



Shadow Habitat Regulation Assessment (HRA) Screening Report and Appropriate Assessment

Prepared for:

Simply Planning

Local Planning Authority	Wiltshire Council
Application Reference	TBC
Application Address	Land off Southampton Road, Alderbury, SP5 3AG
Application Description	Outline planning for 28 residential dwellings

Revision 3

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1 Introduction

This sHRA has been prepared due to an identified hydrological link between the proposed development and the River Avon Special Area of Conservation (SAC) and The Solent Marine Sites (comprising Chichester and Langstone Harbours Special Protection Area (SPA)/Ramsar, Solent and Southampton Water SPA/Ramsar, Solent Maritime SAC, Portsmouth Harbour SPA/Ramsar) which has the potential to cause adverse impacts with regard to nutrient pollution.

1.1 HRA Requirement

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended), a Competent Authority is required to conduct a Habitat Regulations Assessment (HRA) for any plans or projects that could impact on a European Site. However, a 'shadow' HRA can be completed by the applicant and adopted by the competent authority. In this case Wiltshire Council is the competent authority responsible for undertaking the HRA.

This report will mainly reference the regulations set out by the Wiltshire Council, as this is the competent authority. Wiltshire Council is required to assess the Local Plan through the HRA process as policies and site allocations in the Local Plan can potentially affect the national site network of European Sites in the UK, as well as Ramsar sites.

1.2 European Sites of Potential Impact

The proposed site is located on the surface water divide of two catchments: the River Test to the east and the River Avon to the west. Therefore, the sHRA needs to consider European Sites within both catchments; principally the River Avon SAC, the New Forest SPA and the Solent Marine Habitats sites.

The River Avon is one of the most diverse chalk streams in the UK, with over 180 species of plants, one of the most diverse fish faunas, and a wide range of aquatic invertebrates. The River Avon is a Site of Special Scientific Interest (SSSI) and therefore forms part of the nation's finest natural heritage. The site is also internationally recognised, and was confirmed as a Special Area of Conservation (SAC) in 2000. The SAC includes a number of rivers and adjacent. The lower reaches of the Avon Valley are also internationally designated as a Special Protection Area (SPA), for its bird interest.

The New Forest's unique mix of landscapes including ancient woodlands, wetlands and bogs, and open heathlands means it is home to many rare species of plants and wildlife long since lost from the UK and Europe. The significance of the New Forest is reflected in the fact that it has the highest possible conservation status and is legally protected.

The Solent Marine Sites (SEMS) is a collective name which covers internationally important areas in the Solent. It includes areas designated under the EU Habitats Directive as Special Areas of Conservation (SAC), areas designated under the EU Birds Directive as Special Protection Areas (SPAs) and areas designated as Ramsar sites. The Directive requires that all European Sites are managed sustainably in order to protect the features for which the sites have been designated. SEMS covers the harbours, estuaries, areas of open coast and inshore water around the Solent.

Two joined European Union Court of Justice cases (C-293/17 and C-294/17) relating to the Habitats Directive, were decided. In summary, this judgment concludes that, where a European protected site is in unfavourable condition, permitting additional nutrient loads is 'necessarily limited' and would need careful justification to ensure that it is compatible with the Habitats Directive.

1.3 Data sources

- All references in this assessment to the 'Habitats Regulations' refer to The Conservation of Habitats and Species Regulations 2017 (and as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019).
- **This report should be read in conjunction with the Nutrient Neutral Assessment and Mitigation Strategy (NNAMS) Report. Revision 3, Nutrient Neutral Ltd, April 2026**
- The Defra MAGIC website [www.magic.defra.gov.uk], accessed **April 2026**
- Information on European sites from the JNCC website [www.jncc.defra.gov.uk], accessed **April 2026**
- Wiltshire Local Plan Review Habitats Regulations Assessment Scoping Report (LUC, January 2021)

2 Stage 1 – HRA Screening Assessment

The purpose of screening under Regulation 63(1)(a) of the Habitats Regulations is to provide evidence so that a judgement can be made as to whether there could be any potential significant impacts of the development on the integrity of the River Avon SAC, The Solent Marine Sites.

2.1 Likely Significant Effects definition

The significance of potential effects was assessed in the absence of mitigation measures other than those which are standard construction practices, such as pollution control or those incorporated into the scheme. The assessment has been made with awareness of the conservation objectives for the features of the European Sites.

2.2 Current condition of designated sites

Natural England has advised that based on the best available up-to-date evidence the River Avon SAC and The Solent Marine Sites are in an unfavourable condition.

2.3 European Sites potentially impacted by this proposed development

Below is a list of the designated sites, reason for their designation and distance from the site, at their nearest point. The sites are listed in order of proximity from the proposed development site.

Table 1-6: European Sites subject to HRA screening assessment

Site Name	Designation	Approx distance and direction from site
River Avon	SAC	1.2 km W
Reasons for designation		
Annex I: habitats that are a primary reason for selection of this site	Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitriche – Batrachion vegetation	
Annex 1: habitats present as a qualifying feature, but not a primary reason for selection of this site	N/A	
Annex II species that are a primary reason for selection of this site	Desmoulin's whorl snail – <i>vertigo moulinsiana</i> Sea lamprey – <i>Petromyzon marinus</i> Brook lamprey – <i>lampetra planeri</i> Atlantic salmon – <i>salmo salar</i> Bullhead – <i>cottus gobio</i>	
Annex II species present as a qualifying feature, but not a primary reason for site selection	N/A	

Site Name	Designation	Approx distance and direction from site
New Forest	SAC	7.4 km SE
Reasons for designation		
Annex I: habitats that are a primary reason for selection of this site	Oligotrophic waters containing very few minerals of sandy plains Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea North Atlantic wet heaths with Erica tetralix European dry heaths Molinia meadows Depressions on peat substrates of the Rhynchosporion Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrub layer Asperulo-Fagetum beech forests Old acidophilous oak woods with Quercus robur on sandy plains Bog woodland Alluvial forests with Alnus glutinosa and Fraxinus excelsior	
Annex 1: habitats present as a qualifying feature, but not a primary reason for selection of this site	Alkaline fens Transition mires and quaking bogs	
Annex II species that are a primary reason for selection of this site	Southern damselfly Stag beetle	
<i>Annex II species present as a qualifying feature, but not a primary reason for site selection</i>	Great crested newt	

Site Name	Designation	Approx distance and direction from site
The Solent Marine Sites	SAC, SPA, RAMSAR	21 km SE
Reasons for designation		
Annex I: habitats that are a primary reason for selection of this site	Estuaries Spartina swards Atlantic salt meadows	
Annex 1: habitats present as a qualifying feature, but not a primary reason for selection of this site	Sandbanks which are slightly covered by sea water all the time Mudflats and sandflats not covered by seawater at low tide Coastal lagoons * Priority feature Annual vegetation of drift lines Perennial vegetation of stony banks Salicornia and other annuals colonizing mud and sand Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")	
Annex II species that are a primary reason for selection of this site		
<i>Annex II</i> species present as a qualifying feature, but not a primary reason for site selection	Desmoulin's whorl snail	

2.4 Physical loss of habitat

The proposed development is beyond the boundary of the River Avon SAC, which is the closest European Site. Therefore, **there will be no likely significant effect on the designated sites and this effect can be screened out.**

2.5 Recreation and urban impacts

Recreational activities and human presence can result in significant effects on European Sites as a result of erosion and trampling, associated impacts such as fire and vandalism or disturbance to sensitive features, such as birds through both terrestrial and water-based forms of recreation.

Each European Site will typically have a 'Zone of Influence' (ZOI) within which increases in population would be expected to result in likely significant effects. ZOIs are usually established following targeted visitor surveys and the findings are therefore typically specific to each European Site (and often to specific areas within a European Site). The findings are likely to be influenced by a number of complex and interacting factors and therefore it is not always appropriate to apply a generic or non-specific ZOI to a European Site.

The Wiltshire local plan HRA states that development in close proximity to the River Avon SAC could result in damage/degradation to habitats during the construction phase and increased pollution from urban run-off in the long term. However, the proposed development is not within a 20 m radius of the River Avon SAC. **Therefore, there will be no likely effect and this can be screened out.**

2.6 Physical loss of functionally linked habitat

Functional linkage occurs where land beyond the boundary of a European Site fulfils a crucial role in ecologically supporting the populations of species for which the site is designated. The development site does not provide a functional link to any of the notified features of the designated sites due to the distance from the designated site and lack of pathways.

Therefore, **no likely significant effect** is concluded on the River Avon SAC, New Forest SAC or The Solent Marine Sites and this **can be screened out**.

2.7 Water Quality

Features for which a European Site is designated are often sensitive to changes in water balances and water quality. Therefore, urbanisation affecting drainage streams which flow through, or groundwater which feeds into, a European Site, has the potential to adversely affect the features for which it is designated.

With respect to water quality, a likely significant effect is considered where a hydrological connection exists.

The proposed site is located on the water divide of two catchments: the River Test to the east and the River Avon to the west. Therefore, the proposed development has a hydraulic connection to both catchments. The River Avon SAC and the Solent Marine Sites, within the River Test catchment, both have qualifying features that have potential to be sensitive to changes in water quality.

Therefore, there is a likely significant effect, and this cannot be screened out at this stage.

2.8 Air pollution

Air pollution can affect a European Site if it has an adverse effect on its features of qualifying interest. The main mechanisms through which air pollution can have an adverse effect is through eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides). Deposition of air pollutants can alter the soil and plant composition and species which depend upon these.

Excess atmospheric nitrogen deposition within an ecosystem or habitat can disrupt the delicate balance of ecological processes interacting with one another. As the availability of nitrogen increases in the local environment, some plants that are characteristic of that ecosystem may become competitively excluded in favour of more nitrophilic plants. It also upsets the ammonium and nitrate balance of the ecosystem, which disrupts the growth, structure and resilience of some plant species.

However, air quality impacts are greatest within 200 m of a road source, decreasing with distance. The proposed development does not include the construction of a road source within 200m of any of these sites.

Therefore, this is beyond the 200m buffer zone so there will not be a likely significant impact on the River Avon SAC and **this can be screened out.**

2.9 Non-physical disturbance

Noise and vibration effects, e.g. during the construction of new housing or other development, are most likely to disturb bird species and are thus a key consideration with respect to European Sites where birds are the qualifying features, although such effects may also impact upon some mammals and fish species. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) is most likely to affect bat populations and some nocturnal bird species, and therefore have an adverse effect on the integrity of European sites where bats or nocturnal birds are a qualifying feature.

It has been assumed (on a precautionary basis and based on our experience of previous HRAs and consultation with Natural England) that the effects of noise, vibration and light pollution can cause an adverse effect if development takes place within 500m of a European site (or functionally linked habitat) with qualifying features sensitive to these disturbances.

The closest designated site is the River Avon SAC (1.2 km) which is outside of the buffer zone. **Therefore, there is no likely significant effect to be had and this can be screened out.**

2.10 Potential in-combination effects

Any plan or project likely to have a significant effect on a European Site, either individually or in-combination with other plans or projects, shall undergo an Appropriate Assessment to determine its implications for the site. This is to prevent sites, which would not have a significant effect on a site, combining with other plans or projects to the point where an in-combination effect of all of these plans or projects, which would otherwise not be assessed, becoming significant.

The requirement for Appropriate Assessment in respect to water quality cannot be screened out.

2.11 Conclusion of Screening Assessment

Table 7: provides a summary of the Screening Assessment of the proposed development in isolation and in-combination.

Site	Likely Significant Effect?					
	Physical loss of habitat	Recreation and urban impacts	Physical loss of functionally-linked habitat	Water quality	Air pollution	Non - physical disturbance
River Avon SAC	No	No	No	Yes	No	No
New Forest SAC	No	No	No	No	No	No
Solent Marine Sites SAC	No	No	No	Yes	No	No

Would the proposal lead to a likely significant effect on European Site integrity? Yes

3 Stage 2 – Appropriate Assessment

3.1 Site description and background

The proposed development comprises 28 residential dwellings with associated gardens and parking. The site is located within the village of Alderbury, some 5.5 km southeast of Salisbury and is centred around National Grid Reference (NGR) SU 19070 27029. The application area extends to approximately 4.9 hectare and the current land use is greenspace.

3.2 Nutrient calculations

The site is located within the catchment of the River Test, which is nitrogen sensitive. However, wastewater discharges to the catchment of Salisbury (Petersfinger) WwTW, which is located within a phosphorus sensitive area.

Therefore, wastewater calculations have been undertaken using the River Avon SAC nutrient calculator (Natural England/Ricardo). Calculations regarding land use change have been undertaken as per The Solent Marine Sites nutrient calculator (Natural England/Ricardo).

A detailed assessment of the phosphorus and nitrogen export from the proposed development is provided in the Nutrient Neutral Assessment and Mitigation Strategy (NNAMS) in [Appendix 1](#). The calculations are summarised below.

3.3 Wastewater discharge

Wastewater from site will discharge to Salisbury (Petersfinger) WwTW. Calculations are based on an assumed average occupancy rate of 2.4 per dwelling and an average water usage of 120 litres/person/day.

Pre-2030 TAL upgrade

Total phosphorus = **2.65 kg TP/yr**

Post-2030 TAL upgrade

Total phosphorus = **0.66 kg TP/yr**

3.4 Land use change

The current land use at site is classified as lowland grazing (3.9 ha) and woodland (1.0 ha)
Total Nitrogen export = **43.71 kg TN/yr**

The post-development land use at site is classified as residential urban (1.65 ha), greenspace (2.25 ha) and woodland (1.00 ha). Total Nitrogen export = **36.66 kg TN/yr**

3.5 Summary of nutrient budget

The overall phosphorus and nitrogen budget for this site is provided below:

Phosphorus budget		
Description	Pre 2030 Value (kg TP/yr)	Post 2030 Value (kg TP/yr)
Wastewater, post-treatment	2.65	0.66
Pre-development land use	-	-
Post-development site loss	-	-
Land use net change	-	-
Nutrient budget	2.65	0.66
20% buffer	0.53	0.13
Nutrient budget + 20% buffer	3.18	0.79

Nitrogen budget	
Description	Value (kg TN/yr)
Wastewater, post-treatment	-
Pre-development land use	43.71
Post-development site loss	36.66
Land use net change	-7.05
Nutrient budget	-7.05
20% buffer	-
Nutrient budget + 20% buffer	-7.05

The total nutrient budget for the site is:

-7.05 kg TN/yr

and

3.18 kg TP/yr pre-2030

0.79 kg TP/yr post-2030

4 Mitigation Strategy

As the development falls within both the River Avon and River Test catchments, two separate mitigation approaches would normally be required. However, the nitrogen budget generated by the site results in a net reduction and, as such, no mitigation is required.

In order to mitigate the 3.18 kg TP/yr pre-2030 and 0.79 kg TP/yr post-2030 that is generated in the River Avon catchment, it is proposed to use credits supplied from the Gray Manor Nutrient Credit Bank. The credit bank has identified 22.69 kg TP of phosphorus mitigation within the River Avon, generated through the upgrade of the existing septic tank at Gray Manor Hotel.

5 Mechanisms for delivery

A nutrient credit certificate will be provided by the Gray Manor Credit Bank to demonstrate that the required nutrient mitigation has been secured. This certificate will confirm that sufficient credits have been allocated to offset the development's nutrient load, in accordance with the relevant guidance and regulatory requirements. The purchase and allocation of these credits ensures that the scheme will achieve nutrient neutrality prior to occupation.

6 Test of site integrity

The proposed mitigation measures would ensure that there would be no adverse effect on the conservation objectives of the River Avon SAC and The Solent Marine Sites, either alone or in-combination with other plans or projects, as a result of water quality (nitrogen and phosphorus) impacts. Accordingly, it can be concluded that there would be no adverse effect on the integrity of the site in respect of this impact pathway.

7 Conclusion

A likely significant effect on the River Avon SAC and The Solent Marine Sites has been identified as a result of water quality (phosphorus and nitrogen) impacts. The development will result in a net increase in phosphorus loading in the River Avon SAC. Mitigation for the additional phosphorus will be mitigated by purchasing nutrient credits from the Gray Manor Credit Bank.

It can be concluded that there will be no adverse effect on the integrity of conservation objectives of the River Avon SAC and The Solent Marine Sites, either in-isolation or in-combination.

Appendix 1

Nutrient Neutral Assessment and Mitigation Strategy – April 2026



NUTRIENT NEUTRAL ASSESSMENT AND MITIGATION STRATEGY

Report Ref: NNAMS/222

**Southampton Road,
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Revision R1	30-Oct-2024	Simply Planning
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222/NNAMS/D1	Site location
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222/NNAMS/D3	Superficial deposits
222/NNAMS/D4	Soils at the site
222/NNAMS/D5	Aquifer designations
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222/NNAMS/T1	Phosphorus budget
222/NNAMS/T2	Nitrogen budget

APPENDICES

222/NNAMS/A1	Site plan & location plans
222/NNAMS/A2	Nutrient calculations

1. Introduction

Nutrient Neutral have been commissioned by Simply Planning to undertake an assessment of the nutrients generated by a proposed development and to develop a mitigation strategy for any residual nutrient load.

The site is located on the boundary of two hydrological catchments: the River Test to the east and the River Avon to the west. Foul water will discharge to the River Avon Special Area of Conservation (SAC) Nutrient Neutrality catchment and will therefore need to demonstrate phosphorus neutrality. The surface water will drain to the River Test in The Solent Nutrient Neutrality catchment and will need to demonstrate nitrogen neutrality.

To ensure compliance with the requirements of the Habitats Regulation and Water Framework Directive, new development within both catchments must not, alone or in-combination, result in the non-compliance with the River Avon SAC or The Solent catchment water quality targets or compound existing problems of target exceedance in those parts of the catchments already failing standards. Furthermore, new developments must not prejudice achievement of Conservation Objectives for the River Avon or The Solent catchments over the long-term.

The nutrient load generated by the proposed development has been calculated according to the Natural England generic nutrient methodology and a mitigation solution developed to ensure the proposed development is neutral.

The assessment has been prepared in accordance with the Natural England River Avon SAC and The Solent Marine Sites nutrient budget calculators (Ricardo Energy).

2. Site characteristics

2.1 Site location

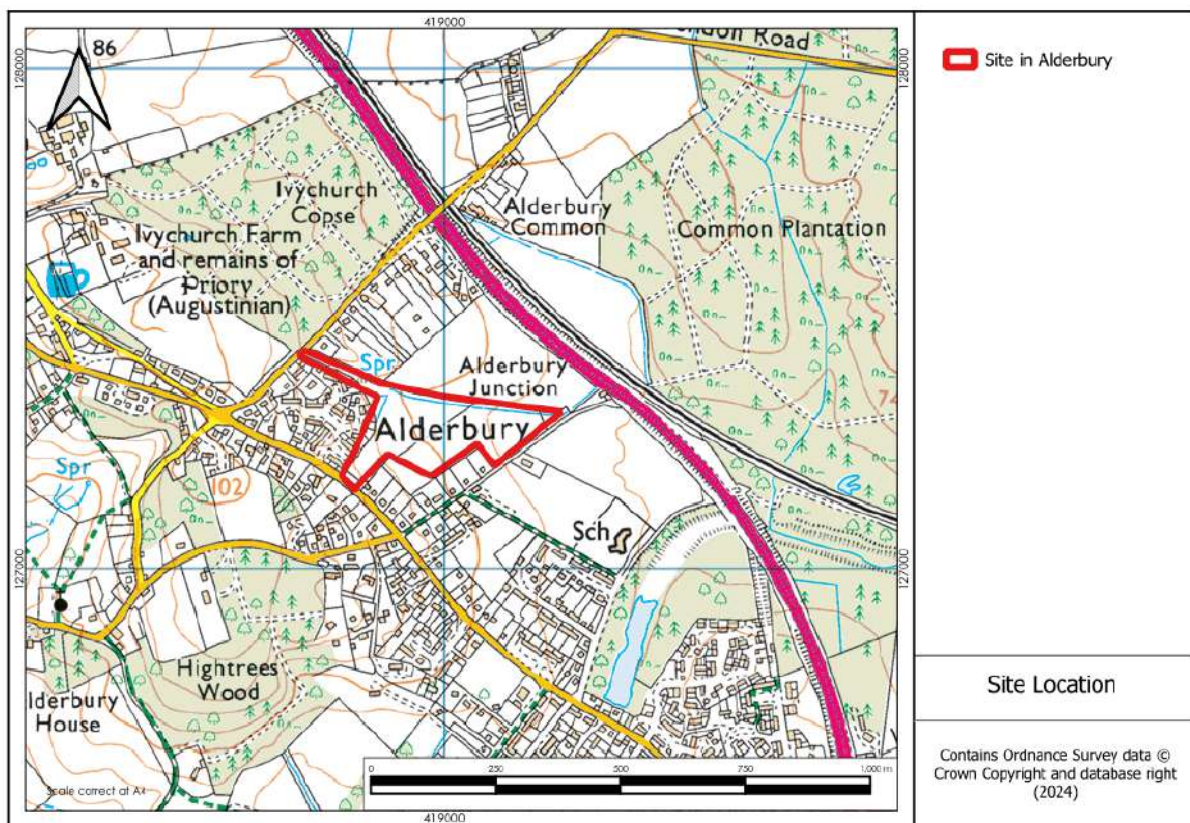
The site is located in the village of Alderbury, Wiltshire, some 5.1 km southeast of Salisbury city centre, and is centred around National Grid Reference (NGR) SU 18976 27270. The application area extends to approximately 4.9 hectares (ha). The site currently comprises lowland grazing. The site location is presented on 222/NNAMS/D1.

The proposed development comprises 28 residential dwellings with associated gardens and parking (Appendix 222/NNAMS/A1).

2.2 Topography

The site is located in an area of gently undulating topography. Within the site, elevations decrease gently north-eastwards. Elevations decrease from 80 metres Above Ordnance Datum (mAOD) in the southwest of the site to 74 mAOD in the northeast of the site. Beyond the site, elevations decrease to a local low of 64 mAOD some 0.4 km northeast of the site. Elevations increase westwards to a local high of 105 mAOD some 2.1 km west of the site.

Drawing 222/NNAMS/D1: Site location



2.3 Geology

The bedrock geology at the site comprises Wittering Formation consisting of sand, silt and clay. Superficial deposits are absent at the site.

2.4 Soils

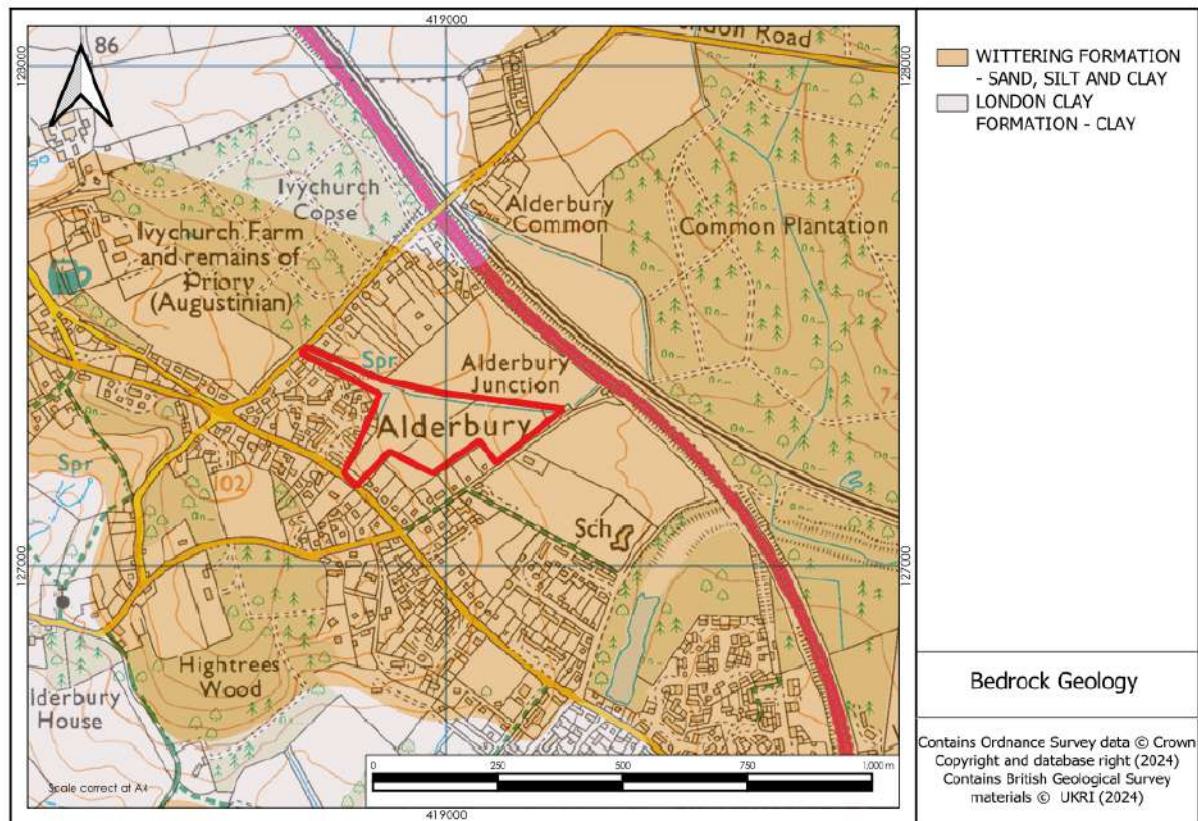
Based on the Cranfield University Soilscales webtool (<http://www.landis.org.uk/Soilscales>), the soils at the site are classified as 'Soilscales 15' which are described as naturally wet, very acid, sandy and loamy soils.

2.5 Hydrology

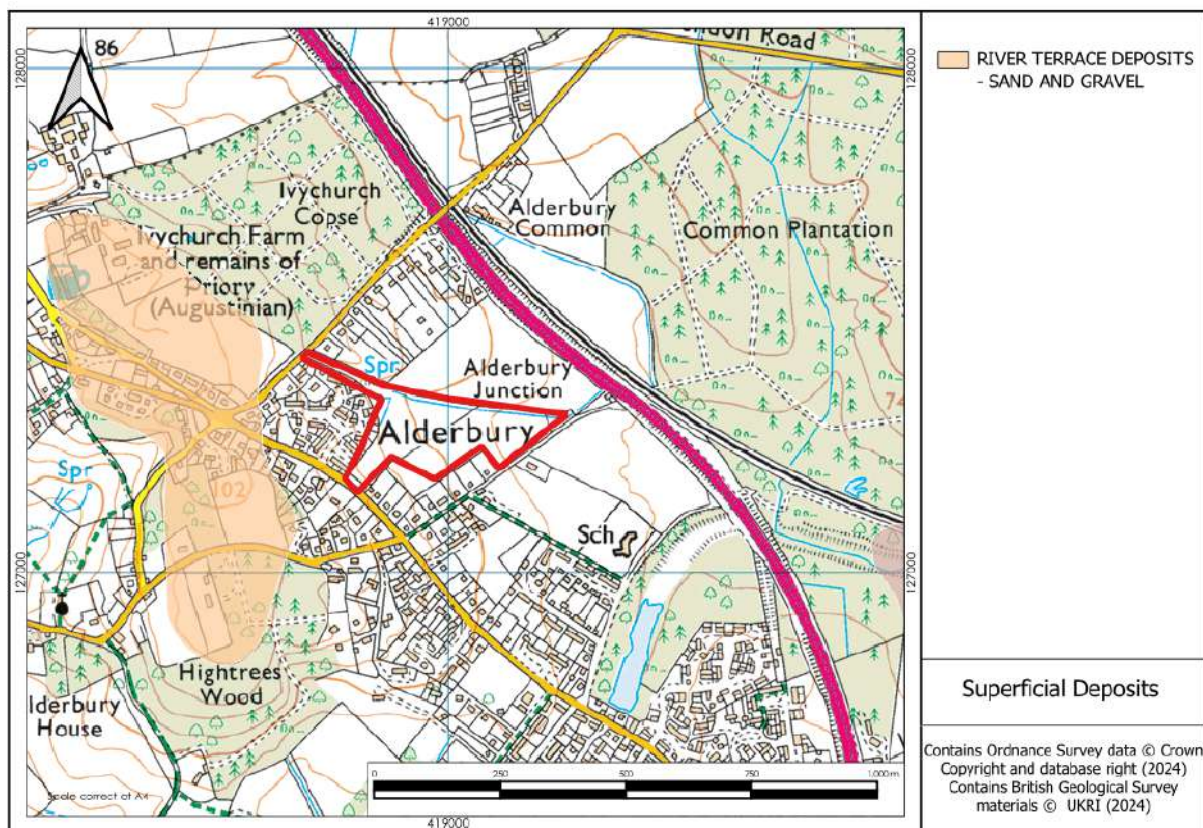
The site is located on the surface water divide of two catchments: the River Test to the east and the River Avon to the west. Foul water is discharged to the River Avon via the Salisbury (Petersfinger) Wastewater Treatment Works (WwTW). Surface water drains into the River Test catchment. The site is located in Flood Zone 1, which means that there is a 'low' probability of flooding at the site.

The nearest watercourse rises immediately north of the site and flows east along the northern boundary to an unnamed tributary of the River Dun, 500 m east of the site. This flows for 1.5 km east to its confluence with the River Dun at NGR SU 21179 27130. The River Dun then flows for an additional 12 km east and meets its confluence with the River Test at NGR SU 33144 26281

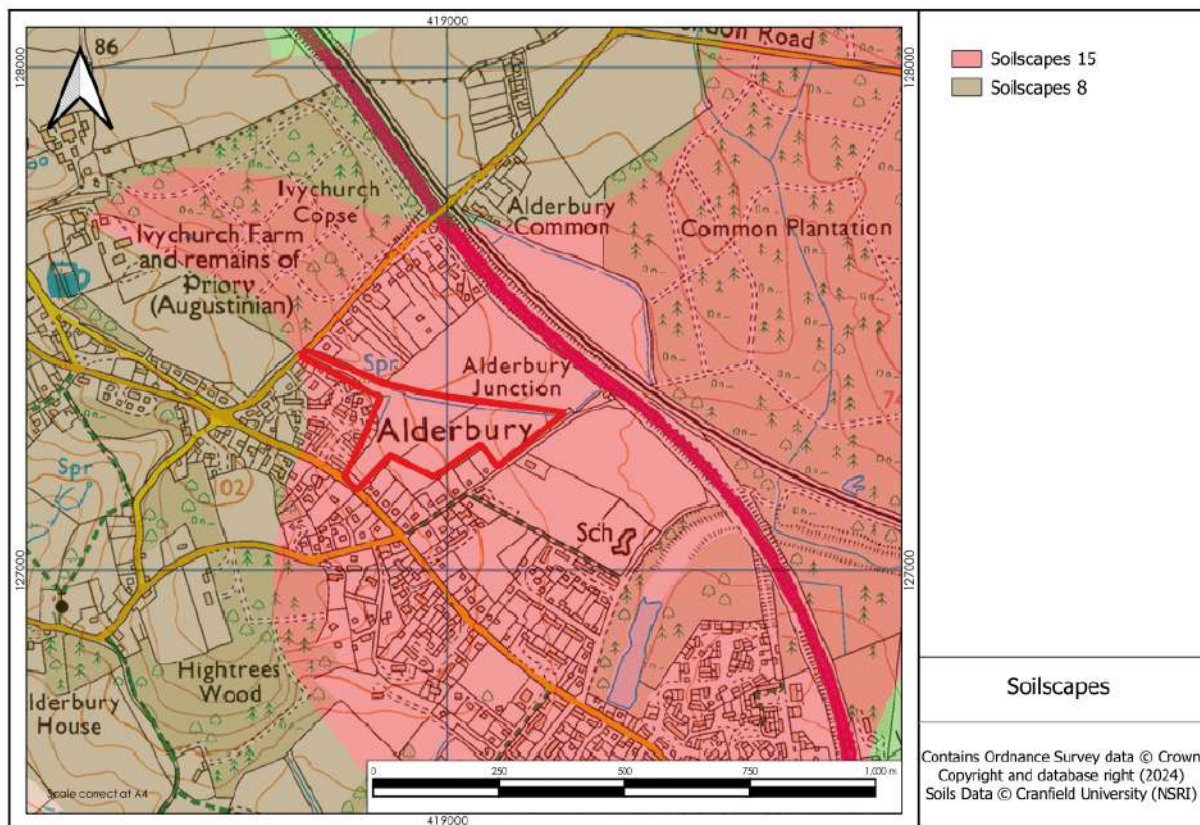
Drawing 222/NNAMS/D2: Bedrock geology



Drawing 222/NNAMS/D3: Superficial deposits



Drawing 222/NNAMS/D4: Soils at the site



2.6 Groundwater vulnerability

The groundwater vulnerability at the site is indicated as 'high'. This means that this area can easily transmit pollution to groundwater. Such areas are characterised by high-leaching soils and the absence of low-permeability superficial deposits.

(Source: <https://magic.defra.gov.uk/magicmap.aspx>)

2.7 Source Protection Zones and Nitrate Vulnerable Zones

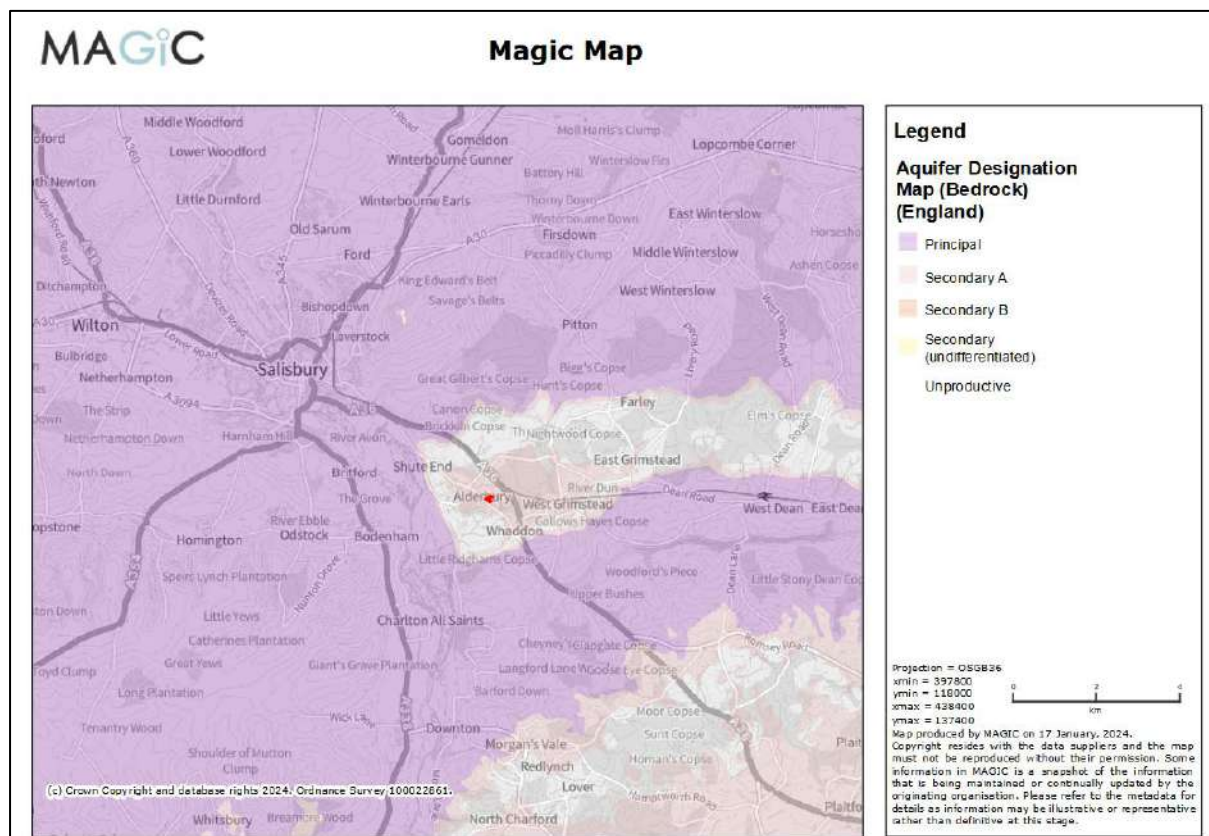
The site is not located within a Source Protection Zone and is in a Nitrate Vulnerable Zone.

(Source: <https://magic.defra.gov.uk/magicmap.aspx>)

2.8 Aquifer Designations

The site is located in a Secondary A aquifer. This comprises permeable layers that can support local water supplies and may form an important source of base flow to rivers. Secondary aquifers provide significant quantities of drinking water, and water for business needs. They may also support rivers, lakes, and wetlands.

(Source: <https://magic.defra.gov.uk/magicmap.aspx>)

Drawing 222/NNAMS/D5: Aquifer designations**2.9 Rainfall**

The 1991-2020 annual average rainfall was sourced from the National River Flow Archive (<https://nrfa.ceh.ac.uk/data/search>). The site falls in the category of 896.00 mm/yr.

3. Calculation of nutrient export from proposed development

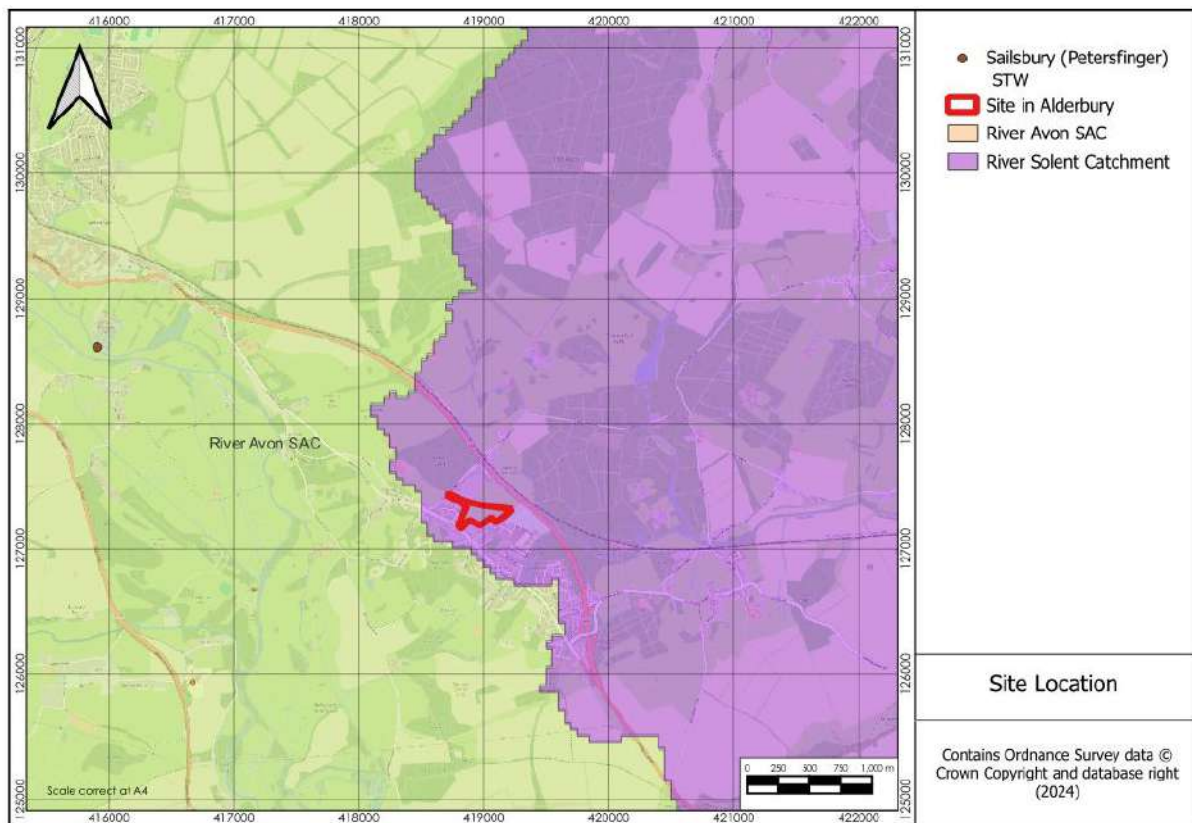
The site is located within the hydrological catchment of the River Test in The Solent Nutrient Neutrality catchment, which is nitrogen sensitive. However, wastewater discharges to the Salisbury (Petersfinger) WwTW, which discharges in the River Avon SAC Nutrient Neutrality catchment and is a phosphorus sensitive area.

Preliminary calculations have been undertaken to assess the likely nutrient export from the site and consider the potential mitigation options.

3.1 Proposed development

The proposed development comprises 28 residential dwellings with associated gardens and parking.

Drawing 222/NNAMS/D6: Catchment areas



3.2 Calculation of wastewater load

As the site will discharge to Salisbury (Petersfinger) WwTW, which is in the River Avon catchment, the site will have to mitigate the associated wastewater phosphorus load. This calculation has been undertaken using the Natural England River Avon SAC nutrient calculator (Ricardo) (Appendix 222/NNAMS/A2).

The Salisbury (Petersfingers) WwTW currently has a discharge consent limit for phosphorus set at 1.00 mg/l. The Levelling-Up and Regeneration Act (LURA) requires all sewage treatment works serving populations greater than 2,000 people to upgrade to the Technically Achievable Limit (TAL) by 2030. The phosphorus limit will reduce to 0.25 mg/l post-2030.

Based on an assumed average occupancy rate of 2.4 per dwelling and an average water usage of 120 litres/person/day, the associated annual phosphorus generated by wastewater is **2.65 kg TP/yr**.

However, after the TAL upgrade, the associated annual phosphorus generated by wastewater is **0.66 kg TP/yr**.

3.3 Land use change

Calculations regarding land use change have been undertaken as per the Natural England The Solent Marine Sites nutrient calculator (Ricardo) whereby pre- and post-development land use is considered.

The current site comprises approximately 3.9 ha of lowland grazing and 1.0 ha of woodland. This has an associated total nitrogen load of 43.71 kg TN/yr.

The post-development site comprises approximately 1.65 ha residential urban land, 2.25 ha of greenspace and 1.00 ha of woodland. This has an associated total nitrogen load of 36.66 kg TN/yr.

Therefore, the total land use net change is **-7.05 kg TN/yr**.

4. Summary of nutrient balance for this development

Table 222/NNAMS/T1: Phosphorus budget		
Description	Pre 2030 Value (kg TP/yr)	Post 2030 Value (kg TP/yr)
Wastewater, post-treatment	2.65	0.66
Pre-development land use	-	-
Post-development site loss	-	-
Land use net change	-	-
Nutrient budget	2.65	0.66
20% buffer	0.53	0.13
Nutrient budget + 20% buffer	3.18	0.79

Table 222/NNAMS/T2: Nitrogen budget	
Description	Value (kg TN/yr)
Wastewater, post-treatment	-
Pre-development land use	43.71
Post-development site loss	36.66
Land use net change	-7.05
Nutrient budget	-
20% buffer	-
Nutrient budget + 20% buffer	-7.05

The total phosphorus budget for the site is **3.18 kg TP/yr** pre 2030 and **0.79 kg TP/yr** post 2030. The nitrogen budget is **-7.05 kg TN/yr**.

5. Mitigation

As the mitigation for this development falls within both the River Avon and River Test catchments, two separate mitigation approaches would normally be required. However, the nitrogen budget generated by the site results in a net reduction and, as such, no mitigation is required.

In order to mitigate the 3.18 kg TP/yr pre-2030 and 0.79 kg TP/yr post-2030 that is generated in the River Avon catchment, it is proposed to use credits supplied from the Gray Manor Nutrient Credit Bank. The credit bank has identified 22.69 kg TP that can be used to mitigate phosphorus within the River Avon, generated through the upgrade of the existing septic tank. Therefore, this would be sufficient mitigation for the proposed development.

6. Conclusion

It is proposed to construct 28 residential dwellings on land in Alderbury, Wiltshire. Wastewater will discharge to the River Avon SAC Nutrient Neutrality catchment and surface water will drain to The Solent Nutrient Neutrality catchment.

The nutrient mitigation requirement for the River Avon SAC is 3.18 kg TP/yr pre-2030 and 0.79 kg TP/yr post-2030. For The Solent catchment, the nutrient budget for the development is -7.05 kg TN/yr. The mitigation required in the River Avon SAC will be mitigated via the purchase of credits from nutrient credits generated from the upgrade of the septic tank at Gray Manor Hotel.

Therefore, it can be concluded that this proposed development will not prevent the Conservation Objectives of the River Avon SAC or The Solent Marine Sites.

APPENDIX 222/NNAMS/A1

Site plans and location plans

Notes

To be read in conjunction topographical and arboricultural survey and associated drawings/reports.

KEY

Development boundary

Other land owned by applicant

P5	23-09-2024	Planning issue	SL	SH
P4	16-08-2024	Planning issue	SL	SR
P3	04-07-2024	Red line updated	SL	SH
P2	30-01-2024	Re-issue	SR	SH
P1	08-01-2024	First issue	SL	SH
Rev	Date	notes	Drawn	Chkd

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Project
Land off Southampton Road
Alderbury

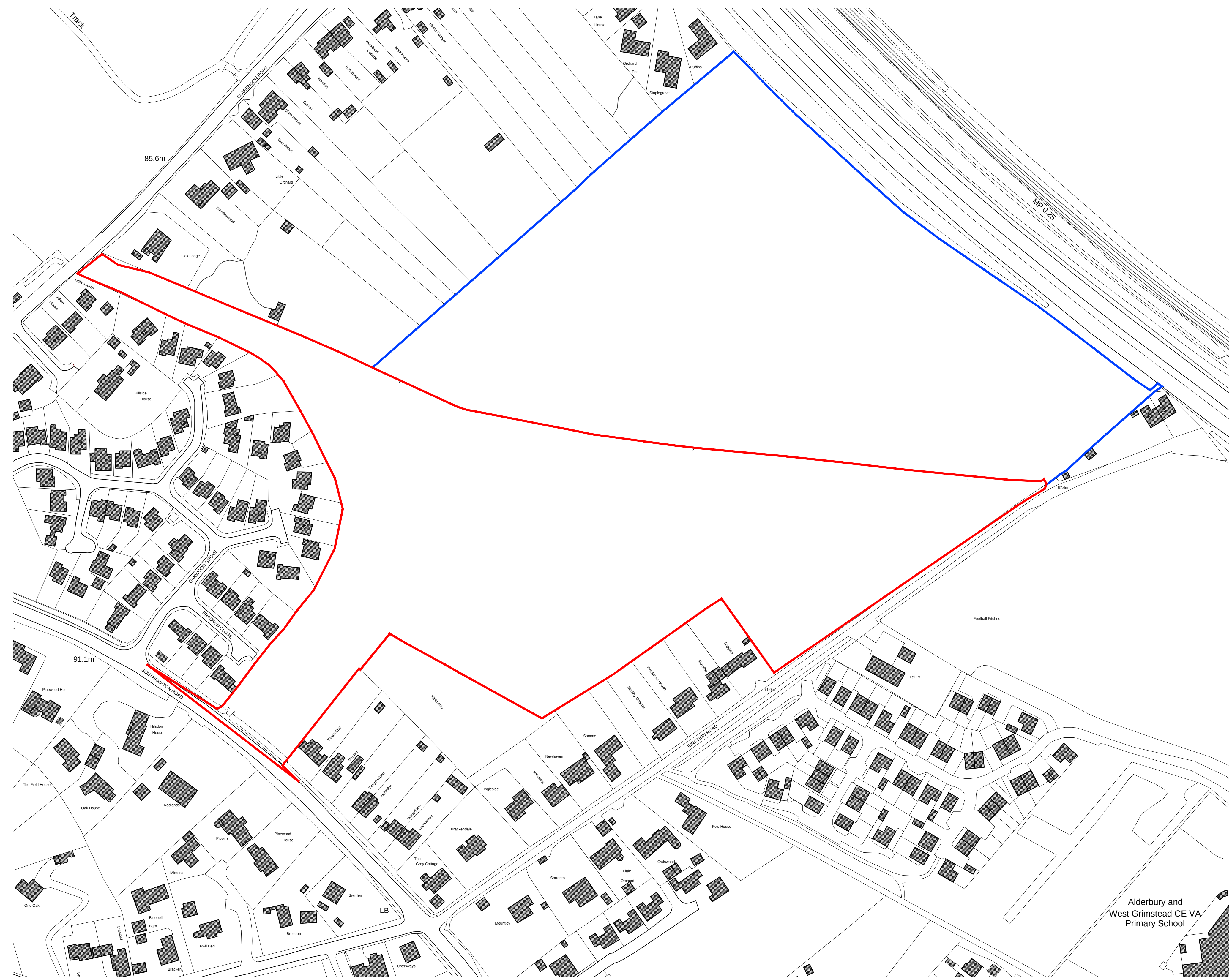
Drawing
Site Location Plan

Project	originator	volume	level	type	role	number	revision
P1365-RHP-ZZ-00-DR-A-1015	P5						
Scale(s) @ A1	RHP Project	Drawn	Chkd				
1:1250	P1365	SR	SH				

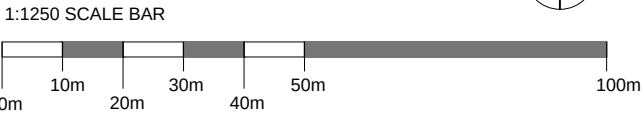
Status
Planning

Suitability
S0

File location: R:\Projects\P1365-P1365 Southampton Road Alderbury\BMA01-WP\Sheet_Plan\1000-1999 Site\deg\P1365-RHP-ZZ-00-DR-A-1015-03 Site Location Plan.dwg Last Plotted: 23/9/2024 12:19PM



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Notes
To be read in conjunction with all other reports and drawings that form part of this submission.

ACOUSTIC LEGEND:
2.1m solid barrier
2.4m solid barrier
For further information
refer to: Assessment
Acoustic Noise Impact
Assessment Report
22065-RP-1-06

Proposed Dwellings	
180P Flats	2
2B4P Detached Bungalow	2
2B4P Dwelling Houses	4
3B5P Dwelling Houses	18
4B6P Dwelling Houses	2
Total Units	28

P6 22.04.2025	Planning Issue - Layout amended	SL	BH
P5 12.03.2025	Unit 39-40 house type amended to 2no. 180P units, site entrance amended in accordance with Mayer Brown Proposed Priority Access Junction Drawing 010, acoustic barriers added in accordance with Assessment Acoustics Technical Note 22065-TH-1-R2	SL	BH
P4 24.09.2024	Planning Issue	SL	BH
P3 23.09.2024	Planning Issue	SL	BH
P2 16.08.2024	Planning Issue	SL	BR
P1 08.01.2024	First Issue	SL	BR
Rev Date - notes		Drawn	Checked

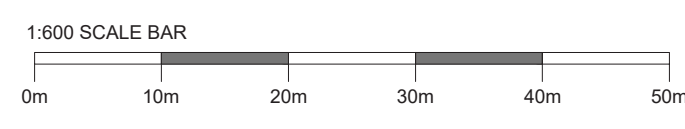
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Project
Land off Southampton Road
Alderbury

Drawing
Indicative Proposed Site Plan

Project	original	volume	level	type	size	number	revision
P1365-RHP-ZZ-00-DR-A-1200 P6	SL	BH	BR	BR	BR	BR	BR
Scale(s) @ A0	1:500	1:500	1:500	1:500	1:500	1:500	1:500

Planning



APPENDIX 222/NNAMS/A2

Nutrient calculations

River Avon calculator for wastewater

Water infrastructure information	
Description of required information	Data entry column - user inputs required
Date of first occupancy (dd/mm/yyyy):	
Average occupancy rate (people/dwelling or people/unit):	2.40
Water usage (litres/person/day):	120
Development proposal (dwellings/units):	28
Wastewater treatment works:	Salisbury (Petersfinger)
Current wastewater treatment works P permit (mg TP/litre):	1.00
Not applicable	Not applicable
Post 2030 WwTW P permit (mg TP/litre):	0.25
Final calculation of nutrient load from wastewater	
Description of values generated	Values generated
Post-2030 wastewater nutrient Loading	
Additional population (people):	67.20
Wastewater by development (litres/day):	8064.00
Annual wastewater TP load (kg TP/yr):	0.66
Pre-2030 wastewater nutrient loading	
Annual wastewater TP load (kg TP/yr):	2.65

Total nutrient budget calculations	
Description of values generated	Values generated
Wastewater TP load (kg TP/year):	0.66
Net land use TP change (kg TP/year):	0.00
TP budget:	0.66
TP budget + 20% buffer:	0.79
Annual nutrient budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	0.79
Pre-2030 nutrient budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	3.18

Solent Marine Sites calculator for land use change

Current land use information			
Description of required information		Data entry column - user inputs required	
Operational catchment:		Lower Test and Southampton Streams	
Soil drainage type:		Naturally wet	
Annual average rainfall (mm):		850.1 - 900	
Within nitrate vulnerable zone (NVZ):		Yes	
Current land uses			
Existing land use type(s) - user inputs required		Area (ha) - user inputs required	Annual nitrogen nutrient export (kg TN/yr)
Lowland		3.90	40.71
Woodland		1.00	3.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
Totals:		4.90	43.71

Future land uses		
New land use type(s) - user inputs required	Area (ha) - user inputs required	Annual nitrogen nutrient export (kg TN/yr)
Residential urban land	1.65	26.91
Greenspace	2.25	6.75
Woodland	1.00	3.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
Totals:	4.90	36.66

Total nutrient budget calculations	
Description of values generated	Values generated
Wastewater TN load (kg TN/year):	0.00
Net land use TN change (kg TN/year):	-7.05
TN budget:	-7.05
TN budget + 20% buffer:	-7.05
Annual nutrient budget	
The total annual nitrogen load to mitigate is (kg TN/yr):	0.00

