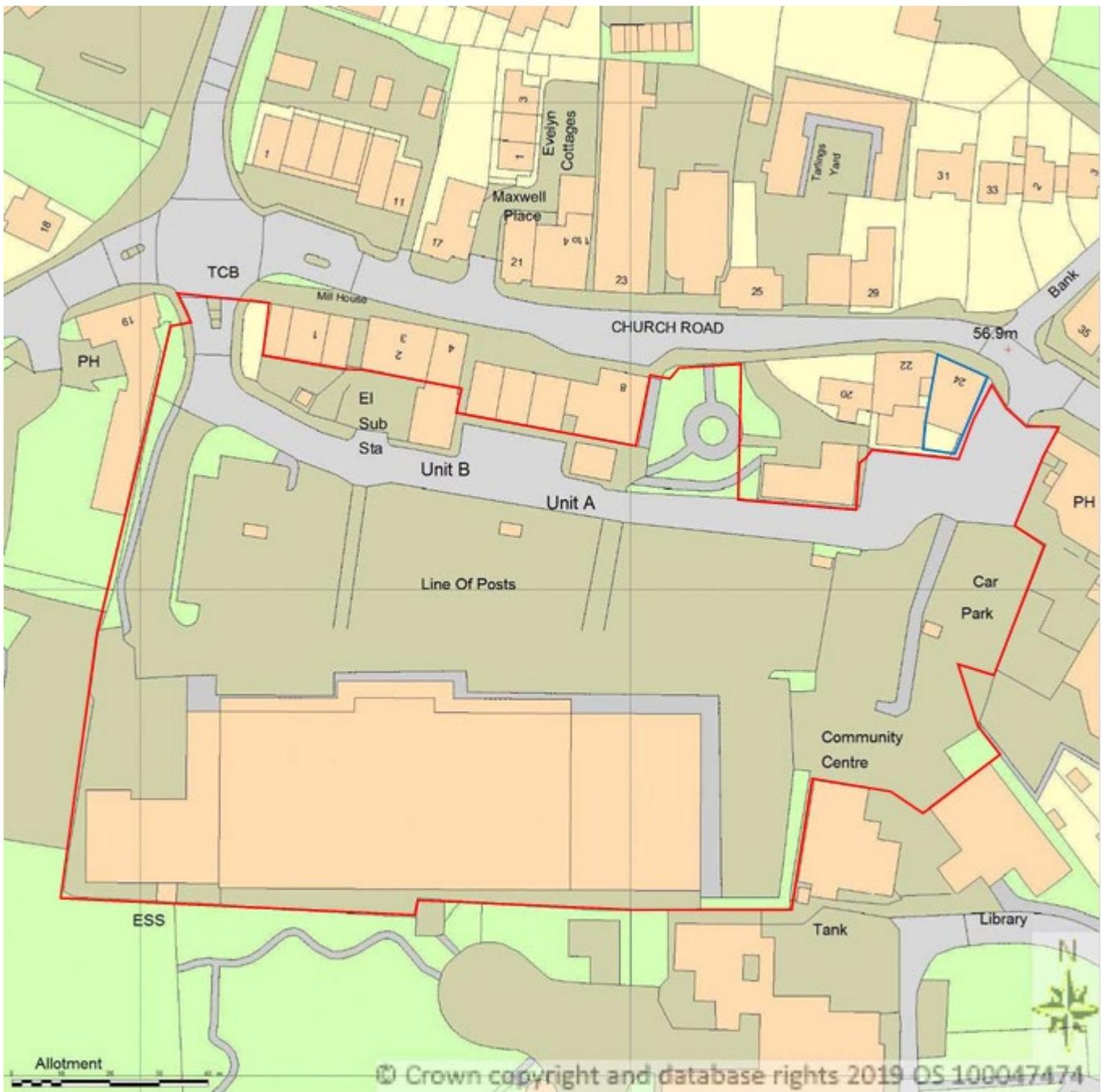


Site Location Plan



Memo

To: Ms Dawn Lloyd
Development Control

Ref: 19/00985/FUL

From: Environmental Health Department

Ref: 19/01905/PLAN

Date: 6th July 2020

Re: Planning Application - Variation of Condition 5 of planning permission ref: 01/0041/0125/FUL (as modified by permission ref: 08/01358/FUL) to allow deliveries to commence at 5am Monday to Saturday.

Tesco Supermarket, Church Road, Bishops Cleeve

Thank you for consulting me on the above application for planning permission.

I have been asked to assess whether the proposed application to extend store delivery hours to 05:00am Monday to Saturday would have an impact on the wider community and on the flats in Mill Parade. This was not considered in a previous assessment of this application by colleagues from WRS acting on our behalf.

With respect to the wider area:

The noise assessment produced by Sharps Redmore (reference project number 1919020 dated 16th August 2019) notes that during the time of monitoring (04:30am -05:15am) there were three peak noise levels all of 64dB from cars passing on Church Road, indicating three cars in the area at this time. I have spoken to the Deputy Store manager at Tesco and at present they have one fresh lorry in the 6-7 am period and three bread lorries later on. So pushing this forward probably would not have a significant impact on the wider Bishops Cleeve area.

With respect to the flats on Mill Parade

There are two potential sources of noise in this case-

1. **The noise from the unloading of the lorries in the delivery yard:** The impact from this at the Kings Head pub (which is the most relevant monitoring point for the Mill Parade residents) has been assessed by Sharps Redmore using the BS4142 methodology, where the L_{aeq} is calculated and used to look at the difference between when the activity is occurring and when not. The L_{aeq} smooths out variations in noise levels and can be thought of as an energy average. In this calculation the overall levels are below the WHO CNLs (World Health Organisation Community Noise Levels) for noise at night. However, the assessment also requires a rating to be applied for various sounds that would make the noise more annoying such as bangs and crashes. In this case a rating is applied for clearly perceptible impulsivity (bangs and crashes during unloading). The calculated rating of +8 indicates an adverse affect for lorry unloading and so the effects need to be mitigated or reduced to make them acceptable in planning terms. It also indicates that peak noise levels (L_{Amax}) are more pertinent rather than the L_{aeq} measurement. The predicted L_{Amax} for the unloading activity is 59dB. This is close to the maximum WHO CNL which would anticipate sleep disturbance at an external level of 60dB (this would correlate to 45dB inside the bedroom with the windows closed).

For this reason Sharps Redmore have recommended various mitigation measures to reduce the noise from unloading activities.

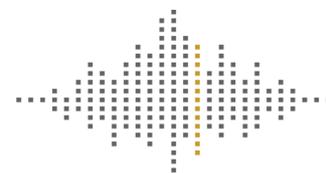
2. **The noise from delivery vehicles arriving & departing:** This was measured by Sharps Redmore at the Kings Head pub and peak noise levels on arrival were noted as between 51-69dB, and on departure of 65-69dB. Because some of these levels exceeded the WHO CNL of 60dB, the WRS consultant has recommended an acoustic barrier to be erected between the access road and the Kings Head pub.

To assess what the $L_{A_{Max}}$ may be at the flats at Mill Parade (72 m from arrival/departure) I have used the results of the monitoring at the Kings Head Pub (55m from arrival/departure) and the maximum peak noise level of 69dB which was seen on arrival and departure and calculated a maximum peak level of 66dB. This too exceeds the WHO CNL of 60dB where sleep disturbance would be expected.

Given that the number of lorries that could be delivering in the 5am-7am period could potentially increase from one to four, and this period is still considered as night time, then I recommend this application be refused.

Reason: To safeguard the amenity of adjoining occupiers

Environmental Health Officer



Reference: Planning Application - Variation of Condition 5 of planning permission ref: 01/0041/0125/FUL (as modified by permission ref: 08/01358/FUL) to allow deliveries to commence at 5am Monday to Saturday, at Tesco Supermarket, Church Road, Bishops Cleeve.
Project No: 1919020

Technical note

Comments responding to EHO planning application consultation

Introduction

- This technical note is provided in response to the comments received from the Environmental Health Officer (EHO) at Tewkesbury Borough Council, in a memo to Ms Dawn Lloyd, Planning Officer, dated 6th July 2020, in relation to the Sharps Redmore (SR) noise assessment report (reference 1919020 R1, dated 16th August 2019), that accompanied the planning application.

Response to queries raised

1 EHO wrote:

“I have been asked to assess whether the proposed application to extend store delivery hours to 05:00am Monday to Saturday would have an impact on the wider community and on the flats in Mill Parade. This was not considered in a previous assessment of this application by colleagues from WRS acting on our behalf.”

With respect to the wider area:

The noise assessment produced by Sharps Redmore (reference project number 1919020 dated 16th August 2019) notes that during the time of monitoring (04:30am -05:15am) there were three peak noise levels all of 64dB from cars passing on Church Road, indicating three cars in the area at this time. I have spoken to the Deputy Store manager at Tesco and at present they have one fresh lorry in the 6-7 am period and three bread lorries later on. So pushing this forward probably would not have a significant impact on the wider Bishops Cleeve area.”

Keith Metcalfe [KM] response:

To clarify the peak noise levels of 64 dB L_{Amax} from other vehicles using Church Road, as presented in Table 6, were the highest measured noise levels from existing vehicles on the road network, not the only vehicles. In the context of the existing Soundscape at the site, it is agreed with the EHO that Tesco delivery activity would be unlikely to have an impact on the wider Bishops Cleeve area.

Head Office

Sharps Redmore The White House, London Road, Copdock, Ipswich, IP8 3JH

T 01473 730073 E contact@sharpsredmore.co.uk W sharpsredmore.co.uk

Regional Locations South England (Head Office), South West England, North England, Wales, Scotland

Sharps Redmore Partnership Limited Registered in England No. 2593855

Directors RD Sullivan BA(Hons), PhD, CEng, MIOA, MAAS, MASA; DE Barke MSc, MIOA; KJ Metcalfe BSc(Hons), MIOA; N Durup BSc(Hons), MSc, PhD, CEng, FIOA, MinstP, MASA, MAES
Company Consultant TL Redmore BEng, MSc, PhD, MIOA



2 EHO wrote:

“With respect to the flats on Mill Parade

There are two potential sources of noise in this case-

1. The noise from the unloading of the lorries in the delivery yard: *The impact from this at the Kings Head pub (which is the most relevant monitoring point for the Mill Parade residents) has been assessed by Sharps Redmore using the BS4142 methodology, where the L_{aeq} is calculated and used to look at the difference between when the activity is occurring and when not. The L_{aeq} smooths out variations in noise levels and can be thought of as an energy average. In this calculation the overall levels are below the WHO CNLs (World Health Organisation Community Noise Levels) for noise at night. However, the assessment also requires a rating to be applied for various sounds that would make the noise more annoying such as bangs and crashes. In this case a rating is applied for clearly perceptible impulsivity (bangs and crashes during unloading). The calculated rating of +8 indicates an adverse affect for lorry unloading and so the effects need to be mitigated or reduced to make them acceptable in planning terms. It also indicates that peak noise levels (L_{Amax}) are more pertinent rather than the L_{aeq} measurement. The predicted L_{Amax} for the unloading activity is 59dB. This is close to the maximum WHO CNL which would anticipate sleep disturbance at an external level of 60dB (this would correlate to 45dB inside the bedroom with the windows closed).*

For this reason Sharps Redmore have recommended various mitigation measures to reduce the noise from unloading activities.

2. The noise from delivery vehicles arriving & departing: *This was measured by Sharps Redmore at the Kings Head pub and peak noise levels on arrival were noted as between 51-69dB, and on departure of 65-69dB. Because some of these levels exceeded the WHO CNL of 60dB, the WRS consultant has recommended an acoustic barrier to be erected between the access road and the Kings Head pub.*

To assess what the L_{Amax} may be at the flats at Mill Parade (72 m from arrival/departure) I have used the results of the monitoring at the Kings Head Pub (55m from arrival/departure) and the maximum peak noise level of 69dB which was seen on arrival and departure and calculated a maximum peak level of 66dB. This too exceeds the WHO CNL of 60dB where sleep disturbance would be expected.

Given that the number of lorries that could be delivering in the 5am-7am period could potentially increase from one to four, and this period is still considered as night time, then I recommend this application be refused.”

Keith Metcalfe [KM] response:

My interpretation of the EHO's response is that there is no criticism of the assessment methodologies employed nor the outcome of the assessment as presented in the SR report.

I would seek to clarify that the BS 4142 assessment presented is recognised in the SR report to not be the most appropriate method to determine and assessment the impact of noise from Tesco delivery activity. This is explained at paragraph 4.7 of the SR report; for noise that may occur at night, the difference between the external background noise level and the rated level of the noise at the receptor position does not best reflect the noise impact when people are generally inside their properties sleeping.

The most appropriate way to assess noise impact in this instance is with consideration to the peak (L_{Amax}) noise levels at the receptor position, for comparison with the WHO sleep disturbance criterion.

The SR assessment indicates that whilst peak noise levels from unloading noise is below the WHO peak noise criterion, peak noise levels as the vehicle arrives and departs exceeds this value.

The EHO states *"The predicted L_{Amax} for the unloading activity is 59dB. This is close to the maximum WHO CNL which would anticipate sleep disturbance at an external level of 60dB (this would correlate to 45dB inside the bedroom with the windows closed)"*. This sentence is misleading in two respects, firstly that an external level of 60 dB outside would equate to a level of 45 dB inside with windows closed, and secondly with regard to what the WHO guidelines state in respect of sleep disturbance. On the first point, an external value of 60 dB L_{Amax} is derived from an internal value of 45 dB L_{Amax} adding the attenuation from a partially open, not closed, window. A closed window would result in an approximate inside to outside reduction of typically 25-30 dB; such that with closed windows peak noise levels well above 60 dB could be readily reduced well below 45 dB L_{Amax} inside.

On the second point, it is important to understand what the WHO peak noise guideline value (60 dB L_{Amax}) represents. This is not the level of noise that once exceeded people will wake up, the peak noise criterion of 60 dB L_{Amax} is the level that once exceeded the onset of sleep disturbance may occur. The effects of the onset of sleep disturbance may be the depth of the sleep pattern is changed or that eyelids flutter, not that a person wakes up.

The 1998 National Physical Laboratory (NPL) report CMAM 16, which was a review of the then draft WHO guidelines, explained in its summary that *"In essence, the WHO guidelines represent a consensus view of international expert opinion on the lowest threshold noise levels below which the occurrence rates of particular effects can be assumed to be negligible. Exceedances of the WHO guideline values do not necessarily imply significant noise impact and indeed, it may be that significant impacts do not occur until much higher degrees of noise exposure are reached"*.

Based on the above approach the WHO Guideline for sleep disturbance can be considered the Lowest Observed Adverse Effect Level (LOAEL); albeit the Significant Observed Adverse Effect Level (SOAEL) is not therefore defined.

In situations such as this, whereby for short durations peak noise levels from site operations exceed the WHO peak noise guideline value, it may be appropriate for any planning permission to be temporary in nature such that the direct effect of the noise source can be evaluated prior to any permanent consent being granted.

One of the Government's responses to the Covid 19 pandemic has seen the lifting of delivery hour curfews imposed on foodstore operators through directed non-enforcement of planning conditions. This change, to improve the availability of goods to customers during periods of unprecedented demand, has resulted in deliveries being received at times that would not normally be permitted. Consequently, this situation has enabled the direct impact of noise from 'out of hours' delivery activity to be established.

Since the nationwide lifting of delivery restrictions, the Tesco store at Church Road, Bishops Cleeve has been receiving daily deliveries outside of the planning permission consented delivery times. Tesco has regularly been receiving a delivery between midnight and 0200 hours. The schedule of times that deliveries have been received at the Tesco store since the beginning of June 2020 is presented at Figure 1 to this technical note.

An email from Ms Karen Crowder-James at Contour Planning was sent to the Planning Officer, Dawn Lloyd, on 14th October 2020 to ask whether the Tesco store at Church Road, Bishops Cleeve had received any noise complaints relating to delivery activity.

A response from Ms Lloyd was received on 15th October 2020 confirming that no noise complaints had been received in this period. This is a further contextual consideration, one that cannot usually be obtained (without breaching a planning condition), that night time deliveries to this store avoid significant adverse impact.

Essentially Tesco has been able to use the Covid pandemic period to undertake a trial of night time deliveries to the store at Bishops Cleeve. Such that, in the absence of any noise complaints being made to either the store or local authority, the Council could grant permanent planning permission to allow deliveries from 0500 hours in the knowledge that over a prolonged 6 month plus period (including the warmer summer period when windows are more likely to be open) noise from night time deliveries did not give rise to significant adverse impact.

The absence of noise complaints in relation to delivery activity is a clear example of a situation whereby a negative outcome from a BS 4142 assessment does not necessarily equate to significant adverse impact/complaints.

Despite measured peak noise levels of between 61-69 dB L_{Amax} outside the Kings Arms from delivery vehicle pass bys on arrival and departure, there have been no noise complaints associated with this activity. It is entirely reasonable to assume that regular noise complaints would have been received by the Council if out of hours delivery activity were giving rise to disturbance

Keith Metcalfe BSc(Hons), MIOA

Director

8th December 2020

FIGURE 1

TESCO BISHOPS CLEEVE DELIVERY TIMES

Information from Microlise system. Although the information presented below only cover the previous two month period, the night time delivery arrival times were similar since the beginning of the Covid-19 period.

Date	Route	Arrival time
04/10/2020	R101-	00.38
05/10/2020	R295-	00.43
06/10/2020	R298-	00.45
07/10/2020	R321-	00.57
08/10/2020	R247	01.10
09/10/2020	R265	02.12
10/10/2020	R254	01.32
11/10/2020	R295	01.45
12/10/2020	R268	01.41
13/10/2020	R330	01.26
14/10/2020	R329	01.43
15/10/2020	R318	00.49
16/10/2020	R362	00.31
17/10/2020	R381	01.04
18/10/2020	R267	03.01
19/10/2020	R341	01.46
20/10/2020	R250	01.24
21/10/2020	R235	00.53
22/10/2020	R429	01.49
23/10/2020	R370	01.24
24/10/2020	R305	09.24
25/10/2020	R232	01.23
26/10/2020	R179	00.16
27/10/2020	R177	00.26
28/10/2020	R255	01.38
29/10/2020	R243	01.48
30/10/2020	R247	Not tracked
31/10/2020	R182	01.50
01/11/2020	R184	02.04
02/11/2020	R276	02.27
03/11/2020	R318	01.26
04/11/2020	R229	01.59

Date	Route	Arrival time
05/11/2020	R432	02.02
06/11/2020	R342	02.16
07/11/2020	R343	01.06
08/11/2020	R229	00.53
09/11/2020	R242	01.25
10/11/2020	R279	02.10
11/11/2020	PVA 952	08.35
12/11/2020	R343	01.14
13/11/2020	R235	01.15
14/11/2020	R258	01.44
15/11/2020	R195	00.56
16/11/2020	R268	01.48
17/11/2020	R296	00.44
18/11/2020	R219	01.59
19/11/2020	R267	02.06
20/11/2020	R390	01.52
21/11/20220	R131	00.55
22/11/2020	R299	01.16
23/11/2020	R245	01.17
24/11/2020	R230	00.47
25/11/2020	R244	01.15
26/11/2020	R215	00.30
27/11/2020	R322	00.59
28/11/2020	R383-	02.41
29/11/2020	R228	01.59
30/11/2020	R310	02.05
01/12/2020	R364	02.50
02/12/2020	R244	01.23
03/12/2020	R404	00.15
04/12/2020	R255	01.42
05/12/2020	R260	00.08
06/12/2020	R260	01.20