

APP/20/00658 Former Electricity Board Centre, Land at Bartons Road, Havant, PO9 5JB: nitrate budget

This supporting information accompanies the completed European Site avoidance and mitigation checklist. Officers will note that the form says the development proposes a bespoke assessment and nitrogen budget. I herein provide that bespoke assessment and budget.

Natural England's latest guidance¹ is provided on the Council's website. At paragraph 4.18, it says that '*Natural England recommends that, as a starting point, local planning authorities should consider using the average national occupancy rate of 2.4, as calculated by the Office for National Statistics (ONS), as this can be consistently applied across all affected areas*'. The use of the word 'should' implies that it is not mandatory and the fact that the Council's own European Site avoidance and mitigation checklist includes a section allowing developers to provide their own calculations shows that alternatives can be justified.

The proposed development involves the erection of 191 apartments, comprising 168 x 1-bed units and 23 x two-beds. The number of bed spaces within each apartment varies, with just one bed space (i.e. one person) in the case of the smallest units to three in the case of the largest units.

Appendix A of this document provides a breakdown of the number of bed spaces per apartment. As officers will see, the proposed development would result in a total of 237 bed spaces, or in other words 237 future occupants. If the blanket 2.4 people per unit were applied, the result would be 459 people, which is clearly disproportionate and would be unreasonable in light of this evidence.

The calculation

The calculation below is based on the NE guidance.

Stage 1, step 1: calculate additional population

237 people.

Stage 1, step 2: confirm water use

A standard target of 110 litres per person per day is used.

Stage 1, step 3: confirm WwTW and permit level

The WwTW is Budds Farm, which has a permit level of 9.7

Stage 1, step 4: calculate total nitrogen (TN) in Kg per annum that would exit the WwTW after treatment derived from the proposed development

¹ <https://www.push.gov.uk/wp-content/uploads/2020/06/Natural-England%E2%80%99s-latest-guidance-on-achieving-nutrient-neutrality-for-new-housing-development-June-2020.pdf>

237 people x 110 litres per day = 26,070 litres per day.

26,070 x 9.7mg/l TN = 252,879mg/TN/day

Divide by 1,000,000 to achieve kg/TN/day = 0.252

Multiply by 365 for annual figure = 92.3kg/TN/yr.

Stages 2 (current land use) and 3 (adjustment for proposed uses)

Not applicable.

Stage 4: calculate the net change in the Total Nitrogen load that would result from the development

As stages 2 and 3 are not applicable, the Total Nitrogen load for the proposed development (92.3kg/TN/yr) remains the same.

A 20% buffer is then added (18.46kg/TN/yr).

= 110.76kg/TN/yr

Proposed mitigation

As set out on the Council's European Site avoidance and mitigation checklist, the Council's strategic mitigation package requires £1,235/kg of nitrogen. A payment of £136,788.60 would therefore mitigate the development's impacts.

Appendix A: proposed bed spaces figures

Block A

Unit no.	No. of beds	No. of bed spaces
1	2	3
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	2	3
12	2	3
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
24	1	1

Block B

Unit no.	No. of beds	No. of bed spaces
1	2	3
2	1	1
3	1	1
4	1	1
5	1	1
6	2	3
7	2	3
8	1	1
9	1	1
10	1	1
11	1	1
12	2	3
13	2	3
14	2	3
15	1	1
16	1	1
17	1	1
18	1	1
19	2	3
20	2	3
21	2	3
22	1	1
23	1	1
24	1	1

Block C

Unit no.	No. of beds	No. of bed spaces
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
24	2	3

Overall total

No. of units	191
No. of beds	214
No. of bed spaces	237
Average no. beds per unit	1.240838

25	2	3
26	2	3
27	1	1
28	1	1
29	1	1
30	1	1
31	1	1
32	1	1
33	1	1
34	1	1
35	1	1
36	1	1
37	1	1
38	1	1
39	2	3
40	2	3
41	1	1
42	1	1
43	1	1
44	1	1
45	1	1
46	1	1
47	1	1
48	1	1
49	1	1
50	1	1
51	1	1
52	1	1
53	1	1
54	1	1
55	1	1
56	1	1
57	1	1

25	1	1
26	2	3
27	2	3
28	2	3
29	1	1
30	1	1
31	1	1
32	2	3
Total	45	58

25	1	1
26	1	1
27	1	1
28	1	1
29	1	1
30	1	1
31	1	1
32	1	1
33	1	1
34	1	1
35	1	1
36	1	1
37	1	1
38	1	1
39	1	1
40	1	1
41	1	1
42	1	1
43	1	1
44	1	1
45	2	3
46	1	1
47	1	1
48	1	1
49	1	1
50	1	1
51	1	1
52	1	1
53	1	1
54	1	1
55	1	1
56	1	1
57	1	1

58	1	1
59	1	1
60	1	1
61	1	1
62	1	1
63	1	1
64	1	1
Total	71	78

58	1	1
59	1	1
60	1	1
61	1	1
62	1	1
63	1	1
64	1	1
65	1	1
66	2	3
67	1	1
68	1	1
69	1	1
70	1	1
71	1	1
72	1	1
73	1	1
74	1	1
75	1	1
76	1	1
77	1	1
78	1	1
79	1	1
80	1	1
81	1	1
82	1	1
83	1	1
84	1	1
85	1	1
86	1	1
87	1	1
88	1	1
89	1	1
90	1	1

91	1	1
92	1	1
93	1	1
94	1	1
95	1	1
Total	98	101