

BELLWAY HOMES LIMITED

BOREHAM ROAD, WARMINSTER

NUTRIENT NEUTRALITY STATEMENT

**REPORT REF.
2204791-ACE-XX-XX-RP-C-0501**

March 2026

HEAD OFFICE: 3rd Floor, The Hallmark Building, 52-56 Leadenhall Street, London, EC3M 5JE **T** | 020 7680 4088

ESSEX: 1 - 2 Crescent Court, Billericay, Essex, CM12 9AQ **T** | 01277 657 677

KENT: Suite 10, Building 40, Churchill Business Centre, Kings Hill, Kent, ME19 4YU **T** | 01732 752 155

MIDLANDS: Office 3, The Garage Studios, 41-43 St Mary's Gate, Nottingham, NG1 1PU **T** | 0115 697 0940

SOUTH WEST: City Point, Temple Gate, Bristol, BS1 6PL **T** | 0117 456 4994

SUFFOLK: Suite 110, Suffolk Enterprise Centre, 44 Felaw Street, Ipswich, IP2 8SJ **T** | 01473 407 321

Contents

	Page
1. INTRODUCTION.....	2
2. SITE LOCATION AND DEVELOPMENT PROPOSALS.....	3
3. PHOSPHORUS BUDGET CALCULATION	6
4. SUMMARY AND CONCLUSIONS	13

Appendices

Appendix A Proposed Site Layout

Appendix B Phosphorus Budget Calculator

Figures

Figure 2-1: Site Location Plan

Figure 2-2: Proposed Development Layout

Figure 3-1: Nutrient loading from additional wastewater

Figure 3-2: Nutrient loading from 2 septic tanks

Figure 3-3: Nutrient loading from current land use

Figure 3-4: Nutrient loading from proposed land use

Tables

Table 3-1: Stage 1 inputs

Table 3-2: Stage 2 inputs

Table 3-2: Nutrient budget calculation

Document Control Sheet

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	Draft	EN	CC	-	19.12.2025
-	Draft	EN	VL [REDACTED]	CC [REDACTED]	02.03.2026

Distribution

This report has been prepared for the exclusive use of BELLWAY HOMES LIMITED. It should not be reproduced in whole or in part, or relied upon by third parties, without the express written authority of Ardent Consulting Engineers.

1. INTRODUCTION

- 1.1. Ardent Consulting Engineers (hereafter referred to as "Ardent") has been commissioned by Bellway Homes Limited to undertake a Nutrient Neutrality Statement for the proposed development at Boreham Road, Warminster (hereafter referred to as 'the site'). The application site lies within the administrative boundary of Wiltshire Council (WC).
- 1.2. This Statement supports an application for full planning permission for residential development (Use Class C3) comprising 135 dwellings with associated private amenity space and car/cycle parking, a comprehensive landscaping scheme to include publicly accessibly amenity space, sustainable drainage features, new tree planting and associated works. Alterations to the existing Home Farm access from Boreham Road, and new vehicular, cycle and pedestrian routes through the site. All associated infrastructure works.
- 1.3. This Statement has been prepared in accordance with Natural England's 'Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites' (March 2022).

2. SITE LOCATION AND DEVELOPMENT PROPOSALS

Site Location

- 2.1. The Site is located to the east of Warminster, adjacent to the settlement boundary, on land to the north of Boreham Road at the post code BA12 9HF. The site is bound by farmland and MOD sports facilities to the north, Bishopstrow Hotel/ grounds to the east, Boreham Road and existing residential properties to the south/ west. The small village of Bishopstrow is located south of the site. **Figure 2-1** below shows the Site Location Plan.
- 2.2. The site is entirely greenfield, and primarily agricultural land with some existing hedgerows, fence lines, and tree lines. The approximate centre of the site is at grid coordinates 389483m easting, 144450m northing.



Figure 2-1: Site Location Plan

- 2.3. The Site lies within the River Wylfe catchment, which forms part of the Hampshire Avon catchment. Development within this catchment is required to demonstrate compliance with the Conservation of Habitats and Species Regulations 2017 in relation to potential nutrient impacts, specifically Phosphorous, on downstream designated sites.

- 2.4. The site is within the wastewater catchment of the Warminster Wastewater Treatment Works (WWTW) which discharges treated effluent to the River Wylye.

Development Proposals

- 2.5. The development proposals are for for residential development (Use Class C3) comprising 135 dwellings with associated private amenity space and car/cycle parking, a comprehensive landscaping scheme to include publicly accessibly amenity space, sustainable drainage features, new tree planting and associated works. Alterations to the existing Home Farm access from Boreham Road, and new vehicular, cycle and pedestrian routes through the site. All associated infrastructure works. Refer to **Figure 2-2** below for an extract of the site layout and to **Appendix B** for the full plan.



Figure 2-2: Site Layout

3. PHOSPHORUS BUDGET CALCULATION

- 3.1. Under the Conservation of Habitats and Species Regulations (2017), Wiltshire Council require that planning applications that have the potential to result in an increase in nutrients entering European Sites are supported by a nutrient neutrality assessment. The nutrient budget has been calculated using Natural England's methodology for phosphorus neutrality; the full set of calculator inputs and outputs is provided in Appendix B
- 3.2. To calculate the nutrient load of the proposed development site, Natural England's methodology and associated nutrient budget calculator (Solent Nutrient Budget calculator) have been used in this assessment. The full set of Calculator inputs and outputs is included in **Appendix B**. Key inputs and maps used in the Nutrient Budget Calculator are included in this section for ease of reference.
- 3.3. The assessment concludes that the development will result in a total increase in phosphorus discharge of 5.76 kg TP/yr, relative to the baseline scenario.

Phosphorus Budget Methodology

Stage 1- Phosphorous Loading from additional wastewater

Table 3-1: Stage 1 inputs

Inputs		Notes
Date of first occupancy	01/01/2028	Indicative.
Average occupancy rate	2.40	As per NE's guidance.
Water usage (l/person/day)	120	As per NE's guidance.
Development Proposal	135 dwellings + 2 existing dwellings with removed septic tanks	Refer to Proposed development layout in Appendix A .

Wastewater treatment works	Warminster WwTW	
Wastewater treatment works P permit (mg TN/I)	0.50 – Current 0.25 – Post 2030	The development is located within the wastewater treatment catchment of the Warminster WwTW, which has a current permit level of 0.50 mg TP/litre, which will be reduced to 0.25mg TP/ litre post-2030.

- 3.4. Total Phosphorus loading from additional wastewater discharge is 6.49 kg TP/yr under the current scenario, and will be reduced to 3.24 kg TP/yr post-2030, as shown in **Figure 3-1** below.

Description of values generated	Values generated
Post-2030 wastewater nutrient Loading	
Additional population (people):	328.80
Wastewater by development (litres/day):	39456.00
Annual wastewater TP load (kg TP/yr):	3.24
Pre-2030 wastewater nutrient loading	
Annual wastewater TP load (kg TP/yr):	6.49
Not applicable	
Not applicable	Not applicable

Figure 3-1: Nutrient loading from additional wastewater

Stage 2- Nutrient loading from current land use

Table 3-2: Stage 2 inputs

Inputs	
Catchment	Avon Hampshire
Soil drainage type	Freely draining
Annual average rainfall (mm)	900.1-950
Within Phosphorus Vulnerable Zone (NVZ)	Yes

- 3.5. The planning redline boundary equates to 10.48 ha of predominantly agricultural land, currently in arable use. For the purposes of the nutrient neutrality assessment,

approximately 8.85 ha of the Site has therefore been classified as horticulture / arable land. Smaller areas of neutral grassland extend to approximately 1.40 ha and have been classified as green space. Two small fields used for horse grazing, amounting to 0.23 ha in area, have been classified as lowland grazing.

- 3.6. In addition, it is proposed to connect two properties within Bishopstrow Court, which are currently served by septic tanks, to the foul network serving the proposed development, resulting in a net reduction in phosphorous loading.

Inputs		Notes
Average occupancy rate	2.40	As per NE's guidance.
Water usage (l/person/day)	120	As per NE's guidance.
Development Proposal	2 dwellings	Currently served by Septic Tanks
Existing Phosphorous Loading	2.44 (kg TP/yr)	

- 3.7. Total Phosphorus loading from these septic tanks is 2.44 kg TP/yr as shown in **Figure 3-2** below.

Description of required information	Data entry column - user inputs required
Date of first occupancy (dd/mm/yyyy):	01/01/2026
Average occupancy rate (people/dwelling or people/unit):	2.40
Water usage (litres/person/day):	120
Development proposal (dwellings/units):	2
Wastewater treatment works:	Septic Tank default
Current wastewater treatment works P permit (mg TP/litre):	11.60
Not applicable	Not applicable
Not applicable	Not applicable
Final calculation of nutrient load from wastewater	
Description of values generated	Values generated
Wastewater nutrient loading	
Additional population (people):	4.80
Wastewater by development (litres/day):	576.00
Annual wastewater TP load (kg TP/yr):	2.44

Figure 3-2: Nutrient loading from 2 existing septic tanks

- 3.8. This has been represented in the calculator within the current land use tab as a 'Residential urban land' with an area to give an equivalent phosphorous load to the above.
- 3.9. Existing land uses and associated phosphorus loadings are shown in Figure 3-3 below. Total Phosphorus loading from existing uses is 4.15 kg TP/yr.

Existing land use type(s) - user inputs required	Area (ha) - user inputs required	Annual phosphorus export (kg TP/yr)
Horticulture	8.85	1.65
Greenspace	1.40	0.03
Lowland	0.23	0.03
Residential urban land	1.32	2.44
Totals:	11.80	4.15

Figure 3-3: Nutrient loading from current land use

Stage 3 - Nutrient loading from future land use

- 3.10. The proposals comprise of 3.02 ha of residential urban land, 1.63 ha of open urban land, 5.53ha of greenspace/woodland and 0.30 ha of SuDS features classified as

'Water'. Proposed land uses and associated Phosphorus loadings are shown in Figure 3-3 below. Total Phosphorus loading from proposed land uses is 7.32 kg TP/yr.

New land use type(s) - user inputs required	Area (ha) - user inputs required	Annual phosphorus export (kg TP/yr)
Residential urban land	3.02	5.60
Open urban land	1.63	1.62
Woodland	5.53	0.11
Water	0.30	0.00
Totals:	10.48	7.32

Figure 3-4: Nutrient loading from proposed land use

Stage 4 - TP load removed by SuDS

3.11. The proposed surface water drainage strategy provides a treatment train comprising swales followed by an attenuation basin with sediment forebays. Using the mass balance approach set out in CIRIA C808 (*Using SuDS to reduce phosphorus in surface water runoff*), the combined SuDS total phosphorus removal has been calculated as 46.7%. The incoming total phosphorus load is assumed to comprise 55% particulate phosphorus (PP) and 45% dissolved phosphorus (DP). Treatment efficiencies are applied in sequence, with each SuDS component acting only on the phosphorus remaining from the preceding stage.

- **Swale Stage (first stage of treatment):** Swales are assumed to remove 50% of particulate phosphorus, with no removal of dissolved phosphorus, in accordance with C808 indicative performance values.

From an initial load of 55 units of PP, the swale therefore removes 27.5 units.

- **Dry basin stage (second stage of treatment):** The dry basin acts only on the remaining phosphorus load. A further 50% of the remaining particulate phosphorus is removed (13.75 units). In addition, 12% of the remaining dissolved phosphorus is removed (5.40 units).
- **Final total phosphorous removal rate (P units):**
 - PP removed by swale: 27.5
 - PP removed by basin: 13.75

- DP removed by basin: 5.40
- Total TP removal rate: 46.65 units (46.65%)

3.12. The TP removed by SuDS is based on a 4.64ha surface water drainage catchment, which results in a phosphorous output of 8.61 kg T/yr. With a 46.65% reduction, this results in **4.02 kg T/yr**.

Stage 5 - Nutrient budget calculation

3.13. Based on the above, the net change in Total Phosphorus loading as a result of the development will be:

Table 3-2: Nutrient budget calculation

Input/Output	Pre-2030 scenario (kg TP/yr)	Post-2030 scenario (kg TP/yr)
Wastewater TP load	+6.49	+3.24
Existing land TP load	-4.15	-4.15
Proposed land TP load	+7.32	+7.32
Proposed Reduction from SuDS	-4.02	-4.02
Total TP load before buffer	5.64	2.39
Total TP load including 20% Precautionary buffer	6.77	2.87

3.14. The assessment therefore concludes that the development will result in a total increase in phosphorus discharge relative to the baseline scenario.

3.15. It is proposed to offset the above increase in phosphorus loading through the purchase of offsite mitigation credits. Bellway are currently exploring options for the private purchase of credits through;

- Wiltshire Council Strategic Mitigation Scheme; or
- Environment Bank Credits.

3.16. With the appropriate off-site mitigation strategy in place, the proposed development will be considered to be phosphorus neutral and in compliance with the requirements of the Conservation of Habitats and Species Regulations (2017).

4. SUMMARY AND CONCLUSIONS

- 4.1. Ardent Consulting Engineers has been appointed by Bellway Homes Limited to prepare a Nutrient Neutrality Statement for the proposed development at Boreham Road, Warminster. The application site lies within the administrative boundary of Wiltshire Council.
- 4.2. The site is within the wastewater catchment of the Warminster Wastewater Treatment Works (WWTW) and within the River Avon SAC Catchment.
- 4.3. As part of this assessment, the phosphorus budget for the site has been calculated in accordance with Natural England's 'Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites' (March 2022). The calculations concluded that the development would result in a total increase in phosphorus discharge when compared to the baseline scenario.
- 4.4. It is proposed to offset the above increase in phosphorus loading through the purchase of offsite mitigation credits.
- 4.5. With the appropriate off-site mitigation strategy in place, the proposed development will be considered to be phosphorus neutral and in compliance with the requirements of the Conservation of Habitats and Species Regulations (2017).

Appendix A

All Intellectual Property Rights (including copyright) in or arising out of this drawing and the building works depicted are owned by Pegasus Planning Group Ltd (Pegasus Group) and may not be reproduced and/or copied without a written licence. Pegasus Group accepts no liability for any use of this drawing other than for its original purpose and by the original client except in circumstances where approval for use has been supplied by Pegasus Group in writing. Use only written dimensions. Drawing prepared for planning application purposes only. DO NOT SCALE (or use) for construction, sales or any other purpose. Any queries to be reported to Pegasus Group for clarification. © Pegasus Planning Group Limited. © Crown copyright and database right 03 100042931. Promap. Licence number 100004046. Empolia Licence number 000001073. Terms & conditions @pegasusgroup.co.uk

Issue:



KEY: SITE LAYOUT

- APPLICATION BOUNDARY
- PROPOSED SITE ACCESS

SURFACE MATERIALS:

- GARDEN/POS/HIGHWAY VERGE (SEE DETAILED LANDSCAPE PROPOSALS)
- TARMACADUM
- BLOCK PAVING

ENCLOSURE DETAILS:

- 1.8M HIGH BRICK WALL
- 1.8M HIGH TIMBER PANEL FENCING
- 1.2M ESTATE RAILING
- 0.45M ESTATE RAILING
- LOW LEVEL HEDGEROW (SEE DETAILED LANDSCAPE PROPOSALS)

LANDSCAPING:

- INDICATIVE TREE PLANTING (SEE DETAILED LANDSCAPE PROPOSALS)
- RETAINED VEGETATION (SEE TREE RETENTION PLAN)
- RETAINED TREE (CATEGORY A)
- ROOT PROTECTION ZONE
- ROOT PROTECTION ZONE - VETERAN

- TREE / VEGETATION REMOVED

OTHER:

- BIN COLLECTION POINT
- GATE/PERSONNEL DOOR
- STREET LIGHTING - COLUMN
- STREET LIGHTING - BOLLARD
- AFFORDABLE HOUSING (SEE AFFORDABLE HOUSING PLAN)
- PEDESTRIAN LINKS
- KEY IDENTIFIED VIEWS TO EXISTING MONUMENT FROM THE SITE
- EXISTING PUBLIC RIGHT OF WAY
- LAP
- LEAP
- SUB STATION LOCATION
- PROPOSED DRAINAGE (SEE DETAILED DRAINAGE PLAN)

SHOW HOMES:

- SHOW HOME
- SALES OFFICE

LAND NORTH OF BOREHAM ROAD, WARMINSTER

Accommodation Schedule							
Housetype	Sq.ft	Sq.m	St.	Beds	No's	Total Sqft	Total Sqm
OPEN MARKET HOUSING							
2B HOOPER	790	73.4	2	2	4	3,160	294
COINER	876	81.4	2	2	4	3,504	326
BLEMMERE	1,026	95.3	2	3	12	12,312	1,144
3B COPPER SMITH	1,026	95.3	2	3	12	12,312	1,144
HILLARD	1,052	97.7	2	3	6	6,312	586
REEDMAKER	1,309	121.6	2	4	10	13,090	1,216
4B BOWYER	1,356	126.0	2	4	11	14,916	1,386
LUTHIER	1,392	129.3	2	4	9	12,528	1,164
PHILOSOPHER	1,507	140.0	2	4	9	13,563	1,260
5B WATCHMAKER	1,901	176.6	2	5	4	7,604	706
Sub Total (Open Market)					81	99,301	9,225
AFFORDABLE							
1B STATIONER	496	46.1	2	1	3	1,488	138
BOOKBINDER	646	60.0	2	1	3	1,938	180
2B BAKER	876	81.4	2	2	16	14,016	1,302
3B DRAFTSMAN	935	86.9	2	3	10	9,350	869
TILLMAN	1,026	95.3	2	3	20	20,520	1,906
4B CARTOGRAPHER	1,109	103.0	2	4	2	2,218	206
Sub Total (Affordable)					54	49,530	4,601
TOTAL					135	148,831	13,827
DENSITY dwelling/acre					15	no./ac	
DENSITY dwelling/hectare					36	no./ac	

LAND AT HOME FARM, WARMINSTER – SITE LAYOUT

