures – sufficiently so as to impede the rate of infiltration (soaking into the soil) and transmission (soaking through the subsoil). Various online resources show that water is approximately 50% more viscous at 5°C than it is at 20°C – so the impact can be significant; and would help to explain why the ground remains wetter for longer in winter. Of course, we have no record of the temperature of the water used or the ground into which it was poured; however, we understand that the water arrived in plastic containers, so was likely to be considerably warmer than rain on a cold winter's night; and the surface temperature of the soil in winter will, of course, be much lower than that of the soil tested in mid-May.

The risks:

The modified scheme refers to a *'drainage blanket providing the connectivity to the gravel stratum below'* – but states that this will itself accommodate only 1m³ of water. If the groundwater is only 0.3m below the surface and the microbasin is 0.1m deep, then this leaves only 0.2m (20cm) between basin and groundwater: leaving the rain water nowhere to go beyond the drainage blanket. The Aqua Callidus calculations show 16.78m³ of water flowing into this basin in 'worst case' conditions; if 1m³ is able to soak into the drainage blanket and no further, then once the 11.3m³ basin is full, this would leave around 4.5m³ – or 1,000 gallons – of rainwater free-flowing across the (already saturated) surrounding ground.

We believe that had the tests been carried out (or even attempted) in winter conditions – as originally advised by the CDC Drainage Engineer and required by Condition 5 – then the conclusions would have shown that this latest plan is indeed wishful thinking and that the only viable solution is as per the original plan: to vent surplus surface water to the river.

Drainage hierarchy:

Of course, we understand the principle, as stated by the CDC Engineer that, *'on-site infiltration is always preferable to discharging flows off-site'*. However, the same Engineer previously

acknowledged that this is not possible with this development, when on 24 April 2020 he wrote, *'These very high peak groundwater levels appear to rule out 'on-site infiltration' as the sole method of surface water disposal. Instead, a new approach of 'attenuation followed by a restricted discharge to the River Lavant' has been proposed as the most appropriate method of draining the development. This is acceptable in principle...'*

While we acknowledge the role of the drainage hierarchy in planning decisions, we believe the planning authority has a duty to consider the impact on surrounding properties as well as those further downstream and the wider environment: enabling localised flooding is to be encouraged when it's on open wetland, but enabling flooding across lower lying neighbouring properties is surely not.

Aesthetics and long-term viability:

Leaving aside the operational questions over this scheme, we would question its viability in the front garden of what will, after all, be a 'prestige home'. The *'localised lowering in the floodplain area on the front lawn'* proposed by Aqua Callidus amounts to a part-time pond (the 'microbasin'), in the middle of the front garden, 10cm deep and 3.8m (about 12'6") diameter. This would repeatedly fill and drain, gathering dirt and dust and the resulting slime, quickly becoming something of an eyesore (even if the comprehensive maintenance schedule is adhered to). It seems likely that the new owners (or maybe their successors) will be looking for ways to smarten up and make better use of this significant portion of their front garden, leading to all sorts of problems.

Clarification and way forward:

For the avoidance of misunderstanding, we should make it clear that this submission has been prepared, discussed and agreed independently from the Parish Council Chairman – who is also the immediate neighbour, living at Flint Lodge. Furthermore, we have sought assurances with regard to the applicant's claim that, *"It has not been possible to achieve an agreement with the neighbour to install the drainage pipe under his drive and into the river. This is because he is requiring an exorbitant fee"*. We are assured by Mr Zacharias that this is not the case and he has stated, *"I am not. I am seeking due indemnities, recovery of costs incurred by me during this process and a contribution to the cost of repairing the track which has been significantly degraded by the lorries and heavy machinery used during construction"*.

We take all local planning applications very seriously and have approached this one exactly as we would any other. This has included seeking opinions of neighbours affected by the proposals, just as we would for any other case of this significance.

We understand that for a variety of reasons, the working relationship between the developer and the neighbours has broken down. We would encourage all parties to sit down together and work out a viable and sustainable long-term solution to what is, after all, going to be a very long-term practical issue: the risk to future occupiers of Sunnyhurst, as well as their immediate neighbours, posed by surface water flooding

Follow up comment from Singleton & Charlton Parish Council

Timing of testing

The British Geological Survey has a very useful study of the hydrogeology of the area in its publication, *'The Chalk aquifer of the South Downs'* (<https://nora.nerc.ac.uk/12713/1/SD99001.pdf>). On page 39 it tells us that, *'...analysis by Posford Duvivier (1994) identified a critical water level within the Chilgrove House well (69.5 m above OD)... At this point the capacity of the Chalk to store further recharge ceased. It has been suggested that this critical level corresponds to a zone of highly permeable chalk that acts as an*

overflow system providing a rapid flow path for groundwater to the discharge areas and springs within the valley’.

WSCC expand on this in their publication ‘*Upper Lavant Valley Flood Risk Management Study*’ (https://www.westsussex.gov.uk/media/4704/lavant_valley_swmp.pdf), where on page 3-2 they say ‘*In the Lavant catchment previous studies suggest that when groundwater levels at Chilgrove reach 69.5 mAOD (the threshold used by the Environment Agency to consider issue of groundwater flood alerts) the chalk catchment response changes from the more typical “buffered” response of chalk catchments to the flashier, near direct runoff response. This is accompanied by a rapid rise of groundwater levels throughout the catchment and increased sensitivity of all areas to flooding following large storms.*’

The water level at Chilgrove Well has exceeded 69.5m in 7 of the last 10 winters, so this is by no means a rare event. Nor is it a matter of ‘leeway’: either the test conditions are representative of such volatile winter conditions or they are not; on 11 May 2023 they certainly were not. Nor should we draw comfort from comparisons with the October 2019 results, because October, following as it does the drier summer months, has some of the lowest groundwater readings: data from Chilgrove Well shows the level on 5 October 2019 to be a mere 35.23m (less than half of last winter’s peak of 76.81m).

Joining the dots

The Chalk aquifer of the South Downs shows in Fig 2 on page 3 how the relatively impermeable Lower Chalk extends beyond the hilltops to the north; this layer collects rainwater/groundwater from beyond the hilltops and brings it south. On pages 48/50 they describe the background to the east/west nature of the Upper Lavant Valley: ‘*In the Chichester Block, a series of flexures, striking east–west are developed — the most significant to groundwater movement are the Singleton Anticline and the Chichester Syncline. The low permeability Lower Chalk is near to the surface in the core of the Singleton Anticline. This has the effect of impeding groundwater flow to the south, across the axis of the anticline.*’ (Anticlines are peaks and synclines are the valleys). The cross-sectional sketch in Fig 36 at the foot of page 50 illustrates how this leads to springs in the valley bottom.

The map at <https://environment.data.gov.uk/catchment-planning/WaterBody/GB107041006520> then shows how this geology translates into the catchment area of the River Lavant, which extends well beyond the hilltops that surround the river, covering an area more than 91km². If we draw a line roughly north-west / south-east through Singleton, the area to the north-east of this line is the approximate catchment for that part of the river that flows through Singleton: roughly half the total of the river. Of course, much of this passes safely through in the river (when it remains within its banks), having joined it upstream; however, due to its position at the focal point of this area, and the large, otherwise undrained, area to the north and northwest of Singleton (principally the Cocking Gap), a significant proportion of the groundwater making its way into the river arrives first in the water table of Singleton. Hence the proliferation of groundwater springs in the village. While in normal conditions the surface water can soak away into what amounts to a large underground storage reservoir, in Singleton, when the water table is high and rising, the whole thing goes into reverse: the porous subsoil (including the layer between 2m and 3m below ground level tested by Aqua Callidus), which carried the water away in dry conditions, is suddenly working against us, as the rising groundwater seeks the route of least resistance to the river.

Of course, at such times, rain still falling on the village has nowhere to go. As a result, the red wiggly arrows on Mr Traves’s drawing, indicating surface water safely draining down below the

groundwater level, could not only be somewhat curtailed, but on occasions reversed, as rising groundwater seeps up through the porous gravel and fills the proposed basin from below. Anyone who, following the heavy rain in January this year, watched as groundwater seeped out from drains, manhole covers and cracks in the road, near to the river, will recognise that such a scenario is not only entirely feasible, but quite likely at some time within the foreseeable future.

And things are not getting any easier: as well as the impact of climate change, measures being introduced to reduce the rate of flow downstream and increase infiltration locally, inevitably raise the water table in the village. In particular, Goodwood Estates is working with the Environment Agency to restore the Leys Meadow as a water-meadow; this contributed to the flooding of Charlton Road last winter, when the river burst its banks near the school. It also exacerbates the problem of rising groundwater finding its way into our leaky sewer pipes: most winters, Southern Water sets up pumps to run 24/7; ironically pumping groundwater into the river – only now containing pollutants and effluent from the sewers.

All of this helps to explain why, in Singelton if nowhere else, volatile groundwater levels during storm conditions are indeed relevant to infiltration rates. In truth, it's probably not possible to reliably model the effectiveness or otherwise of the proposed drainage system: it would require extensive testing over a prolonged period in a range of different winter storm conditions. Mr Keir sums up the risks at Sunnyhurst when he says, *'It is undoubtedly true that surface water drainage difficulties exist at this location. Had this been a greenfield site then I cannot imagine that planning permission would be granted for a domestic property at this location'*.

However, what can be said with complete confidence is that, based on all of the above and on local observations and experience, it would be most unwise to implement any scheme that discharged the surface water from 220m² all in one place at this location in storm conditions – other than into the river.

The role of the Parish Council

In response to Mr Hall's comments regarding the role of the Parish Council, we would point out that our role in planning issues is multi-faceted. Our first responsibility is to consider how a development might affect the wider parish community – both present and future. Next to this comes our responsibility to those more immediately affected by any development – including present and future residents of the subject property, as well as neighbours. In this particular instance, we no more want future residents of Sunnyhurst to experience flooding issues than we do their neighbours.

Our record will also show that we are always happy to work with the applicant/homeowner to help them achieve what they want from their home, whilst working within existing constraints. With this in mind, we note that there was no response to our comment regarding the aesthetics and the chances of the proposed scheme surviving a future garden redesign. Perhaps relevant here is Mr Keir's observation that 'We do not normally see such SuDS solutions on small-scale single domestic property development'; quite possibly this is because few would want such a thing in their garden – particularly not their front garden.

We note Mr Hall's comment that 'we would not have sought an alternative solution if the neighbour had been reasonable in this matter'; we have assurances from Mr Zacharius that he is indeed prepared to be reasonable. It is clear that tensions, which have perhaps inevitably arisen during this development, have led to a breakdown in communications between the relevant parties – and we would repeat our encouragement to all parties to sit down and reach an agreement that avoids problems for all in the future

Reference 23/04772/CND

Sunnyhurst Paddock Lane, Singleton

3 bedroom detached dwelling with detached garage to supersede previous full planning approval for 1 no. 4 bedroom replacement dwelling with detached garage (under SDNP/18/01390/FUL). (Variation of condition 6 of permission SDNP/22/05832/FUL - alternative surface water drainage).

Planning Officer – Beverley Stubbington

Deadline for Comments – 27th December 2023

Singleton and Charlton Parish Council Comment - We note that the application remains unchanged from the previously proposed modifications to the drainage system and is merely to formalise matters. As such, our previous comments apply in full to this new application, supplemented as follows.

Since our earlier comments, we have a new Councillor who tells us that she had an arrangement to park her car on the driveway of Sunnyhurst between approximately 2010 and 2014:

'We used to park a vehicle there all year round and walking on the gravel the springs bubbled up as a natural occurrence. I can confirm the winters always had spring water on the surface of the gravel around the wheels of our car, in the area of the former driveway.'

We have also had input from a family member of the previous owners:

'I do recall that when my parents owned the property, (approximately between 1995 - 2015) most winters when the springs came up in the Valley the water would appear in the gravel driveway from the bridge, up to and into their front garden. Some years the water was high enough to have to wear wellies to walk through it, other years it would just be damp with puddles.'

Referring back to earlier exchanges on this, having set aside his previous insistence that soil testing be carried out in the winter months, the CDC Drainage Engineer's support for the proposed scheme appears to rest entirely on the accuracy of the assessment of 'highest seasonal groundwater level': 30cm below ground level, this being 20cm below the base of the 10cm deep basin.

However, the tests to establish this level were carried out on 22 January 2019 (during the site preparation stage); the groundwater level on that day, as recorded at Chilgrove Well, was 53.57m. Chilgrove has recorded levels higher than 53.57m on no fewer than 1169 days during the past 10 years, on dates that spread across every one of those 10 winters. The last winter *not* to exceed this level was 2005/06.

When Chilgrove Well reaches 69.5m, they issue flood warnings. It exceeded this level 6 times in the last 10 winters (double the number of times in the previous 10 years); this represented a total of 232 days different days over those 10 years (up from 68 days in the previous 10 years). Last winter, Chilgrove Well peaked at 76.8m: 23m higher than it was on 22 January 2019; it remained at this level for 5 days.

The simple fact is that, after we've had a lot of rain locally, and it continues to rain, any given area of ground struggles to absorb even the rain falling directly onto it. The developer's consultant calculates the house footprint of 220m² could collect 16.8m³, or nearly 3700 gallons, of rainwater during a storm lasting 2hrs. Based on local experience – and the above evidence of those who have knowledge of the site – the very idea that, in winter storm conditions, thousands of gallons of rainwater could be deposited in a shallow basin and expected to soak away, sounds like wishful

thinking. We believe that the above data helps to explain why local people would hold this view and why those who know the property well have experienced the conditions they describe.

Furthermore, we believe that with groundwater levels fluctuating by many metres during the winter months, it would be very unwise to rely on a calculated margin of just 20cm, between the bottom of the basin and the assessed 'peak' groundwater level: both the data and witness evidence clearly suggest that there would be many occasions when there simply would be no margin – and that flooding would result.

SDNP Comment – Refused

Reference 24/01139/CND

Sunnyhurst, Paddock Lane, Singleton

1 3 bedroom detached dwelling with detached garage to supersede previous full planning approval for 1 4 bedroom replacement dwelling with detached garage (under SDNP/18/01390/FUL). (Variation of condition 6 of permission SDNP/22/05832/FUL-alternative surface water drainage).

Planning Officer – Beverley Stubbington

Deadline for Comments – 23rd April 2024

Singleton and Charlton Parish Council Comment – Singleton and Charlton Parish Council have just uploaded a document which shows our previous submissions because the current application hasn't changed, it is a re-application necessitated by the last one being refused for not allowing an extension to the deadline for a decision. There is no new information with this latest application.

SDNP Comment –

Reference 24/01810/LDP

Orestans, Charlton Road, Singleton

Proposed lawful development – removal of rear chimney, new door and windows to the rear elevation and internal modifications.

Planning Officer – Jemma Frankland

Deadline for Comments – 7th June 2024

Singleton and Charlton Parish Council Comment –

SDNP Comment -