



David Wilson

West Berkshire District Council
Issued via email:
planningpolicy@westberks.gov.uk

1st Floor West
Clearwater Court
Vastern Road
Reading
RG1 8DB

28 February 2023

WEST BERKSHIRE LOCAL PLAN REVIEW 2022-2039 Proposed Submission January 2023

Dear Sir/Madam,

Thank you for allowing Thames Water Utilities Ltd (Thames Water) to comment upon the above.

As you will be aware, Thames Water are the statutory water supply and sewerage undertaker for the Borough and are hence a “**specific consultation body**” in accordance with the Town & Country Planning (Local Planning) Regulations 2012.

Please find enclosed our completed forms for the following policies/sections:

- Policy DM7: Water Resources and Waste Water;
- Policy SP6: Flood Risk & Sustainable Drainage;
- Non-Strategic Site Allocations: Our Place Based Approach Sites Allocated for Residential Development: Newbury & Thatcham Area – Omission Site at land east of Hill Road, Speen including location plan and illustrative site layout plan;
- Non-Strategic Site Allocations: Our Place Based Approach Sites Allocated for Residential Development: Newbury & Thatcham Area – Omission Site at land west of Hill Road, Speen including location plan;
- Sites Allocated for Residential Development: Eastern Area Policy RSA11 Former Theale Sewage Treatment Works, Theale. As part of this response I also attach my letter dated 28/11/2022 and accompanying enclosures; and
- Site Allocations.

If helpful, we would welcome the opportunity to meet with the Council in due course to discuss the detail of the above comments. Please contact me on the above telephone number and email address.

Yours faithfully,



David Wilson
Thames Water Property Town Planner


West Berkshire Local Plan Review 2022-2039
Proposed Submission Representation Form
Ref:
(For official use only)

Please complete online or return this form to:	Online: http://consult.westberks.gov.uk/kse
	By email: planningpolicy@westberks.gov.uk
	By post: Planning Policy, Development and Regulation, Council Offices, Market Street, Newbury, RG14 5LD
Return by:	4:30pm on Friday 3 March 2023

This form has two parts:

- Part A - Your details: need only be completed once
- Part B - Your representation(s): please fill in a separate sheet for each representation you wish to make

PART A: Your Details

Please note the following:

- *We cannot register your representation without your details.*
- *Representations cannot be kept confidential and will be available for public scrutiny, however, your contact details will not be published.*
- *All information will be sent for examination by an independent inspector*
- *All personal data will be handled in line with the Council's Privacy Policy on the Development Plan. You can view the Council's privacy notices at <http://info.westberks.gov.uk/privacynotices>*

	Your details	Agent's details (if applicable)
Title:	Mr	
First Name:*	David	
Last Name:*	Wilson	
Job title (where relevant):	Town Planner	
Organisation (where relevant):	Thames Water Property	
Address* <i>Please include postcode:</i>	1 st Floor West, Clearwater Court Vastern Road Reading RG1 8DB	
Email address:*	[REDACTED]	
Telephone number:	[REDACTED]	

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**Mandatory field*

Part B – Your Representation

Please use a separate sheet for each representation

The accompanying guidance note available at: <https://www.westberks.gov.uk/lpr-proposed-submission-consultation> will assist you in making representations.

*Your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change(s) as there will **not normally** be a subsequent opportunity to make further representations, **further submissions will ONLY be at the request of the Inspector, based on the matters and issues they identify for examination.***

Your name or organisation (and client if you are an agent):	Thames Water
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Please indicate which part of the Local Plan Review this representation relates to:

Section/paragraph:	
Policy:	Policy DM7: Water Resources and Waste Water
Appendix:	
Policies Map:	
Other:	

1. Legally Compliant

Please see the guidance notes for an explanation of what 'legally compliant' means.

Do you consider the Local Plan Review is legally compliant?

Yes

No

Please give reasons for your answer:

2. Soundness

Please see the guidance notes for an explanation of what 'soundness' means.

Do you consider the Local Plan Review is sound?

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF)

Please tick all that apply:

NPPF criteria	Yes	No
Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development		
Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence		
Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground		
Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF		x

Please give reasons for your answer:

We generally support Policy DM7 as it is in line with our previous consultation responses. However, we think it should be improved in line with the following detailed comments:

Water Efficiency

Policy DM7 in relation to water efficiency is supported in principle, but needs to be strengthened to ensure the water efficiency standard of 110 litres per person per day is met.

The Environment Agency has designated the Thames Water region to be an area of "serious water stress" which reflects the extent to which available water resources are used. Future pressures on water resources will continue to increase and key factors are population growth and climate change. On average our customers each use 30% more water than they did 30 years ago. Therefore water efficiency measures employed in new development are an important tool to help us sustain water supplies for the long term.

Water conservation and climate change is a vitally important issue to the water industry. Not only is it expected to have an impact on the availability of raw water for treatment but also the demand from customers for potable (drinking) water. Therefore, Thames Water support the mains water consumption target of 110 litres per head per day (105 litres per head per day plus an allowance of 5 litres per head per day for gardens) as set out in the NPPG (Paragraph: 014 Reference ID: 56-014-20150327) and support the inclusion of this requirement in Policy.

Thames Water promote water efficiency and have a number of water efficiency campaigns which aim to encourage their customers to save water at local levels. Further details are available on our website via the following link:
<https://www.thameswater.co.uk/Be-water-smart>

It is our understanding that the water efficiency standards of 110 litres per person per day is

only applied through the building regulations where there is a planning condition requiring this standard (as set out at paragraph 2.8 of Part G2 of the Building Regulations). As the Thames Water area is defined as water stressed it is considered that such a condition should be attached as standard to all planning approvals for new residential development in order to help ensure that the standard is effectively delivered through the building regulations. We therefore support Policy DM7 in referring the use of planning conditions. However, clarification should be provided in relation to the preferred 'Fittings Approach'.

Within Part G of Building Regulations, the 110 litres/person/day level can be achieved through either the 'Calculation Method' or the 'Fittings Approach' (Table 2.2). The Fittings Approach provides clear flow-rate and volume performance metrics for each water using device / fitting in new dwellings. Thames Water considers the Fittings Approach, as outlined in Table 2.2 of Part G, increases the confidence that water efficient devices will be installed in the new dwelling. Insight from our smart water metering programme shows that household built to the 110 litres/person/day level using the Calculation Method, did not achieve the intended water performance levels.

We therefore consider that text in the policy should be amended as set out below.

Water and Wastewater Infrastructure

We support the policy DM7 in principle.

Water and wastewater infrastructure is essential to any development. Failure to ensure that any required upgrades to the infrastructure network are delivered alongside development could result in adverse impacts in the form of internal and external sewer flooding and pollution of land and water courses and/or low water pressure.

A key sustainability objective for the preparation of Local Plans and Neighbourhood Plans should be for new development to be co-ordinated with the infrastructure it demands and to take into account the capacity of existing infrastructure. Paragraph 20 of the revised National Planning Policy Framework (NPPF), 2021, states: "*Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for... infrastructure for waste management, water supply, wastewater...*"

Paragraph 11 states: "*Plans and decisions should apply a presumption in favour of sustainable*

development. For plan-making this means that:

a) All plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects"

Paragraph 28 relates to non-strategic policies and states: "*Non-strategic policies should be used by local planning authorities and communities to set out more detailed policies for specific areas, neighbourhoods or types of development. This can include allocating sites, the provision of infrastructure...*"

Paragraph 26 of the revised NPPF goes on to state: "*Effective and on-going joint working between strategic policy-making authorities and relevant bodies is integral to the production of a positively prepared and justified strategy. In particular, joint working should help to determine where additional infrastructure is necessary...."*

The web based National Planning Practice Guidance (NPPG) includes a section on ‘water supply, wastewater and water quality’ and sets out that Local Plans should be the focus for ensuring that investment plans of water and sewerage/wastewater companies align with development needs. The introduction to this section also sets out that “*Adequate water and wastewater infrastructure is needed to support sustainable development*” (Paragraph: 001, Reference ID: 34-001-20140306).

It is important to consider the net increase in water and wastewater demand to serve the development and also any impact that developments may have off site, further down the network. The new Local Plan should therefore seek to ensure that there is adequate water and wastewater infrastructure to serve all new developments. Thames Water will work with developers and local authorities to ensure that any necessary infrastructure reinforcement is delivered ahead of the occupation of development. Where there are infrastructure constraints, it is important not to under estimate the time required to deliver necessary infrastructure. For example: local network upgrades take around 18 months and Sewage Treatment & Water Treatment Works upgrades can take 3-5 years.

Supporting paragraph 10.70 indicates that developers will be expected to fund network upgrades – this requires clarification. The provision of water treatment (both wastewater treatment and water supply) is met by Thames Water’s asset plans and from the 1st April 2018 network improvements will be from infrastructure charges per new dwelling.

As from 1st April 2018, the way Thames Water and all other water and wastewater companies charge for new connections has changed. The changes mean that more of Thames Water’s charges will be fixed and published, rather than provided on application, enabling you to estimate your costs without needing to contact us. The services affected include new water connections, lateral drain connections, water mains and sewers (requisitions), traffic management costs, income offsetting and infrastructure charges. Paragraph 10.70 should therefore be amended accordingly.

Information on how off site network reinforcement is funded can be found here <https://developers.thameswater.co.uk/New-connection-charging>

Thames Water therefore recommends that developers engage with them at the earliest opportunity (in line with paragraph 26 of the revised NPPF) to establish the following:

- The developments demand for water supply and network infrastructure both on and off site;
- The developments demand for Sewage/Wastewater Treatment and network infrastructure both on and off site and can it be met; and
- The surface water drainage requirements and flood risk of the development both on and off site and can it be met.

Thames Water offer a free Pre-Planning service which confirms if capacity exists to serve the development or if upgrades are required for potable water, waste water and surface water requirements. Details on Thames Water’s free pre planning service are available at: <https://www.thameswater.co.uk/developers/larger-scale-developments/planning-your-development/water-and-wastewater-capacity>

In light of the above comments and Government guidance we consider that the New Local Plan should include a specific policy on the key issue of the provision of water and sewerage/wastewater infrastructure to service development. This is necessary because it will not be possible to identify all of the water/sewerage infrastructure required over the plan

period due to the way water companies are regulated and plan in 5 year periods (Asset Management Plans or AMPs). We therefore recommend Policy DM7 is amended as set out below.

Local Authorities should also consider both the requirements of the utilities for land to enable them to meet the demands that will be placed upon them. This is necessary because it will not be possible to identify all the water and wastewater/sewerage infrastructure required over the plan period due to the way water companies are regulated and plan in 5 year periods (AMPs). Thames Water are currently in AMP7 which covers the period from 1st April 2020 to 31st March 2025. AMP8 will cover the period from 1st April 2025 to 31st March 2030. The Price Review, whereby the water companies' AMP8 Business Plan will be agreed with Ofwat during 2024.

Hence, a further text should be added to Policy DM7 as set out below.

Development within the vicinity of Sewage Treatment Works (STW)

The new Local Plan should assess impact of any development within the vicinity of existing sewage treatment works (STW) in line with the Agent of Change principle set out in the NPPF.

Where development is being proposed within 800m of a sewage treatment works, the developer or local authority should liaise with Thames Water to consider whether an odour impact assessment is required as part of the promotion of the site and potential planning application submission. The odour impact assessment would determine whether the proposed development would result in adverse amenity impact for new occupiers, as those new occupiers would be located in closer proximity to a sewage treatment works.

Paragraph 174 of the NPPF, February 2021, sets out that: "Planning policies and decisions should contribute to and enhance the natural and local environment by:e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans..."

Paragraph 185 goes on to state: "Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development..."

The online PPG states at Paragraph: 005 Reference ID: 34-005-20140306 that: "Plan-making may need to consider:whether new development is appropriate near to sites used (or proposed) for water and wastewater infrastructure (for example, odour may be a concern).."

The odour impact study would establish whether new resident's amenity will be adversely affected by the sewage works and it would set the evidence to establish an appropriate amenity buffer.

Hence, Policy DM7 should include reference in policy that development within the vicinity of existing sewage treatment works should be assessed in relation to impact on amenity in line with the Agent of Change as set out below.

3. Complies with the Duty to Co-operate

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

Do you consider the Local Plan Review complies with the Duty to Co-operate?

Yes

No

Please give reasons for your answer:

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the LPR legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Policy DM7

Water Resources and Waste Water

Development will be required to minimise water use and aim to be water-neutral as far as practicable by incorporating appropriate water efficiency and water recycling measures. A collaborative approach is encouraged between the Council, statutory agencies, water companies and site promoters/developers to promote innovation in water efficiency and re-use within and outside of dwellings and commercial buildings, including demand reduction to improve longer term water resilience. Liaison with other local authorities is expected where relevant.

*Development will be required to be designed to be water efficient and reduce water consumption. Refurbishments and other non-domestic development will be expected to meet BREEAM water-efficiency credits. All new residential developments (including replacement dwellings) will meet the Building Regulation optional higher water efficiency standard of 110 litres per person per day, **using the 'Fittings Approach' in table 2.2 as set out in** Building Regulations part G2. Planning conditions will be applied to new residential development to ensure that the water efficiency standards are met.*

New or replacement non-residential development of 1000sqm gross floor area or more will meet BREEAM 'excellent' standards for water consumption (with at least a 40% improvement in water consumption against the baseline performance of the building), unless demonstrated not to be practicable.

Both of the above apply unless it can be demonstrated that it would not be feasible on technical or viability grounds. Where subsequent national standards exceed those set out above, the new national standards will be applied.

Development proposals should satisfactorily demonstrate the following criteria:

a. There is adequate water supply and waste water treatment infrastructure capacity resources are available, or can be provided, to support the development proposed at the

- time of occupation, and will be safeguarded from the potential impacts of development;
- b. Efficient use of water is made through recycling measures such as rainwater harvesting and grey water recycling;
- c. Foul water treatment and disposal of adequate design and capacity already exists or can be provided in time to serve the development ensuring that the environment and amenity of local residents are not adversely affected. **Developers are encouraged to contact the water/waste water company as early as possible to discuss their development proposals and intended delivery programme to assist with identifying any potential water and wastewater network reinforcement requirements. Where there is a capacity constraint the Local Planning Authority will, where appropriate, apply phasing conditions to any approval to ensure that any necessary infrastructure upgrades are delivered ahead of the occupation of the relevant phase of development;**
- d. Foul water flows produced by the development will be drained separately from surface water run off to a suitable point of connection to a public foul sewer or, for non mains drainage proposals, where there would be no detrimental impact on the environment;
- e. Suitable land and access is safeguarded for the maintenance and treatment of water resources and wastewater, flood defences and drainage infrastructure; and
- f. It will not adversely impact the water quality, ecological value or drainage function of water bodies in the District, including any adverse impacts on Source Protection Zones (SPZ).

Development which would overload available facilities and create or exacerbate problems of flooding or pollution will not be permitted. Where upgrades to water supply and waste water are required consideration should be given to phasing the development so that the necessary infrastructure is in place.

The West Berkshire Phase 2 Water Cycle Study (2021) identifies that land adjacent to the Hungerford Waste Water Treatment Works (as shown on the plan below), will need to be safeguarded to enable upgrades to the Waste Water Treatment Works to serve future growth.

The development or expansion of other water supply or waste water facilities will normally be permitted, either where needed to serve existing or proposed development in accordance with the provisions of the Development Plan, or in the interests of long term water supply and waste water management, provided that the need for such facilities outweighs any adverse land use or environmental impact that any such adverse impact is minimised.

When considering sensitive development, such as residential uses, close to a Sewage Treatment Works, a technical assessment should be undertaken by the developer or by the Council. The technical assessment should be undertaken in consultation with Thames Water. The technical assessment should confirm that either: (a) there is no adverse amenity impact on future occupiers of the proposed development or; (b) the development can be conditioned and mitigated to ensure that any potential for adverse amenity impact is avoided.”

Supporting paragraph 10.70 indicates that developers will be expected to fund network upgrades – this requires clarification. The provision of water treatment (both wastewater treatment and water supply) is met by Thames Water’s asset plans and from the 1st April 2018 network improvements will be from infrastructure charges per new dwelling.

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)?

Yes

No

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply:

Tick

The submission of the Local Plan Review for Independent Examination	x
The publication of the report of the Inspector appointed to carry out the examination	x
The adoption of the Local Plan Review	x

Please ensure that we have either an up to date email address or postal address at which we can contact you. You can amend your contact details by logging onto your account on the Local Plan Consultation Portal or by contacting the Planning Policy team.

Signature	David Wilson	Date	28/02/2023
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Your completed representations must be received by the Council by 4:30pm on Friday 3 March 2023.


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	Your details	Agent's details (if applicable)
Title:	Mr	
First Name:*	David	
Last Name:*	Wilson	
Job title (where relevant):	Town Planner	
Organisation (where relevant):	Thames Water Property	
Address* <i>Please include postcode:</i>	1 st Floor West, Clearwater Court Vastern Road Reading RG1 8DB	
Email address:*	[REDACTED]	
Telephone number:	[REDACTED]	

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Part B – Your Representation

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The accompanying guidance note available at: <https://www.westberks.gov.uk/lpr-proposed-submission-consultation> will assist you in making representations.

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Your name or organisation (and client if you are an agent):	Thames Water
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Please indicate which part of the Local Plan Review this representation relates to:

Section/paragraph:	
Policy:	Policy SP6: Flood Risk & Sustainable Drainage
Appendix:	
Policies Map:	
Other:	

1. Legally Compliant

Please see the guidance notes for an explanation of what 'legally compliant' means.

Do you consider the Local Plan Review is legally compliant?

Yes

No

Please give reasons for your answer:

2. Soundness

Please see the guidance notes for an explanation of what 'soundness' means.

Do you consider the Local Plan Review is sound?

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF)

Please tick all that apply:

NPPF criteria	Yes	No
Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development		
Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence		
Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground		
Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF		x

Please give reasons for your answer:

In relation to flood risk, the National Planning Practice Guidance (NPPG) states that a sequential approach should be used by local planning authorities in areas known to be at risk from forms of flooding other than from river and sea, which includes "Flooding from Sewers". Flooding from sewers should therefore also be referenced in Policy SP6 for clarity.

When reviewing development and flood risk it is important to recognise that water and/or sewerage infrastructure may be required to be developed in flood risk areas. By their very nature water and sewage treatment works are located close or adjacent to rivers (to abstract water for treatment and supply or to discharge treated effluent). It is likely that these existing works will need to be upgraded or extended to provide the increase in treatment capacity required to service new development. Flood risk sustainability objectives should therefore accept that water and sewerage infrastructure development may be necessary in flood risk areas.

Flood risk policies should also make reference to 'sewer flooding' and an acceptance that flooding can occur away from the flood plain as a result of development where off site sewerage infrastructure and capacity is not in place ahead of development.

With regard to surface water drainage it is the responsibility of the developer to make proper provision for drainage to ground, watercourses or surface water sewer in accordance with the drainage hierarchy. It is important to reduce the quantity of surface water entering the sewerage system in order to maximize the capacity for foul sewage to reduce the risk of sewer flooding.

Limiting the opportunity for surface water entering the foul and combined sewer networks is of critical importance to Thames Water. Thames Water have advocated an approach to SuDS that limits as far as possible the volume of and rate at which surface water enters the public sewer system. By doing this, SuDS have the potential to play an important role in helping to ensure the sewerage network has the capacity to cater for population growth and the effects of climate change.

SuDS not only help to mitigate flooding, they can also help to: improve water quality; provide opportunities for water efficiency; provide enhanced landscape and visual features; support wildlife; and provide amenity and recreational benefits.

3. Complies with the Duty to Co-operate

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

Do you consider the Local Plan Review complies with the Duty to Co-operate?

Yes

No

Please give reasons for your answer:

4. Proposed Changes

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With regard to surface water drainage, Thames Water request that the following paragraph should be included in Policy wording or supporting text: **"It is the responsibility of a developer to make proper provision for surface water drainage to ground, water courses or surface water sewer. It must not be allowed to drain to the foul sewer, as this is the major contributor to sewer flooding."**

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)?

Yes

No

x

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

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	Your details	Agent's details (if applicable)
Title:	Mr	
First Name:*	David	
Last Name:*	Wilson	
Job title (where relevant):	Town Planner	
Organisation (where relevant):	Thames Water Property	
Address* <i>Please include postcode:</i>	1 st Floor West, Clearwater Court Vastern Road Reading RG1 8DB	
Email address:*	[REDACTED]	
Telephone number:	[REDACTED]	

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Please indicate which part of the Local Plan Review this representation relates to:

Section/paragraph:	
Policy:	
Appendix:	
Policies Map:	Omission Site - Land east of Hill Road, Speen (SHLAA site reference NEW106)
Other:	

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Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF		x

Please give reasons for your answer:

Thames Water owns land on the east side of Hill Road, Speen that is identified on the enclosed plan and which it is considered should be allocated for residential development.

The site is an enclosed area of grassland that has been historically retained by Thames Water for operational purposes in association with the adjacent water treatment works. It is approximately 1.2 hectares in size and is located on the south eastern edge of Speen Village, approximately 0.6 miles to the west of Newbury Town Centre. The land slopes from north to south, from approximately 95m AOD to 75m AOD. Access is presently gained from Hill Road, towards the southern end of the site.

Pedestrian and cycle access to the site from the town centre can also be achieved via North Croft Lane, making the site an approximate 10 minute walk from the town centre. It is consequently located in a highly sustainable location. Thames Water therefore supports the Council's previous SHLAA assessment that it is suitable for residential development, being located in a predominantly residential area with good access to the services and facilities located in Newbury Town Centre, as well as the open space and leisure facilities at Goldwell Park and Northcroft Leisure Centre.

The site has previously been promoted for development through the Council's Housing Site Allocations Development Plan Document (HSADPD). The site was proposed as an allocation in the HSADPD, but then removed due to concerns that the Council had regarding achieving access to the site.

Thames Water submitted representations to West Berkshire Council in response to consultation on the HSADPD in December 2015, that provided evidence to demonstrate that access to the site is not a barrier to its allocation for housing. The consultation response provided confirmation of the site assessment work undertaken on behalf of Thames Water, in relation to the site, to demonstrate that there are no technical barriers to the delivery of 33 new homes and public open space at the site.

Notwithstanding that the Council did not reinstate the site as an allocation in the HSADPD, Thames Water held a public exhibition at Majendie Hall, St Marys Church, Church Lane, Speen on Friday 8th and Saturday 9th July 2016. The consultation event followed consultation with Speen Parish Council and was based on a development of 22 new homes within a developable area of 0.85ha alongside

some 0.35ha of open space. The illustrative masterplan on which the public consultation was based is also enclosed with this representation (drawing SK05E), which shows how the 22 new homes could be accommodated within the site at a density of 25 dwellings per hectare; this low density being in keeping with the wider area.

Site Access

The principle reason that the Council decided to omit the allocation of the site in the HSADPD was over concerns regarding access. Thames Water instructed Transport Planning Associates (TPA) to confirm that safe access into the site can be achieved via Hill Road and its junction with Speen Lane.

Enclosed with this submission are drawings PL04, PL07 and PL08 which illustrate TPA's designs for improvements to Hill Road, creation of a new site access and the junction with Speen Lane. The result is an acceptable access to the site which is capable of facilitating the bringing forward of the site for residential development.

Drawing PL04 shows that the lane would be widened to 4.8m with a 1.8m footway on the eastern side. The newly created carriage way and footway will continue on into the site itself (drawing PL08). Drawing PL07 illustrates how traffic calming measures could be introduced along Speen Lane reducing the speed limit to 20 mph.

For the reasons set out above, it is concluded that adequate access can be achieved to facilitate the development of the site.

Further Technical Work

Further technical work has been undertaken, including the assessment of landscape and visual impacts, flood risk, an ecological appraisal, a ground conditions and hydrological risk assessment, and archaeological appraisal. This work has not identified any constraints that would prevent the development of the site in a manner proposed.

3. Complies with the Duty to Co-operate

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

Do you consider the Local Plan Review complies with the Duty to Co-operate?

Yes

No

Please give reasons for your answer:

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the LPR legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

For the above reasons we consider the site suitable and deliverable for a development of approximately 22 dwellings as illustrated on the enclosed drawing SK05E and should be allocated as such.

Given that large sites at Newbury and Thatcham that were allocated in the Core Strategy and HSADPD (including the 2,000 home allocation at Sandlesford Park) have been delayed in coming forward it is important therefore that this shortfall is addressed. The allocation of the sustainably located site at Speen would help address this shortfall in line with the spatial strategy and should be allocated accordingly.

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)?

Yes

No

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

To test the council's argument for not allocating the sustainably located site

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply:

Tick

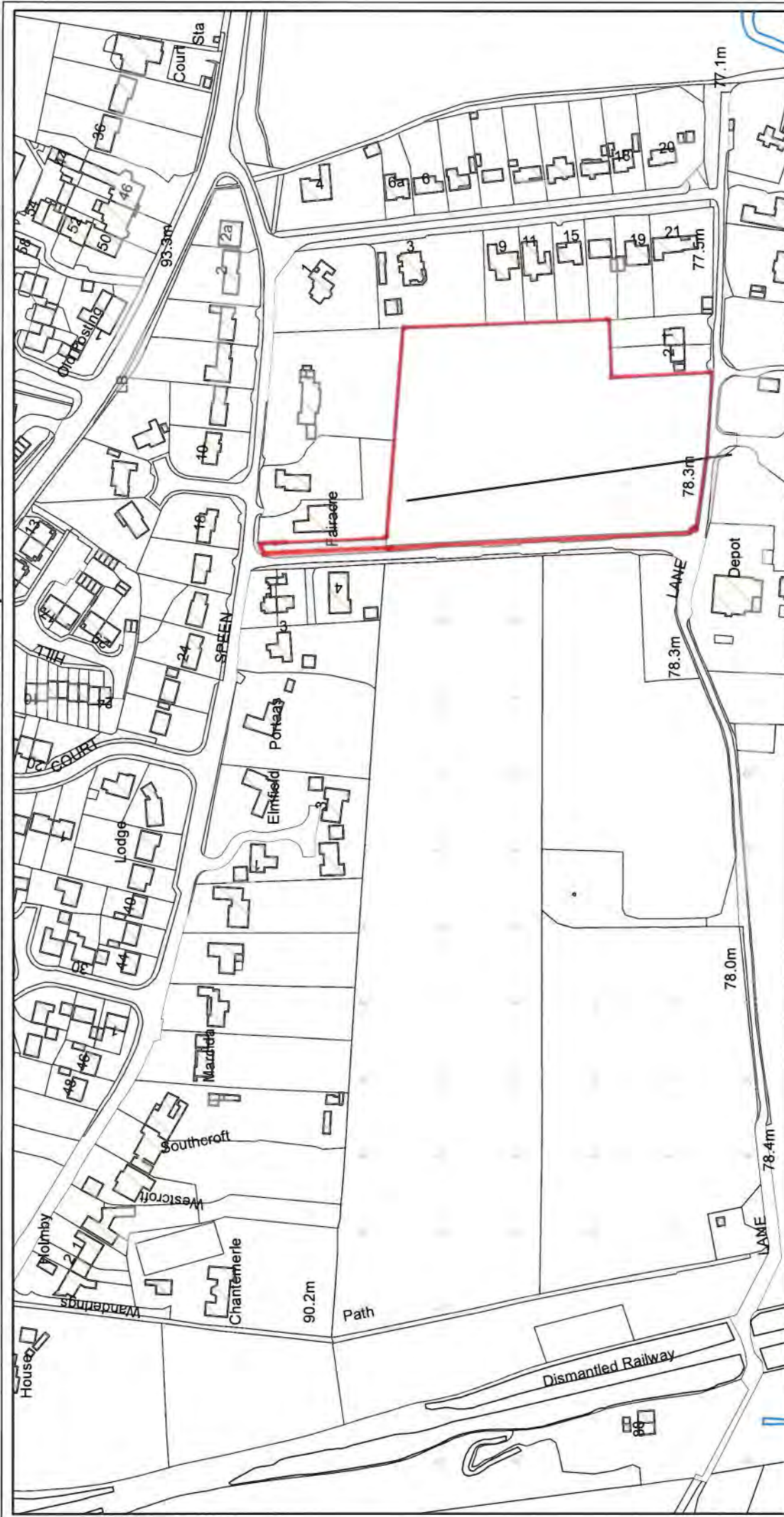
The submission of the Local Plan Review for Independent Examination	<input checked="" type="checkbox"/>
The publication of the report of the Inspector appointed to carry out the examination	<input checked="" type="checkbox"/>
The adoption of the Local Plan Review	<input checked="" type="checkbox"/>

Please ensure that we have either an up to date email address or postal address at which we can contact you. You can amend your contact details by logging onto your account on the Local Plan Consultation Portal or by contacting the Planning Policy team.

Signature	David Wilson	Date	28/02/2023
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Your completed representations must be received by the Council by 4:30pm on Friday 3 March 2023.

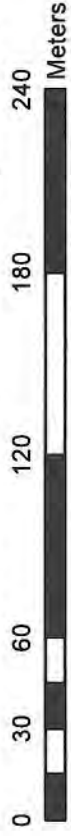
Thames Water Land at Speen



Printed By: dlassey
 Print Date: 30/03/2017
 Map Centre On: 446155, 167620
 Centre Tile No.: SU4667NW

Comments:

Please enter comments here:



Current Scale : 1:2,500



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The position of any boundary or apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed.

Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified on site before any works are undertaken.

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- KEY**
-  Site boundary
 -  Housing
 -  Road
 -  Shared surface
 -  Existing trees
 -  Trees
 -  Shrubs
 -  Park path
 -  Play area
 -  Onsite attenuation
 -  Private drives
 -  Parking

SCHEDULE

Open space 0.35 Ha
 Housing 0.85 Ha
Site area 1.2 Ha

22 Dwellings total (approx 25 dph)
 4 x 2 bed house
 10 x 3 bed house
 8 x 4 bed house

Land at Moor Lane Depot, Newbury
 on behalf of Thames Water

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\\Oxford03\urban design\URBAN DESIGN\UD Projects\Thames Water\Speen\Graphics\G 140528 DH DSP newbury.indd. 21/10/16.



drawing no. SK05
 rev E
 scale NTS
 drawn by SW
 checked by SW

drawing Illustrative Layout
 job no. RGPL352123
 date 11 October 2016



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- KEY**
-  Site boundary
 -  Housing
 -  Road
 -  Shared surface
 -  Existing trees
 -  Trees
 -  Shrubs
 -  Park path
 -  Play area
 -  Onsite attenuation
 -  Private drives
 -  Parking

SCHEDULE

Open space 0.35 Ha
 Housing 0.85 Ha
Site area 1.2 Ha

22 Dwellings total (approx 25 dph)
 4 x 2 bed house
 10 x 3 bed house
 8 x 4 bed house

Land at Moor Lane Depot, Newbury
 on behalf of Thames Water

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drawing no. SK05
 rev E
 scale NTS
 drawn by SW
 checked by SW

drawing Illustrative Layout
 job no. RGPL352123
 date 11 October 2016

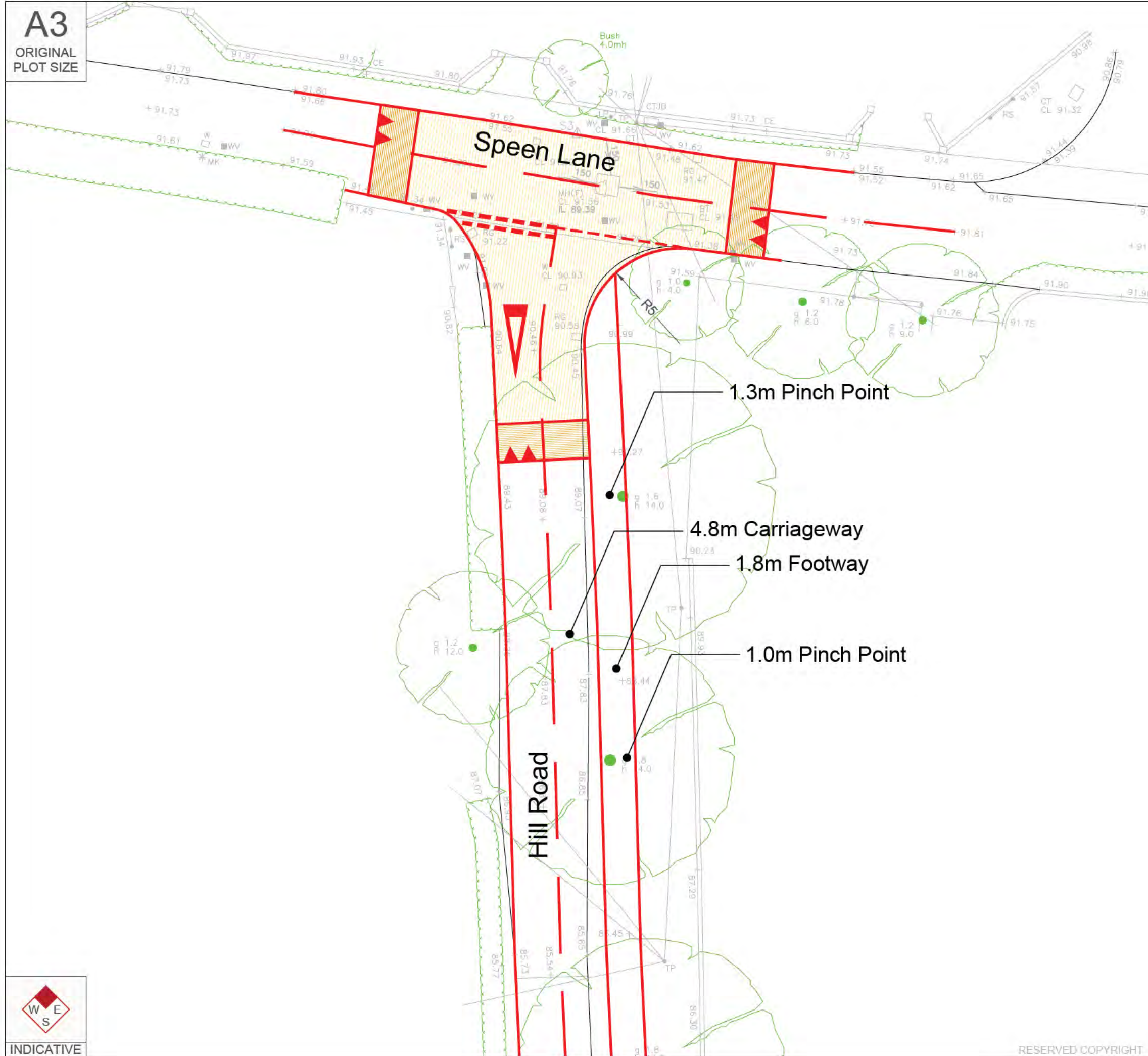


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A3

ORIGINAL PLOT SIZE

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KEY

- Existing Layout (Based on topographical survey, by MJ REES AND COMPANY LTD. drawing no.8451)
- Proposed Layout
- Raised Junction
- Ramps

Rev	Date	Details	Drawn by	Checked by	Approved by

Bristol
Cambridge
Cardiff
London
Oxford
Wetwyn Garden City



Clarendon House
52 Cornmarket Street
Oxford
OX1 3HJ
01865 304 087
www.tpa.uk.com

CLIENT:
THAMES WATER

PROJECT:
**HILL ROAD,
SPEEN**

TITLE:
**PROPOSED HILL ROAD
LAYOUT: OPTION 1
4.8M WIDE CARRIAGEWAY**

STATUS:
FOR INFORMATION

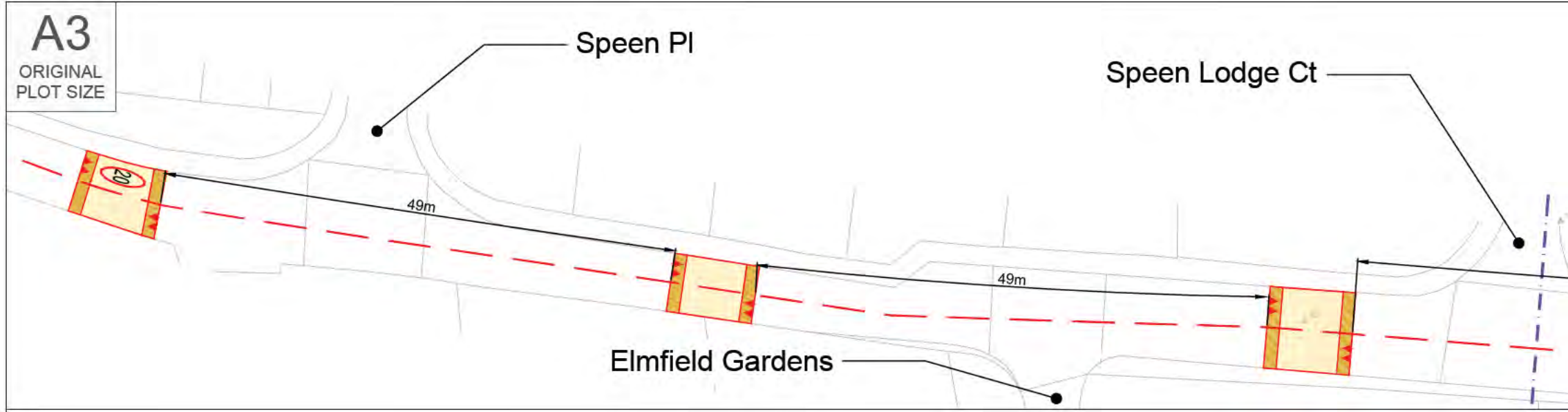
SCALE: 1:200	DATE: 29/10/15	DRAWN: GDG	CHECKED: DEF	APPROVED: DEF
JOB NO: 1404-44		DRAWING NO: PL04		REVISION: -



A3

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- KEY**
- Existing Layout (Based on OS)
 - Existing Layout (Based on topographical survey, by MJ REES AND COMPANY LTD. drawing no.8451)
 - Proposed Layout
 - - - Cutlines
 - Yellow box Raised Table
 - Orange triangle Ramps

NOTES
Exact position and distances of raised tables to be confirmed



Rev	Date	Details	Drawn by	Checked by	Approved by

Bristol
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Cardiff
London
Oxford
Welwyn Garden City



Transport Planning Associates

Clarendon House
52 Cornmarket Street
Oxford
OX1 3HJ
01865 304 087
www.tpa.uk.com

CLIENT:
THAMES WATER

PROJECT:
**HILL ROAD,
SPEEN**

TITLE:
**PROPOSED TRAFFIC
CALMING MEASURES
ALONG SPEEN LANE**

STATUS:
FOR INFORMATION

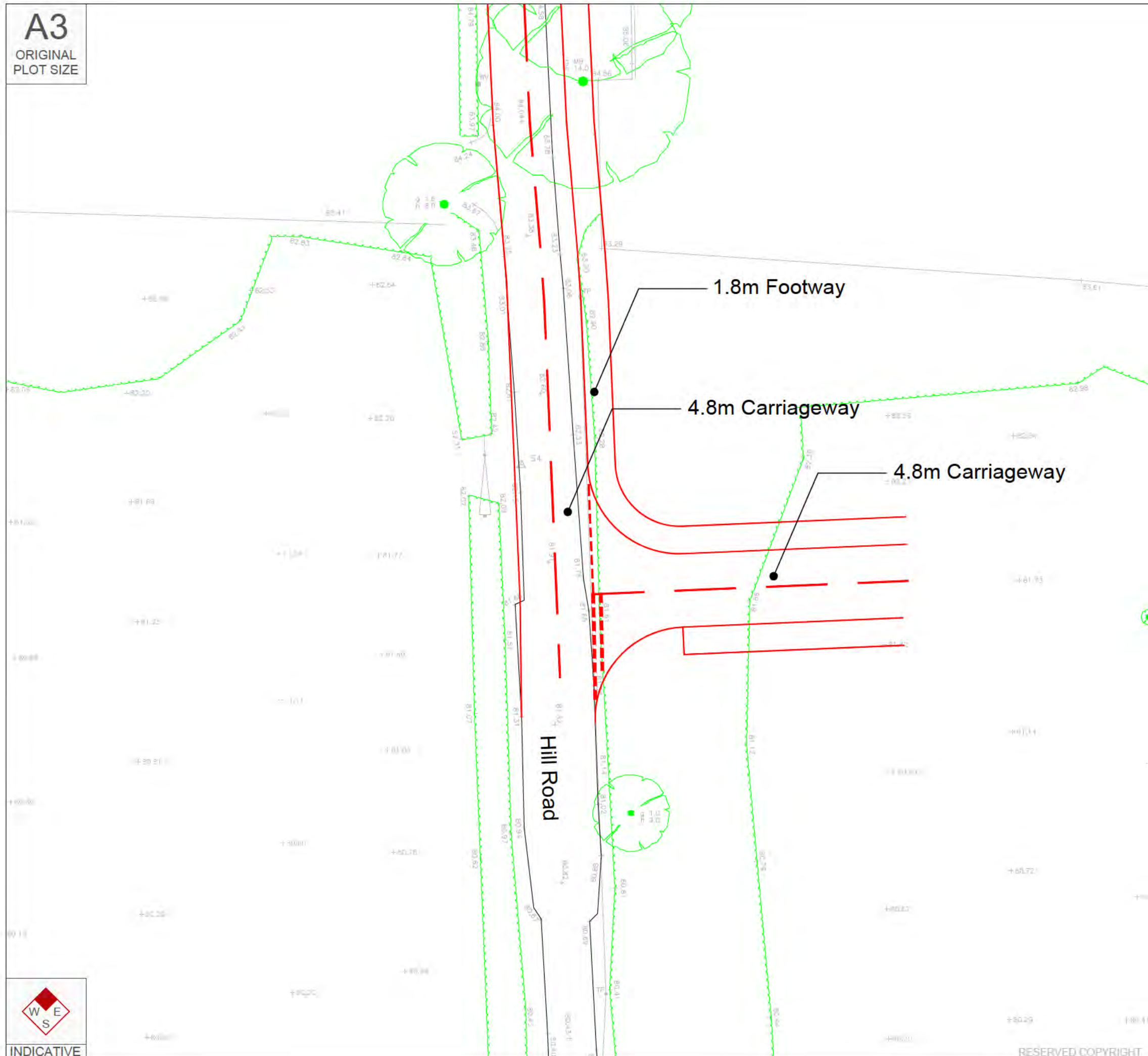
SCALE: 1:500	DATE: 05/11/15	DRAWN: GDG	CHECKED: DEF	APPROVED: DEF
JOB NO: 1404-44		DRAWING NO: PL07		REVISION: -



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KEY

— Existing Layout (Based on topographical survey, by MJ REES AND COMPANY LTD. drawing no.8451)

— Proposed Layout

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Oxford
Welwyn Garden City

Clarendon House
52 Commarket Street
Oxford
OX1 3HJ
01865 304 087
www.tpa.uk.com



CLIENT:
THAMES WATER

PROJECT:
**HILL ROAD,
SPEEN**

TITLE:
**PROPOSED ACCESS
LAYOUT**

STATUS:
FOR INFORMATION

SCALE: 1:250	DATE: 23/11/15	DRAWN: GDG	CHECKED: DEF	APPROVED: DEF
JOB NO: 1404-44		DRAWING NO: PL08		REVISION: -



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West Berkshire Local Plan Review 2022-2039
Proposed Submission Representation Form
Ref:
(For official use only)

Please complete online or return this form to:	Online: http://consult.westberks.gov.uk/kse
	By email: planningpolicy@westberks.gov.uk
	By post: Planning Policy, Development and Regulation, Council Offices, Market Street, Newbury, RG14 5LD
Return by:	4:30pm on Friday 3 March 2023

This form has two parts:

- Part A - Your details: need only be completed once
- Part B - Your representation(s): please fill in a separate sheet for each representation you wish to make

PART A: Your Details

Please note the following:

- *We cannot register your representation without your details.*
- *Representations cannot be kept confidential and will be available for public scrutiny, however, your contact details will not be published.*
- *All information will be sent for examination by an independent inspector*
- *All personal data will be handled in line with the Council's Privacy Policy on the Development Plan. You can view the Council's privacy notices at <http://info.westberks.gov.uk/privacynotices>*

	Your details	Agent's details (if applicable)
Title:	Mr	
First Name:*	David	
Last Name:*	Wilson	
Job title (where relevant):	Town Planner	
Organisation (where relevant):	Thames Water Property	
Address* <i>Please include postcode:</i>	1 st Floor West, Clearwater Court Vastern Road Reading RG1 8DB	
Email address:*	[REDACTED]	
Telephone number:	[REDACTED]	

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**Mandatory field*

Part B – Your Representation

Please use a separate sheet for each representation

The accompanying guidance note available at: <https://www.westberks.gov.uk/lpr-proposed-submission-consultation> will assist you in making representations.

*Your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change(s) as there will **not normally** be a subsequent opportunity to make further representations, **further submissions will ONLY be at the request of the Inspector, based on the matters and issues they identify for examination.***

Your name or organisation (and client if you are an agent):	Thames Water
---	--------------

Please indicate which part of the Local Plan Review this representation relates to:

Section/paragraph:	
Policy:	
Appendix:	
Policies Map:	Omission Site - Land west of Hill Road, Speen
Other:	

1. Legally Compliant

Please see the guidance notes for an explanation of what 'legally compliant' means.

Do you consider the Local Plan Review is legally compliant?

Yes

No

Please give reasons for your answer:

2. Soundness

Please see the guidance notes for an explanation of what 'soundness' means.

Do you consider the Local Plan Review is sound?

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF)

Please tick all that apply:

NPPF criteria	Yes	No
Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development		
Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence		
Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground		
Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF		x

Please give reasons for your answer:

Thames Water owns land on the west side of Hill Road, Speen that is identified on the enclosed plan and which it is considered should be allocated for residential development.

This site has not been previously promoted for development by Thames Water due to concerns regarding the protection of an operational abstraction borehole located immediately to the south of the site. However, in undertaking the work required to confirm that the land east of Hill Road can be released without harming Thames Water's operational works at Speen, it was confirmed that the northern part of Thames Water's land holding to the west of Hill Road could be released for development. A detailed risk assessment would be required once a development proposal has been produced. At this stage, we believe a development of 10 to 20 houses would be possible, with the remainder of the site being brought forward as open space and environmental enhancements.

It is proposed that the site would be accessed via Hill Road, as per the proposal for the land to the East of Hill Road. Work previously undertaken by TPA demonstrated that the proposed access arrangements submitted for the land to the east of Hill Road was sufficient for 33 dwellings. Consequently, were the land to the East and West of Hill Road to come forward for development as proposed this would entail a total of 42 dwellings. It is therefore felt that the access proposals are adequate to enable both sites to come forward.

In light of the work already undertaken on the land to the east of Hill Road, there are no known constraints for this site coming forward for residential development during the lifetime of the Local Plan.

3. Complies with the Duty to Co-operate

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

Do you consider the Local Plan Review complies with the Duty to Co-operate?

Yes

No

Please give reasons for your answer:

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the LPR legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

For the above reasons we consider the site suitable and deliverable for a development of 10-20 dwellings.

Given that large sites at Newbury and Thatcham that were allocated in the Core Strategy and HSADPD (including the 2,000 home allocation at Sandlesford Park) have been delayed in coming forward it is important therefore that this shortfall is addressed. The allocation of the sustainably located site at Speen would help address this shortfall in line with the spatial strategy and should be allocated accordingly.

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)?

Yes

No

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

To test the council's argument for not allocating the sustainably located site

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply:

Tick

The submission of the Local Plan Review for Independent Examination	x
The publication of the report of the Inspector appointed to carry out the examination	x

The adoption of the Local Plan Review	x
---------------------------------------	---

Please ensure that we have either an up to date email address or postal address at which we can contact you. You can amend your contact details by logging onto your account on the Local Plan Consultation Portal or by contacting the Planning Policy team.

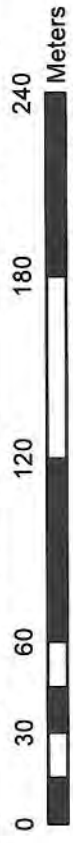
Signature	David Wilson	Date	28/02/2023
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Your completed representations must be received by the Council by 4:30pm on Friday 3 March 2023.

Thames Water Land at Speen



Printed By: dlassey
 Print Date : 30/03/2017
 Map Centre On : 446155, 167620
 Centre Tile No. : SU4667NW



Current Scale : 1:2,500



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The position of any boundary or apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed.

Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified on site before any works are undertaken.

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Comments:

Please enter comments here.

Thames Water
 Map




West Berkshire Local Plan Review 2022-2039
Proposed Submission Representation Form
Ref:
(For official use only)

Please complete online or return this form to:	Online: http://consult.westberks.gov.uk/kse
	By email: planningpolicy@westberks.gov.uk
	By post: Planning Policy, Development and Regulation, Council Offices, Market Street, Newbury, RG14 5LD
Return by:	4:30pm on Friday 3 March 2023

This form has two parts:

- Part A - Your details: need only be completed once
- Part B - Your representation(s): please fill in a separate sheet for each representation you wish to make

PART A: Your Details

Please note the following:

- *We cannot register your representation without your details.*
- *Representations cannot be kept confidential and will be available for public scrutiny, however, your contact details will not be published.*
- *All information will be sent for examination by an independent inspector*
- *All personal data will be handled in line with the Council's Privacy Policy on the Development Plan. You can view the Council's privacy notices at <http://info.westberks.gov.uk/privacynotices>*

	Your details	Agent's details (if applicable)
Title:	Mr	
First Name:*	David	
Last Name:*	Wilson	
Job title (where relevant):	Town Planner	
Organisation (where relevant):	Thames Water Property	
Address* <i>Please include postcode:</i>	1 st Floor West, Clearwater Court Vastern Road Reading RG1 8DB	
Email address:*	[REDACTED]	
Telephone number:	[REDACTED]	

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**Mandatory field*

Part B – Your Representation***Please use a separate sheet for each representation***

The accompanying guidance note available at: <https://www.westberks.gov.uk/lpr-proposed-submission-consultation> will assist you in making representations.

*Your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change(s) as there will **not normally** be a subsequent opportunity to make further representations, **further submissions will ONLY be at the request of the Inspector, based on the matters and issues they identify for examination.***

Your name or organisation (and client if you are an agent):	Thames Water
---	--------------

Please indicate which part of the Local Plan Review this representation relates to:

Section/paragraph:	
Policy:	Policy RSA11 – Former Theale Sewage Treatment Works, Theale (Site Ref THE7)
Appendix:	
Policies Map:	
Other:	

1. Legally Compliant

Please see the guidance notes for an explanation of what 'legally compliant' means.

Do you consider the Local Plan Review is legally compliant?

Yes

No

Please give reasons for your answer:

2. Soundness

Please see the guidance notes for an explanation of what 'soundness' means.

Do you consider the Local Plan Review is sound?

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF)

Please tick all that apply:

NPPF criteria	Yes	No
Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development		
Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence		
Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground		
Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF		X

Please give reasons for your answer:

We fully support the allocation of the former Theale STW for residential development as per our previous representations.

However, the site area has been reduced from the previous Dec 2020 draft allocation for Policy RSA 17 which included the open space to the east as per plans below:

Dec 2020 draft Local Plan:

Jan 2023 draft Local Plan:

Policy RSA 17
Former Theale Sewage Treatment Works, Theale (Site Ref THE7)
 The site, as identified on the indicative map, is proposed to be allocated for residential development comprising approximately 70 dwellings.
 To ensure that the separate identities of Calcot and Theale are maintained, it is likely that the developable area will comprise only part of the site. Further landscape assessment will determine the developable area.
 Detailed policy criteria will be developed to highlight specific mitigation measures and infrastructure requirements.

Former Theale Sewage Treatment Works



Former Theale Sewage Treatment Works



It is understood that the current allocation is based on the developable area, which has been informed by the landscape sensitivity and capacity assessment the council had undertaken for the site. However, the landscape assessment does also highlight that the land beyond the pylons, within the 'undevelopable areas', could be used to design and create a positive buffer to the adjacent AONB, and retaining the open character. So, officers have agreed that open space/landscaping/BNG could go beyond the pylons, and can be shown on any future planning application. We consider that this should be made clear in the policy text.

In November 2022 we submitted the following documents in support of the draft allocation (we have not resubmitted here but please let us know if this would be helpful):

- Former Theale Sewage Treatment Works Vision Document, November 2022, prepared by Carter Jonas;
- Former Theale Sewage Treatment Works Concept Plan, J0059808_002, prepared by Carter Jonas;
- Former Theale Sewage Treatment Works Illustrative Masterplan, No. J0059808_V2_003, prepared by Carter Jonas;
- Former Theale Sewage Treatment Works Biodiversity Net Gain Report and Biodiversity Calculator, November 2022, prepared by ADAS.

The Vision Document demonstrates the key considerations for a residential development at the site and includes the additional landscape buffers around the site edges resulting from the Council's commissioned Landscape Sensitivity and Capacity Assessment in September 2021.

The Vision Document and the Illustrative Masterplan confirm that, having regard to the site considerations, the site can readily deliver 62 dwellings. This represents a relatively low density and appropriate character, having regard to the site's location and context. The development would provide a range of dwelling sizes and affordable housing in accordance with the Local Plan requirements.

Further, a Biodiversity Net Gain (BNG) Report has been prepared which considers the potential for development at the site to deliver at least 10% BNG, as required by the emerging Local Plan Review. The strategy confirms that a BNG of at least 10% can be delivered on site, based on the illustrative scheme provided. The calculations confirm that the following is achievable:

- A 12.7% net gain for habitat units;
- A 24.5% net gain for hedgerow units;
- A 58.1% net gain for river units.

3. Complies with the Duty to Co-operate

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

Do you consider the Local Plan Review complies with the Duty to Co-operate?

Yes

No

Please give reasons for your answer:

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the LPR legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Amend Policy RSA 11 b. as follows:
i. Development will not extend beyond the north-east of the High Voltage Power Lines. The area beyond is **not to be developed contrary to the Landscape and Sensitivity and Landscape Assessment'** ~~to be undeveloped~~, to retain the open character between Theale and Calcot, within the AONB. **This area can be used to provide open space and biodiversity improvements required in association with the residential development.....**

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)?

Yes No

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

To fully respond to any issues raised as landowner

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply:

Tick

The submission of the Local Plan Review for Independent Examination	<input type="checkbox"/>
The publication of the report of the Inspector appointed to carry out the examination	<input type="checkbox"/>
The adoption of the Local Plan Review	<input type="checkbox"/>

Please ensure that we have either an up to date email address or postal address at which we can contact you. You can amend your contact details by logging onto your account on the Local Plan Consultation Portal or by contacting the Planning Policy team.

Signature	David Wilson	Date	28/02/2023
------------------	---------------------	-------------	-------------------

Your completed representations must be received by the Council by 4:30pm on Friday 3 March 2023.



David Wilson

██████████
Senior Planning Officer
Development and Regulation
West Berkshire Council
Issued via email:
████████████████████

████████████████████
████████████████████
1st Floor West
Clearwater Court
Vastern Road
Reading
RG1 8DB

28 November 2022

Former Theale Sewage Treatment Works (Site ref: THE7)

Dear ██████████

Further to recent discussions and correspondence regarding the above site, please find enclosed the documents listed below, sent on behalf of Kennet Properties Limited, which are provided to support the draft housing allocation in the West Berkshire Local Plan Review 2022-2039. Kennet Properties is a subsidiary development company within the Thames Water Group with remit is to identify land that is surplus, or will shortly become surplus, to the operational requirements of Thames Water Utilities Limited and to promote it for alternative use.

- Former Theale Sewage Treatment Works Vision Document, November 2022, prepared by Carter Jonas;
- Former Theale Sewage Treatment Works Concept Plan, J0059808_002, prepared by Carter Jonas;
- Former Theale Sewage Treatment Works Illustrative Masterplan, No. J0059808_V2_003, prepared by Carter Jonas;
- Former Theale Sewage Treatment Works Biodiversity Net Gain Report and Biodiversity Calculator, November 2022, prepared by ADAS.

The Vision Document demonstrates the key considerations for a residential development at the site and includes the additional landscape buffers around the site edges resulting from the Council's commissioned Landscape Sensitivity and Capacity Assessment in September 2021.

The Vision Document and the Illustrative Masterplan confirm that, having regard to the site considerations, the site can readily deliver 62 dwellings. This represents a relatively low density and appropriate character, having regard to the site's location and context. The development would provide a range of dwelling sizes and affordable housing in accordance with the Local Plan requirements.

Further, a Biodiversity Net Gain (BNG) Report has been prepared which considers the potential for development at the site to deliver at least 10% BNG, as required by the emerging Local Plan Review. The strategy confirms that a BNG of at least 10% can be delivered on site, based on the illustrative scheme provided. The calculations confirm that the following is achievable:

- A 12.7% net gain for habitat units;
- A 24.5% net gain for hedgerow units;
- A 58.1% net gain for river units.

I trust the enclosures provide further assurances regarding the deliverability of a housing development at the Former Theale Sewage Treatment Works in accordance with the draft allocation and that the site can contribute towards meeting local housing need.

We note the site requirements listed under Local Plan Review Proposed Submission document Policy RSA11. The proposed illustrative scheme shows that development incorporates the requirements relevant to the scheme design. Other requirements would be fully provided / addressed in a future planning application. Detailed consideration of compliance with each aspect of the draft policy will be included in Representations made in response to the Regulation 19 Consultation.

I trust this is of assistance to demonstrate the deliverability of a residential development in accordance with the draft allocation. If you have any questions on the additional information then please let me know.

Yours faithfully,



David Wilson
Thames Water Property Town Planner



- LEGEND**
- Site boundary (5.0 ha)
 - Existing improved access from Blossom Lane
 - Existing woodland to be retained
 - Proposed footpath
 - Potential link to public footpaths
 - Potential footpath / cycle link to Whitehart Meadows
 - Existing play area
 - Proposed trees
 - Development parcels
 - Primary road
 - Secondary road
 - Tertiary road
 - Key buildings
 - Building frontages
 - Proposed attenuation pond (SuDs)
 - Public Open Space emphasis (POS)
 - West Berkshire Area Of Natural Beauty (AONB)
 - Ancient Woodland
 - Wildflower planting
 - Shared surface
 - Restricted access for biodiversity area
 - Overhead power line
 - 15m wide landscape buffer
 - Public Right of Way (PRoW)

Carter Jonas

PROJECT TITLE
**KENNET PROPERTIES
 FORMER THEALE, SEWAGE TREATMENT
 WORKS**

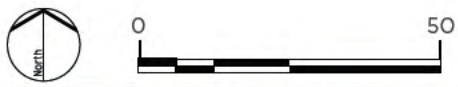
DRAWING TITLE
CONCEPT PLAN

ISSUED BY London T: 020 7016 0720
DATE Nov 2022 **DRAWN** OT
SCALE@A3 1:1250 **CHECKED** JC
STATUS Planning **APPROVED** JC

DWG. NO. J0059808_002

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- LEGEND**
- Site boundary (5.0 ha)
 - Existing improved access from Blossom Lane
 - Potential link to public footpaths
 - Potential foot/cycle link to Whitehart Meadows
 - Residential dwelling
 - Attenuation basin location
 - Primary route
 - Secondary route
 - Private drive
 - Shared surface
 - Proposed footpath
 - Public Right of Way (PRoW)
 - Proposed tree planting
 - Proposed wildflower meadow (planting)
 - Public Open Space (POS)
 - Shared residential courtyards
 - 15 metre wide landscape buffer
 - Restricted access for biodiversity area
 - Overhead power line
 - Existing woodland to be retained

Carter Jonas

PROJECT TITLE
**KENNET PROPERTIES,
 FORMER THEALE SEWAGE TREATMENT
 WORKS**

DRAWING TITLE
ILLUSTRATIVE MASTERPLAN

ISSUED BY	London	T: 020 7016 0720
DATE	Nov 2022	DRAWN OT
SCALE@A3	1:1250	CHECKED JC
STATUS	Planning	APPROVED JC

DWG. NO. J0059808_V2_003

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Former Theale Sewage
Treatment Works,
Blossom Lane, Theale

Vision Document

November 2022



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Project Code	J0059808
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The Vision

The vision for the Site will be refined through discussions with West Berkshire Council, the local community and other key stakeholders.

It is intended that the Site masterplan will embody the following high level aspirations:

- A green, highly sustainable development which respects the setting of the immediate landscape and built context;
- Promotes walking and cycling both within the Site and beyond the boundaries to connect with the wider network; and
- Incorporates the latest green building technologies through use of materials, reduced water consumption, water management systems, biodiversity enhancements and on-site energy generation.

Our vision for the Site is to support the sustainable growth of Theale, creating new homes to support a mixed and balanced community.

New residents will have access to areas of public open space, and walking routes and the local highway network. The development will be designed to reflect the local character of the place.

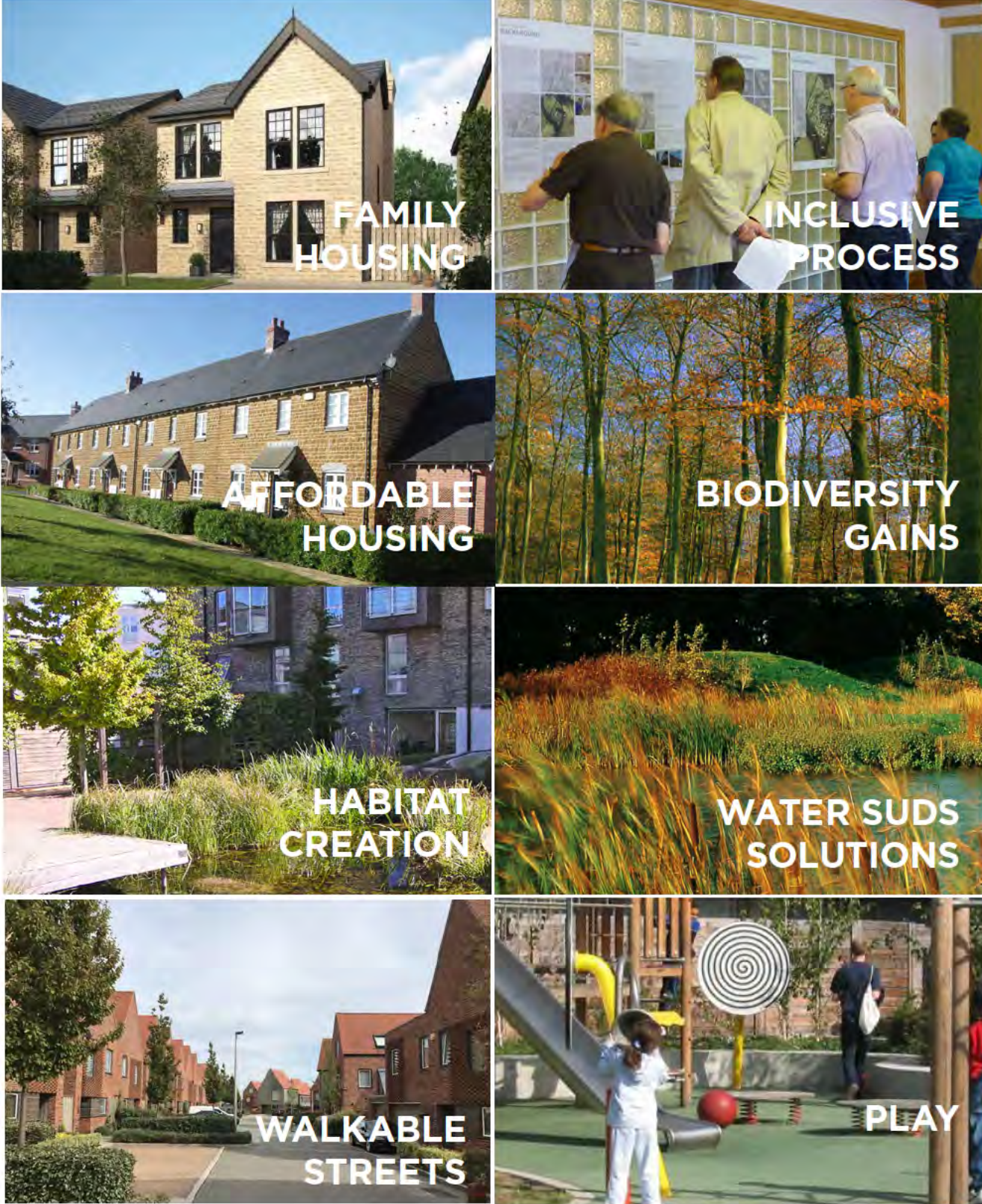


Fig 01: Vision imagery

1.0 Introduction

1.1 Purpose of the Document



1.0 Introduction

1.1 Purpose of the Document

This Vision Document has been prepared by Carter Jonas LLP on behalf of Kenet Properties Limited to support the draft allocation of the Former Theale Sewage Treatment Works, Blossom Lane, Theale.

This document demonstrates how the site can deliver housing in accordance with the requirements of the emerging Local Plan allocation to assist in meeting West Berkshire's housing need and provide significant social and environmental benefits.

The document will:

- Set out a high level vision;
- Illustrate the process that has led to the development proposals and explain the design rationale and concepts that have been applied;
- Introduce the concept masterplan; and
- Justify and confirm why the Site is available, suitable and deliverable and should be considered for development.

 Masterplan boundary (5.0 ha)



Fig 02: Aerial plan of the former Theale Sewage Treatment Works with the site boundary highlighted in red

2.0 Planning

2.1 Planning Background



2.1 Planning Background

Kennet Properties has promoted the Former Theale Sewage Treatment Works to the West Berkshire Local Review for a housing allocation.

West Berkshire Council undertook Regulation 18 Consultation on the draft Local Plan Review in 2021. The site was included as a draft allocation for approximately 70 dwellings (Site ref: THE7).

Following the consultation, West Berkshire Council commissioned a Landscape Sensitivity and Capacity Assessment. This assessment concluded housing can be accommodated at the Site, with additional landscape buffers to the northern and western boundaries.

The Pre-Submission draft of the Local Plan Review is expected to be published for Regulation 19 Consultation in early 2023 and the site remains as a draft allocation for approximately 60 dwellings.

This Vision Document demonstrates that, having regard to the Site constraints, a housing development can be delivered in accordance with West Berkshire Council's requirements at a capacity in accordance with the draft allocation.

 Masterplan boundary (5.0 ha)



Fig Q3: Aerial plan of the former Theale Sewage Treatment Works

3.0 Analysis

- 3.1 District Context
- 3.2 The Site
- 3.3 Access to Community Facilities
- 3.4 Site Considerations



3.1 District Context

The Site is located on the northern edge of Theale, a village within the West Berkshire District, on the south-western edge of Reading, approximately 6.7km from the town centre.

The majority of the District outside of settlement boundaries falls within the West Berkshire Area of Natural Beauty (AONB). The Site does not fall within the AONB.

The Site broadly is rectangular in shape and is bound by Theale Golf Club to the north and Woodfield Play Area to the south. The M4 runs adjacent to the eastern boundary.

The topography on the Site is relatively level, with a slight fall from the north west towards the south eastern corner.

The wider context of the Site to the south is characterised by Theale village.

The Site's wider context to the north and west is open fields used for recreation and farmland.

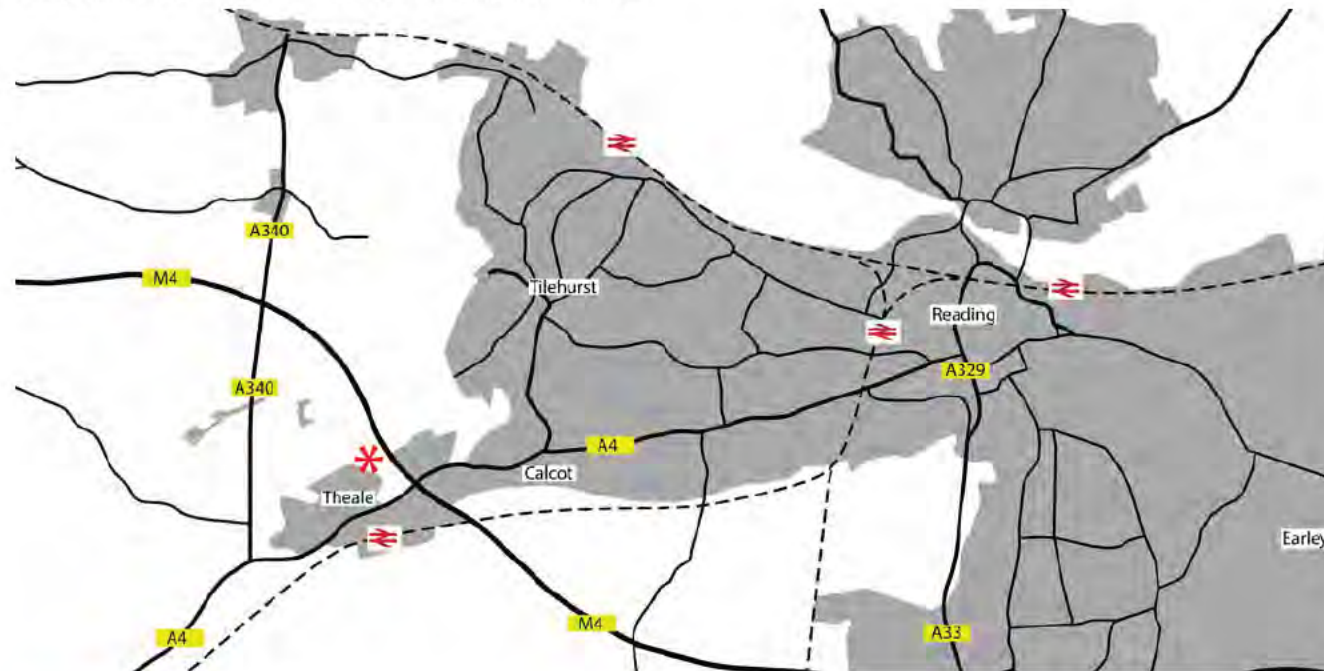


Fig 04: Theale in context showing the key surrounding settlements, road network and railway lines

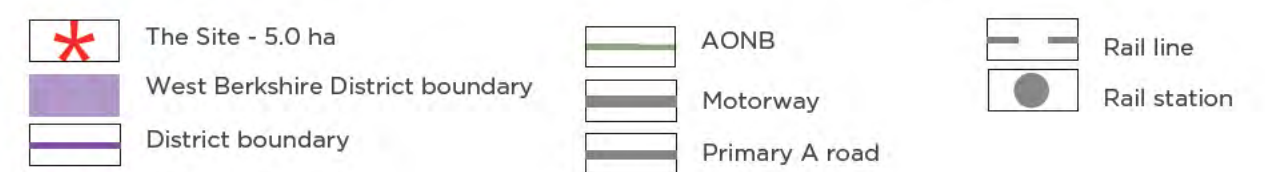
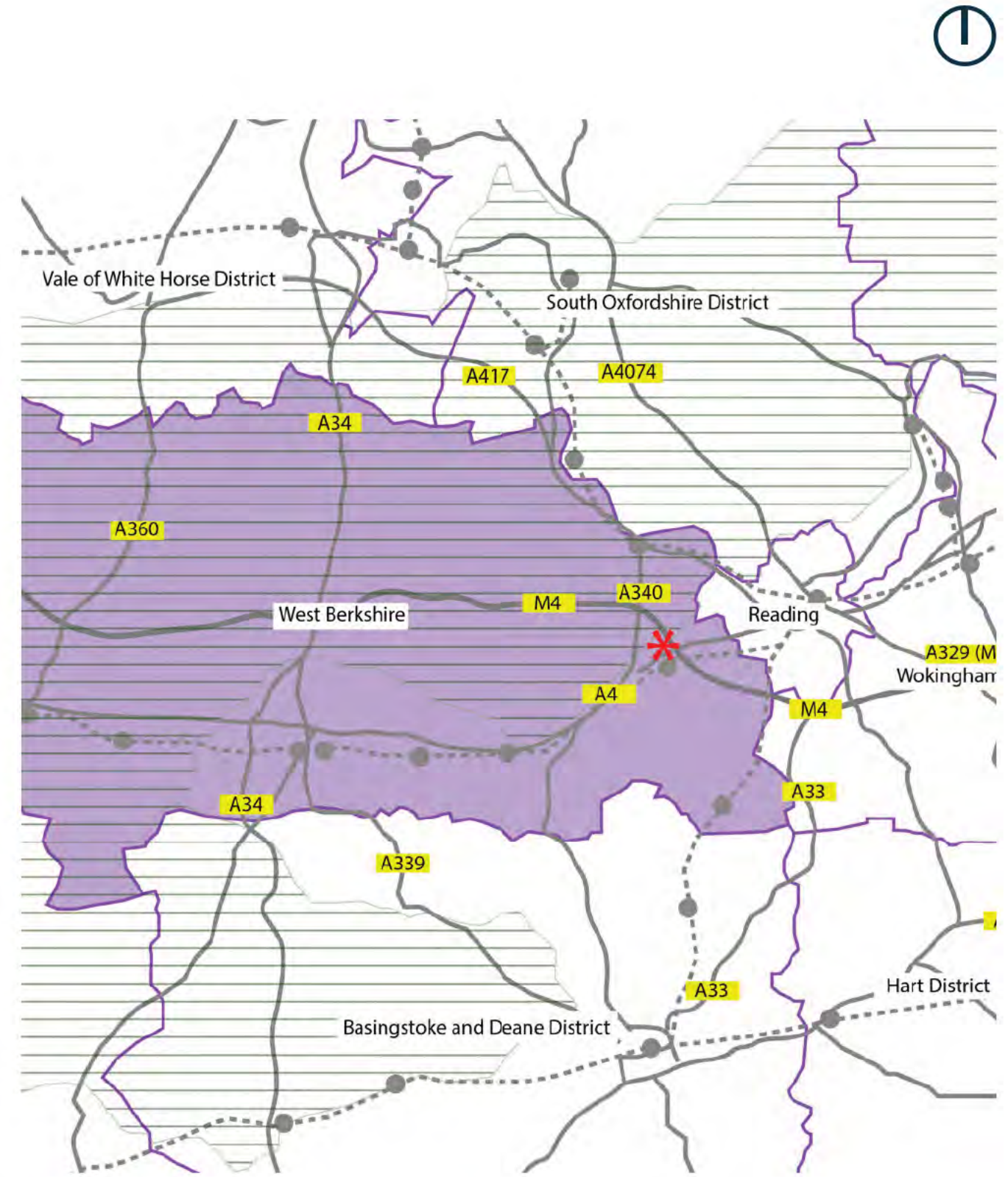


Fig 05: District context map

3.2 The Site

The masterplan boundary (the 'Site') measures 5.0 hectares and sits adjacent to residential development located on Blossom Lane, Woodfield Way and Whitehart Close.

The Site was formerly used as the Theale Sewage Treatment Works. Previously, there has been a building present on the Site, however this has since been removed.

Two Public Rights of Way (PRoW) pass along the northern and southern boundaries of the Site with boundary vegetation separating the Site from the PRoW's. There are several residential buildings that face onto the Site, which are 2 storeys in height. These buildings are not visible from the Site, due to the dense boundary vegetation.

The photos on the opposite page were taken from Google Street View:

1. View of the existing access taken from Blossom Lane
2. View from Blossom Lane looking south east onto the residential development on Whitehart Close
3. Surrounding development on Whitehart Close
4. View looking north on Blossom Lane, beyond the Site access
5. View of Woodfield Way Play area, looking north from Woodfield Way



Fig 06: Photo Location Plan

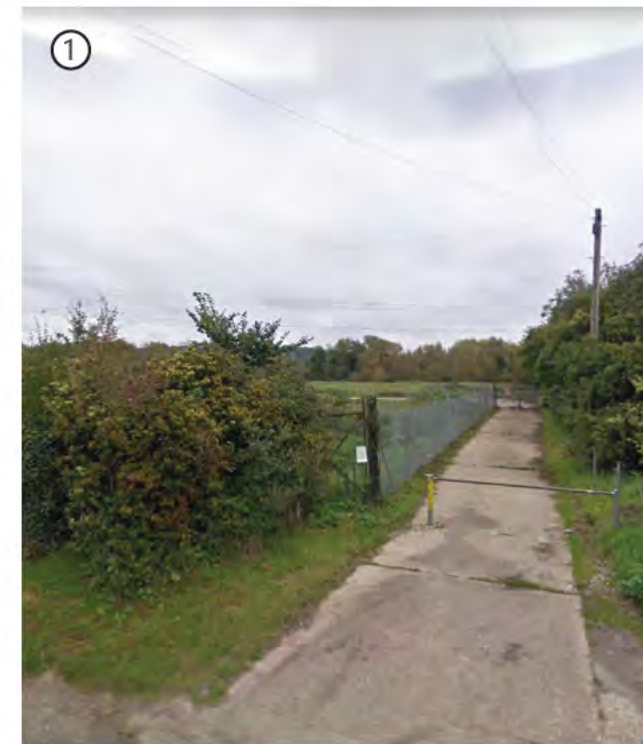


Fig 07: Site Photos

3.3 Access to Community Facilities

The Site is well served by a range of community facilities. These existing services and facilities are shown on Figure 08 opposite and include:

1. Woodfield Play Area
2. Theale Golf Club
3. North Street Playing Field
4. Theale Village Hall
5. Co-op food store
6. Theale CE Primary School

-  Site location
-  Protected employment area
-  Rail line
-  Public Right of Way
-  Water body
-  Isochrone
-  Rail station
-  Supermarkets / retail
-  Religious establishment
-  Food / drink establishment
-  School
-  Medical facility
-  Outdoor facility
-  Hotel
-  Community facility
-  Bus stop



The closest primary school is 'Theale CE Primary School' approximately 0.9km to the west, located on Englefield Road, accessible within a 11 minute walk.



Bus stops are located along Englefield Road where the number 44 buses operate a frequent service to Thatcham. Bus stops are also located at Church Street where the number 1, 15 and 44 buses operate frequent services to Newbury, Central Reading and Thatcham.



Theale Rail Station is located approximately 1.1 km to the south, accessible via Station Road within a 14 minute walk. Theale Rail Station has regular direct services into London Paddington in just over 40 minutes and to Reading in 10 minutes.

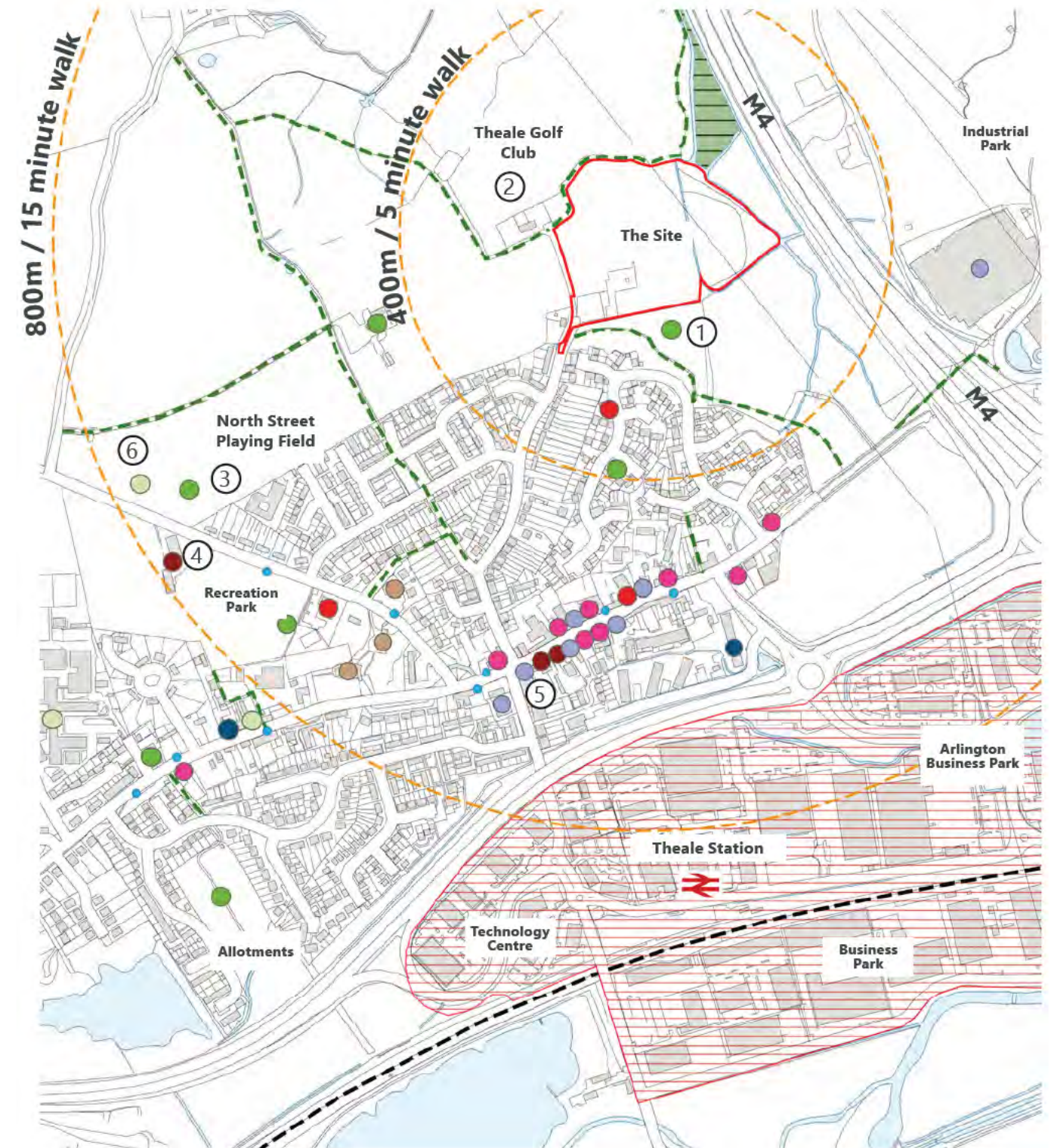


Fig 08: Community facilities plan

3.4 Site Considerations

The following are a series of key site considerations we have identified which need to be addressed through the masterplan design process:

- 1 There is one existing access point from Blossom Lane.
- 2 There is an opportunity to take advantage of aspect views onto Sulham Wood.
- 3 There is a sensitive boundary to the east, which abuts the West Berkshire AONB.
- 4 Areas of existing trees / woodland border most of the Site's boundaries.
- 5 Part of the Site to the east falls within Flood Zone 2.
- 6 An area to the east of the Site is required as an area for additional tree planting.
- 7 A high pressure water pipe runs across the Site from east to west. A 5m buffer to each side of the pipe is required.
- 8 A high voltage overhead power-line runs across the Site to the east. A 30 metre buffer to each side of the power-line is required as a development exclusion zone.
- 9 Existing Public Rights of Way (PRoW's) run to the north (ref: THEA/14/1) and south (ref: THEA/5/1) of the Site. There is the potential to create a PRoW connection utilising new public footpaths across the Site, which could also link to the existing Woodfield Play Area to the south.
- 10 Further to the conclusions of the Landscape Assessment commissioned by West Berkshire Council following the Local Plan Review Regulation 18 Consultation, a 15 metre landscape buffer has been included to offset the existing woodland which borders Blossom Lane, to the west of the Site.
- 11 Development is required to face out onto the Site boundary on the southern and western borders.

- Site boundary (5.0 ha)
- Existing access from Blossom Lane
- Existing woodland
- Public Right of Way (PRoW)
- Potential link to public footpaths
- EA Flood Zone 2
- Existing trees
- Sensitive boundary to AONB
- Existing watercourse
- Open arable land
- 30 metre wide easement to overhead power line
- 15 metre wide landscape buffer
- West Berkshire Area of Natural Beauty (AONB)
- Ancient Woodland
- Landfall arrow
- High pressure water main (5 metre development exclusion zone)
- Key development frontage facing out onto Site boundary
- Existing play area
- Existing park / recreation space



Fig 09: Site Considerations Plan

4.0 Design

- 4.1 Existing Site Influences
- 4.2 Design Rationale
- 4.3 Emerging Concept Masterplan



4.1 Existing Site Influences

A series of design driver diagrams are shown opposite which illustrate the existing site features which have influenced the design of the masterplan. These are separated into:

- Existing watercourses & Flood Zone 2
- Green edges
- Green buffer
- Utilities
- Protecting the Public Rights of Way
- Area required for additional tree planting



Existing Watercourses & Flood Zone 2

Identify existing watercourses and areas of the Site that are in Flood Zone 2 and utilise as open space, free of development.

By keeping these areas open we can retain a soft, green edge to the Site to the east.



Green Edges

Retain existing woodland wherever possible, including the denser planted areas to the east and north of the Site and boundary vegetation along the watercourse to the east.

Fig 10: Existing site influences diagrams



Green Buffer

To protect and enhance the existing woodland / vegetation which is prudent along the Site boundaries, a green buffer of 15m is proposed to the northern and western Site boundaries. This will ensure that existing trees are protected and new trees are sited within public open spaces that can be managed rather than in private gardens.

The retention of these green edges to the Site will serve to protect the amenity of neighbouring properties, existing PRoW and Blossom Lane.



Utilities

Identify and protect existing utilities which traverse the Site. A high pressure water main runs along the Site's southern boundary.

An overhead power line runs across the Site to the east. This power line requires a 30m 'development exclusion zone' to either side, which restricts the area for development.



Protecting the Public Rights of Way

An existing PRoW (ref: THEA/14/1) runs along the northern Site boundary, another along the Site's southern boundary (ref: THEA/5/1).

It is important to protect the green setting of the PRoW's. There is also the potential to create a link between the PRoW's in a north to south direction through the Site in order to expand on the footpath network.



Area required for additional tree planting

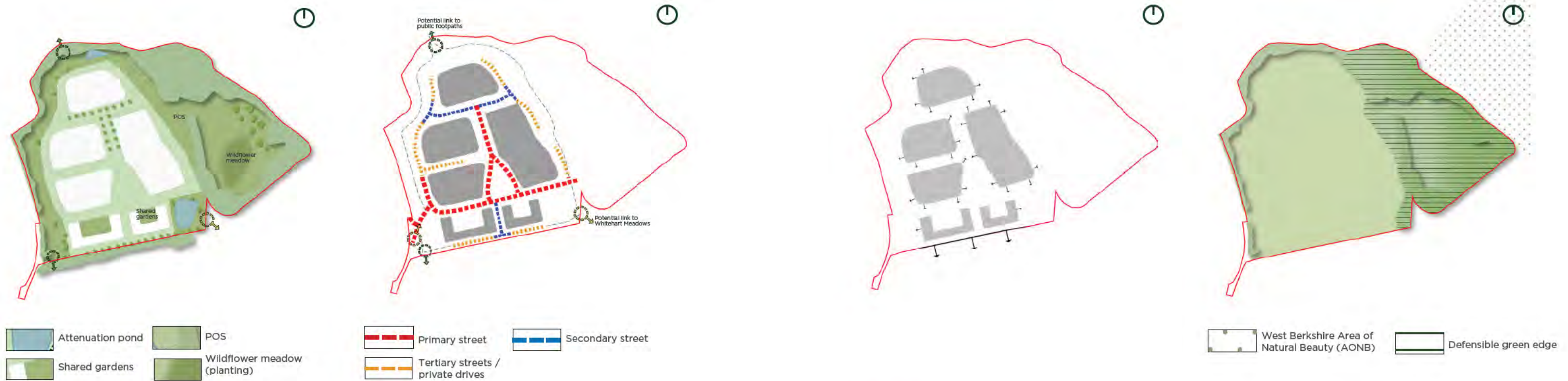
Part of the Site to the east is required as an area for additional tree planting. This will enhance the green edge to the east, and mitigate any views onto the AONB.

There is also an opportunity to create an area of biodiversity enhancements in form of a wild flower meadow to the east with restricted access for people as part of the BNG mitigation strategy.

4.2 Design Rationale

A series of design rationale diagrams are shown below and opposite which illustrate the key design principles for the emerging concept masterplan (overleaf). These are separated into:

1. Blue-green Infrastructure;
2. Access and circulation;
3. Built form; and
4. Relationship to the AONB.



1. Blue-green Infrastructure

The landscape and biodiversity value of the Site is proposed to be enhanced through:

- additional tree planting to boundaries (including a 15m buffer to the western and eastern boundaries);
- a central POS space which can be easily accessed by all development and an open space area to the east, which has the potential to include a wetland habitat area.
- an attenuation pond to store surface water and provide new habitat for local species located towards the south east corner of the Site.

2. Access and circulation

A legible hierarchy of streets are proposed, including:

- A primary street linking the main access from Blossom Lane to the development areas.
- Secondary streets serving residential areas in the main parts of the Site.
- Tertiary streets / private drives serving a limited number of dwellings, mostly located around the edges of the development area adjacent to open space.

All streets will be designed to incorporate elements of street planting, as well as prioritising pedestrian and cycle movement.

3. Built Form

The built form has been arranged in a block structure to create a permeable layout which is usable for walking and cycling.

The structure allows for development frontage to overlook open space, assisting with passive surveillance and a more attractive public realm.

4. Relationship to the AONB

The West Berkshire Area of Natural Beauty (AONB) sits adjacent to the eastern boundary of the Site. To the east, an area of additional tree planting is proposed to mitigate any impact on the views to and from the AONB. This area is free from development. Development is proposed further west on the Site. The existing boundary vegetation will remain and be improved.

Fig 11: Design rationale diagrams

4.3 Emerging Concept Masterplan

There is potential to:

- ① **Amount:** Develop 2.00 ha of the Site for residential development, with a housing density of 30 dwellings per hectare, resulting in a development of up to 62 dwellings.
- ② **Blossom Lane:** Access: In accordance with access plans confirmed by West Berkshire Council as being appropriate for the proposed development, the development will utilise the existing improved access from Blossom Lane to serve the Site from the west.
- ③ **Open Space:** Create a central open space area. A larger open space area is proposed to the east, which will assist in mitigating any views onto the AONB. It will also provide a nature trail which links to the pathways connecting the existing PRoWS and Woodfield Play Area. This area is also kept free from development due to the overhead power line and the 30m buffer requirement.
- ④ **PRoW:** There is the potential to incorporate and connect the proposed footpaths through the Site, via a PRoW link / gateway, to the existing PRoW's that lie outside of the red line.
- ⑤ **Drainage:** Provide a SuDs attenuation pond on Site to the north and south east where the land naturally drains, this will also form part of a habitat wetland area.
- ⑥ **Trees / Biodiversity** - Protect trees and mature Site vegetation wherever possible, and integrate new grassland, planting and other biodiversity enhancement measures throughout the Site to achieve Biodiversity Net Gain (BNG) requirements. A 15m planted buffer is proposed to the north and west of the Site.



- Site boundary (5.0 ha)
- Existing improved access from Blossom Lane
- Existing woodland to be retained
- Proposed footpath
- Potential link to public footpaths
- Potential footpath / cycle link to Whitehart Meadows
- Proposed trees
- Building frontages
- Primary road
- Secondary road
- Tertiary road
- 15 metre wide landscape buffer
- Residential development
- Key buildings
- SuDs
- Existing play area
- Shared residential courtyards
- Wildflower planting
- Shared surfaces
- Restricted access for biodiversity area
- Public Right of Way (PRoW)
- Public Open Space emphasis (POS)

Fig 12: Concept Plan

5.0 Masterplan

5.1 Illustrative Masterplan

5.2 Sustainability Objectives



5.1 Illustrative Masterplan

The illustrative masterplan opposite shows a proposed housing development of 62 homes which takes account of the opportunities and considerations documented at Section 3.4.

- ① In accordance with access plans confirmed by West Berkshire Council as being appropriate for the proposed development, the development will utilise the existing improved access from Blossom Lane to serve the Site from the west
- ② 2 Storey residential dwellings
- ③ Existing woodland
- ④ Restricted access for biodiversity area
- ⑤ Wildflower meadows
- ⑥ Shared residential courtyards

	Site boundary (5.0 ha)
	Existing improved access from Blossom Lane
	Potential link to public footpaths
	Potential foot/cycle link to Whitehart Meadows
	Residential dwelling
	Attenuation basin location
	Primary route
	Secondary route
	Private drive
	Proposed footpath
	Public Right of Way (PRoW)
	Proposed tree planting
	Proposed wildflower meadow (planting)
	Public Open Space (POS)
	Shared residential courtyards
	15 metre wide landscape buffer
	Restricted access for biodiversity area
	Overhead power line
	Existing woodland to be retained
	Shared surface

Proposed access drawing reference: 29598/001/033 produced by Stantec



Fig 13: Illustrative Masterplan

5.2 Sustainability Objectives

As noted earlier in this document, the Site's location provides for ease of walking and cycling into the centre of Theale to the south. The new community of up to 62 new homes (148 people) will have direct access to public transport; Theale Rail Station a 14 minute walk / 5 minute cycle and bus stops are located at Church Street.

Other key considerations for the masterplan design include: drainage and ecology / biodiversity. Existing trees and landscape features are carefully integrated within the masterplan.

On-site habitats have the potential to support bats, nesting birds, badgers and water voles.

RIBA Sustainable Outcomes

In line with the UN's Sustainable Development Goals, the RIBA have developed 8 Sustainable Outcomes (the "Outcomes"):

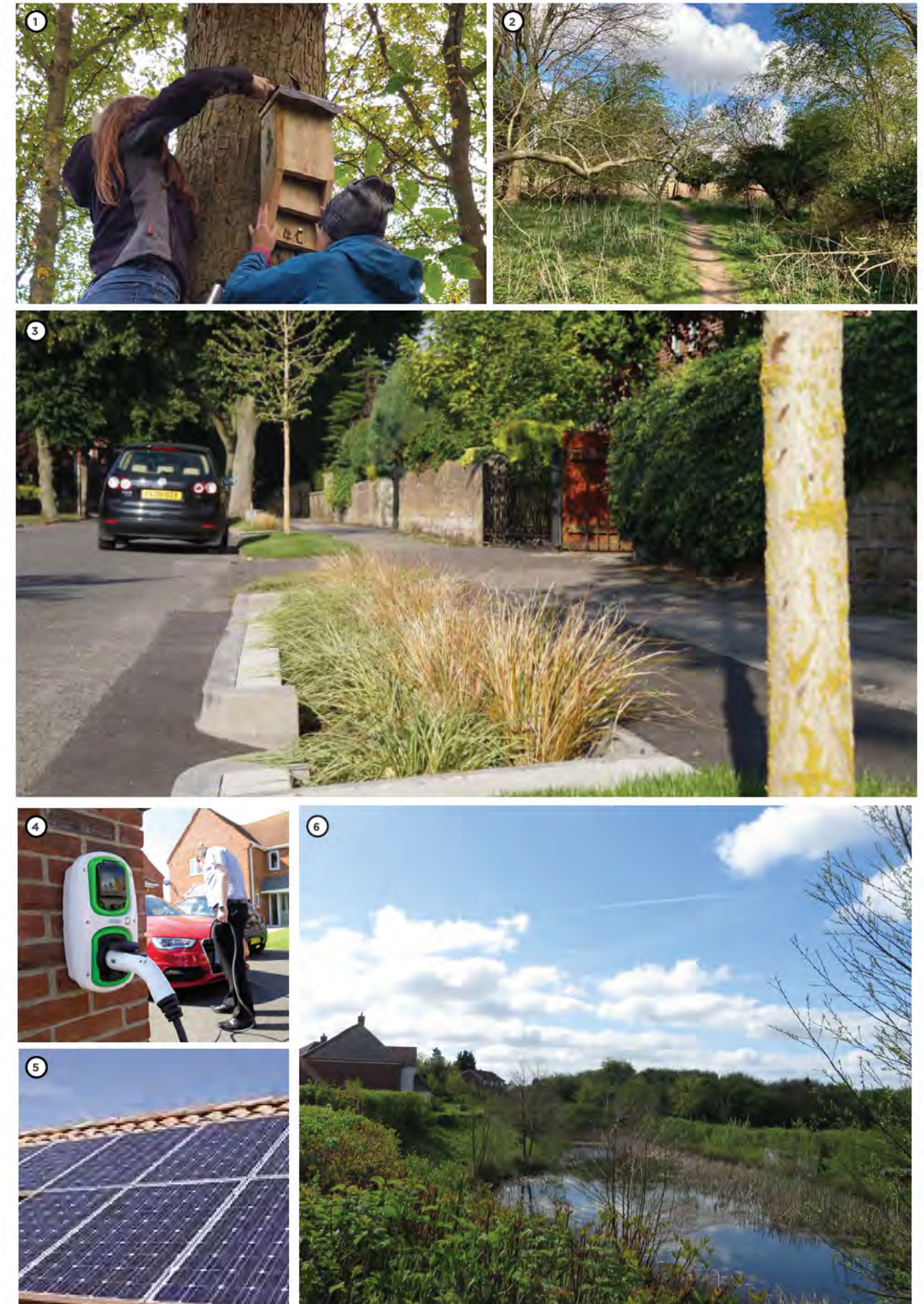
- Net zero operational carbon
- Net zero embodied carbon
- Sustainable water cycle
- Sustainable connectivity and transport
- Sustainable land use and biodiversity
- Good health and wellbeing
- Sustainable communities and social value
- Sustainable life cycle cost

Given the holistic nature of the RIBA Sustainable Outcomes 2030 framework, these 'outcomes' would need to be adopted by the whole design team.

The development will be in-line with West Berkshire Council's standard for construction and planning policy requirement for energy efficiency in new residential development.



Fig 14: Diagram from RIBA Sustainable Outcomes Guide (December 2019).



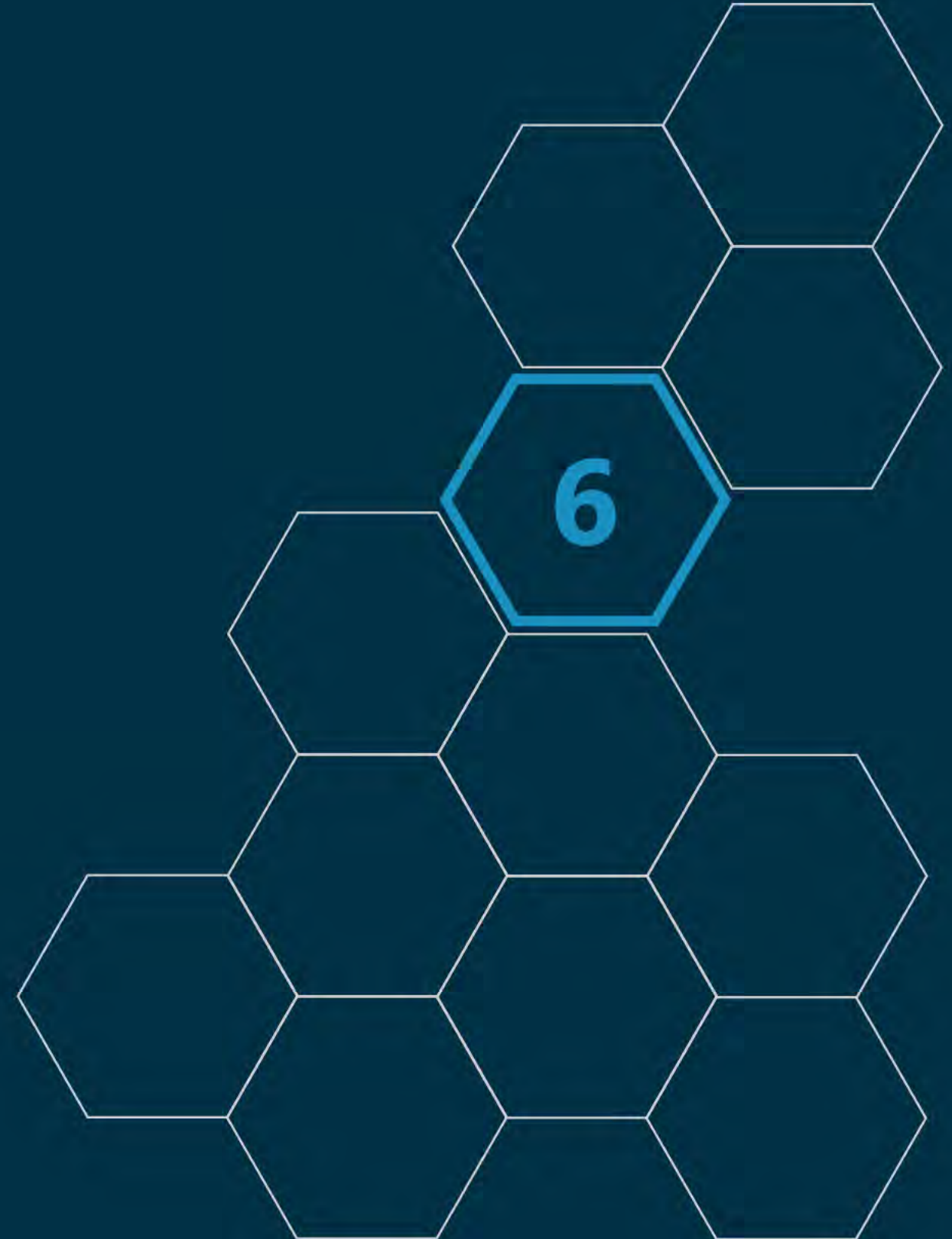
Photograph Descriptions

1. Nest boxes supporting the local bird population
2. Native deciduous woodland
3. Sustainable Urban Drainage Systems
4. EV charging points
5. Use of photovoltaics to roofs
6. Attenuation basins as wildlife habitats

Fig 15: Environmental and Biodiversity Net Gain (BNG) features

6.0 Conclusions

6.1 Conclusions & Key Benefits



6.0 Conclusions

6.1 Conclusions & Key Benefits

The illustrative masterplan demonstrates that a residential development of around 62 homes could address the technical design considerations and deliver a residential scheme which preserves the character and quality of the surrounding landscape and built context, at a sustainable location within West Berkshire.

It is therefore shown that a housing scheme in accordance with the draft allocation quantum and detailed development requirements is deliverable.

Our proposals will encourage new development to respect and be sympathetic to the existing settlement.

Kennet Properties are grateful for the consideration of our development proposals and we would welcome the opportunity to discuss these further with West Berkshire Council as we continue to promote the Site through the plan making process.

KEY BENEFITS

PUBLICLY ACCESSIBLE OPEN SPACE



A high quality housing development which responds to the wider landscape setting and provides up to 1.76 hectares of open space, representing 35.1% of the overall Site area

ECOLOGY AND WILDLIFE



Ecological enhancements including creation of new habitats, achieving in excess of 10% Biodiversity Net Gain

VARIETY OF NEW HOMES



Delivery of approximately 62 new homes to meet a range of needs, including a proportion of much needed new affordable homes

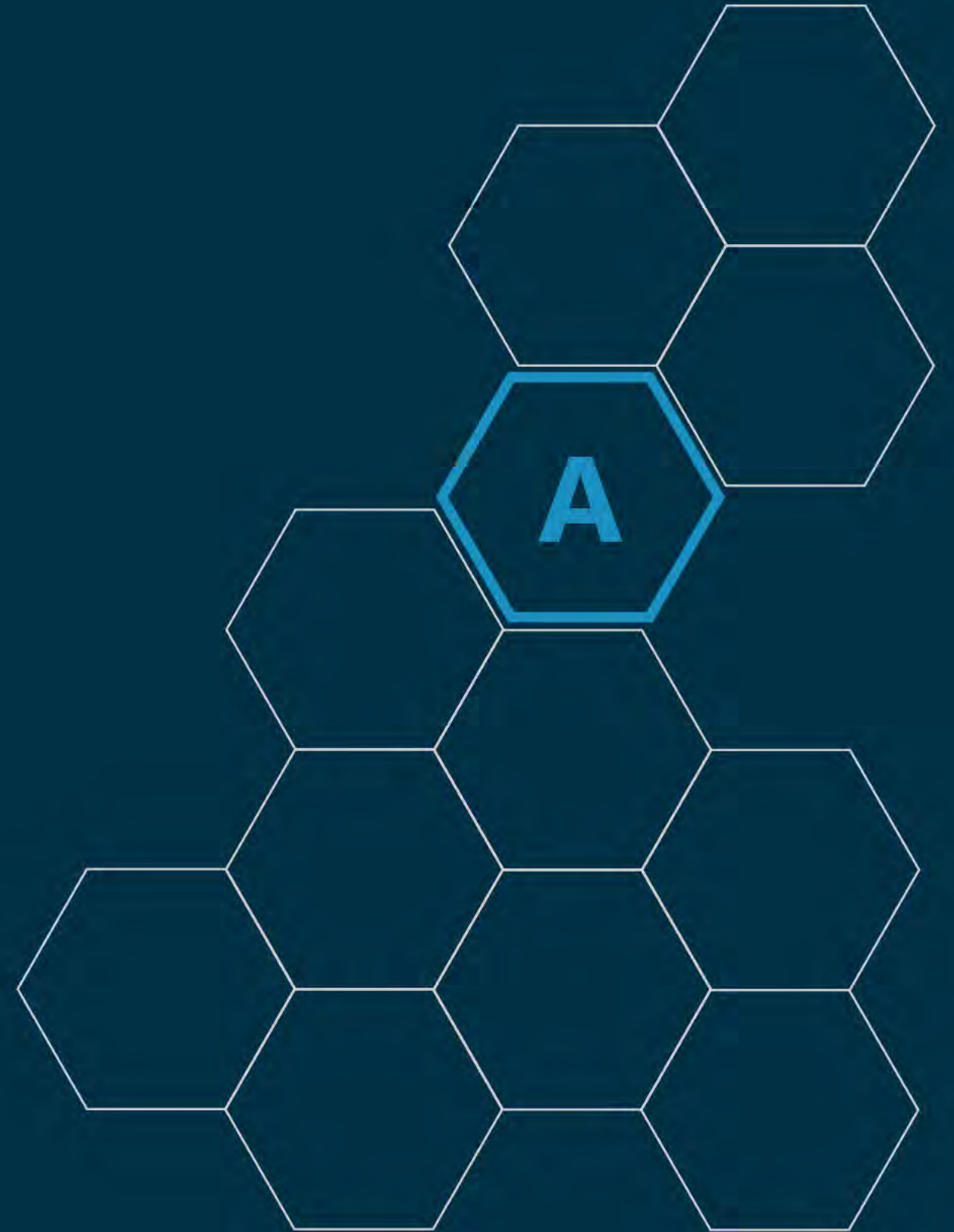
PEDESTRIAN ROUTES



Access to walking routes which connect onto the wider PRoW network, providing new and existing residents with improved access to the countryside

Fig 16: Key benefits infographics

Appendices



Appendix 1: List of Figures

Fig 01: Vision imagery

Fig 02: Aerial plan of the former Theale Sewage Treatment Work

Fig 03: Aerial plan of the former Theale Sewage Treatment Work with the site boundary highlighted in red

Fig 04: Theale in context showing the key surrounding settlements, road network and railway lines

Fig 05: District context mapping

Fig 06: Photo Location Plan

Fig 07: Site Photos

Fig 08: Community facilities Plan

Fig 09: Site Considerations Plan

Fig 10: Existing Site Design Influences Diagrams

Fig 11: Design Rationale Diagrams

Fig 12: Concept Plan

Fig 13: Illustrative Masterplan

Fig 14: Diagram from RIBA Sustainable Outcomes Guide (December 2019).

Fig 15: Environmental and Biodiversity Net Gain (BNG) features

Fig 16: Key benefits infographics

Carter Jonas

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Biodiversity Net Gain Assessment

Former Theale Sewage Treatment Works

Principal Author: Carina Morris

Date: 28 November 2022

Project Code/ADAS Ref:
1051979/ MPT69105-832(01)

Version:
02

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[REDACTED]	[REDACTED]	[REDACTED]

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK ADAS Ltd.

Revision History

Revision	Date	Amendment
MPT69105-832(00)	24/11/2022	First version
MPT69105-832(01)	28/11/2022	Updates following client review

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1 Summary

ADAS has been commissioned by Kennet Properties Limited to produce a biodiversity net gain assessment as a feasibility scoping assessment to see whether a 10% biodiversity net gain is achievable based on the current concept plan. The land at the decommissioned Theale Sewage Treatment Works is being proposed for allocation as a site for a new housing development by West Berkshire Council as part of its draft emerging local plan for approximately 60 dwellings, with masterplanning demonstrating the site is capable of providing 62 new residential units, and areas of public open space.

This report has been prepared to assess the impacts of development on site biodiversity when compared with the baseline habitats condition assessment of the site carried out in November 2022. This report assesses the biodiversity unit gains or losses arising from the proposed development using the Defra Biodiversity Metric 3.1.

Based on the current concept plan, the proposed development will result in the loss of areas of modified grassland, other neutral grassland, and bramble scrub.

A number of amendments to this design have therefore been recommended, which include enhancements to the retained grassland, woodland, lines of trees, hedgerow with trees, and the ditch; and the creation of mixed scrub, and other neutral grassland which have been incorporated into the proposals.

If these recommendations are included in the scheme, the proposed development will achieve a 12.71% net gain in habitat units, which will exceed the minimum 10% net gain requirement by 2.71%. It will also achieve 24.52% in hedgerow units, and 58.10% in river units. This will exceed the minimum 10% net gain requirement.

A management and monitoring plan will be prepared for the site prior to the commencement of construction to detail how the recommended habitat protection and enhancement measures will be implemented and to detail long-term monitoring requirements to secure the targeted net gains are achieved.

2 Introduction

2.1 Background and Objectives

This report has been commissioned by Kennet Properties Limited to support the proposed allocation of land at the decommissioned Sewage Treatment Works, off Blossom Lane, Theale, RG7 5BB (central grid reference SU 64471 71916, hereafter referred to as the site) to demonstrate that the proposed development is capable of delivering a minimum 10% Biodiversity Net Gain (BNG). The latest proposed development plans provided by the client in November 2022 ('JXXX_CJ_MP_CAD Background - A3 @ 1250-A3 @ 1250', 'J0059808_CJ_MP_002_Thames Water_Theale_Concept Plan_A3 @ 1250', and 'J0059808_CJ_MP_V2_003_Thames Water_Theale_Illustrative Masterplan_A3 @ 1250') and a habitat conditions assessment undertaken by ADAS in November 2022 have been used to inform this assessment.

Due to the nature of the proposed development, it is understood that a BNG Assessment of the proposed works is required, as per local and national policy. BNG occurs in development when the project leaves the natural environment in a better state than it was prior to the project. To achieve BNG, the developer is required to ensure that wildlife habitats are created or enhanced. It requires the development to result in a demonstrable increase in habitat value to the baseline (how the site was prior to development). BNG should be demonstrated quantitatively.

To demonstrate BNG, the value of the habitats are assessed using a recognised metric tool to calculate biodiversity units. The biodiversity losses or gains resulting from the development are then calculated by subtracting the baseline (pre-development) units from the post development units. Defra's Biodiversity Metric 3.1 Calculation tool (Natural England, 2022) has been used to demonstrate BNG in a quantitative manner.

The *Biodiversity Net Gain Good Practice Principles for Development* (CIEEM, CIRIA, IEMA, 2016) are a set of ten principles which have been produced to provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature while progressing with sustainable development. To demonstrate that BNG has been achieved in a qualitative manner for a development it would need to be shown that the development meets these ten principles which have been listed below:

- Apply the mitigation hierarchy
- Avoid losing biodiversity that cannot be offset by gains elsewhere
- Be inclusive and equitable
- Address risks
- Make a measurable net gain contribution
- Achieve the best outcomes for biodiversity
- Be additional
- Create a net gain legacy

- Optimise sustainability
- Be transparent

2.2 Purpose of Report

The purpose of this report is to calculate the predicted change in the site's biodiversity units as a result of the proposed development (referred to as the "proposed development") and, where the baseline fails to meet the targeted BNG of 10%, to provide recommended enhancements to meet this target (referred to as the "On-site Post-development Recommendations").

2.3 Site Description

The site was located at the former Theale Sewage Treatment Works, near Reading, RG7 5BB (central grid reference SU 64471 71916). The site comprised of approximately 5 hectares (ha) of land, situated on the edge of Theale, approximately 1.5 kilometres (km) southeast of the village Englefield, 1.96 km northwest of Calcot (a suburb of Reading), and 2.8 km southwest of Tilehurst (a suburb of Reading). The site was adjacent to an area of ancient semi-natural woodland on the northeastern corner, with broadleaved woodland to the east beyond which was the M4 motorway and Reading. The ditch on site (found to be dry at the time of survey in November 2022) connected to Sulham Brook, an Environment Agency Main River, in the northeast and northwest corners of the site. The river ran adjacent to the eastern boundary of the site. Theale Golf Club was immediately north and northeast of the site. Woodfield Way Play Area was situated adjacent to the southern boundary with the village of Theale beyond, and immediately adjacent to Whiteheart Meadows on the southeastern boundary of the site. The wider surroundings include urban areas, arable fields, hedgerows, and woodland, including areas of designated ancient woodland (see Appendix 1, and Figure 1 below).



Figure 1. Site location (indicated by red line boundary) and wider landscape. Imagery taken from ADAS Mapping Tool. November 2022. © 2022 Microsoft Corporation © 2022 Maxar ©CNES (2022) Distribution Airbus DS

2.4 Proposed Development

The proposed concept development includes construction of approximately 62 residential units in the western part of the site, with associated parking, hardstanding (roads and footpaths), gardens, and public open spaces in the centre of the development (including a play area) and in the northern part of the other neutral grassland to the east of the housing development. Approximately 90 trees will be planted across the site (70 small and 20 medium of moderate condition). The total net developable area within the site is 2.02 ha, and the central public open space will be approximately 0.06 ha. Trees are to be planted around the development and within the retained grassland areas in the west of the site. Two attenuation ponds will be created on site, potential locations of which have been marked on the proposed concept plans (Appendix 2).

The woodland surrounding the site is to be retained and will act as a noise barrier for the M4 motorway to the east. The area of grassland in the east of the site may become a 1.70 ha public open space.

Vehicular and foot access will be provided to Blossom Lane in the south-western corner of the site (the existing access point will need to be widened), and a walk and cycle link will be provided to the to the adjacent Whiteheart Meadows in the south-eastern corner of the main development area. A minimum 15 m landscape buffer will be retained around footpaths.

3 The Policy and Legislation Background

3.1 National Planning Policy Framework

The government policy for England on biodiversity is covered under the National Planning Policy Framework (NPPF) (2021), which includes multiple mentions of the requirement for a measurable net gain (highlighted in the following extracts below):

- Para 174d: ‘Planning policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and improving net gains for biodiversity, including by establishing ecological networks that are more resilient to current and future pressures...’
- Para 179b: ‘To protect and enhance biodiversity and geodiversity, plans should... promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.’
- Para 180d: ‘development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.’

3.2 Local Planning Policy

Table 1 below shows relevant policies from West Berkshire’s Local Plan Review 2020-2037 Emerging Draft (Dec 2020) and detail how development proposals will conserve and enhance biodiversity and will deliver a net gain moving forward.

Table 1: Summary of relevant local planning policies – West Berkshire’s Local Plan Review 2020-2037 Emerging Draft (Dec 2020)

Policy	Description
SP11	<p>Development proposals will conserve and enhance biodiversity and/or geodiversity and will deliver a net gain.</p> <p>Development will be permitted where it:</p> <ul style="list-style-type: none"> ▪ protects biodiversity and/or geodiversity value and implements appropriate conservation management. The degree of protection will be proportionate to the status of the site in terms of its international, national and/or local importance; ▪ minimises fragmentation and maximises opportunities for restoration, enhancements and connection of natural habitats (including links to habitats outside the district); ▪ incorporates beneficial biodiversity and/or geodiversity conservation features and enhances existing features, including those that will help wildlife to adapt to climate change where appropriate; ▪ delivers a net gain for biodiversity and/or geodiversity in the district. Development proposals across sites of all sizes will achieve a minimum 10% net gain for biodiversity, either within the site boundary or as part of on-site compensation, or where agreed, off-site compensation towards more strategic nature recovery;

Policy	Description
	<ul style="list-style-type: none"> ▪ provides or retains appropriate buffer zones between development proposals and designated sites; ▪ provides coherent ecological permeability that is integrated and linked to the wider green infrastructure and any nature recovery network identified as relevant to the location; ▪ seeks to eradicate or control any invasive non-native species present on site; ▪ is compatible with any Biodiversity Action Plan, Local Nature Recovery Strategy or other strategic conservation management plans for species or habitats that have been formally adopted by the Council. <p>Development that would have a direct or indirect adverse effect on designated sites, protected or priority species or habitats that are considered to have geological and biodiversity value, will be refused unless it can be demonstrated that the benefits of the development clearly outweigh the impacts on the features of the site and the wider network of habitats. Development resulting in the loss or deterioration of irreplaceable habitats will be refused unless it accords with the exceptional reasons identified within the National Planning Policy Framework. If benefits clearly outweigh the impacts or exceptional reasons are justified, a suitable compensation strategy including long term management and maintenance, will need to be secured.</p>
DC14	<p>West Berkshire District's trees, woodland and hedgerows are valued visual and ecological assets in our towns, villages and countryside, adding local character and distinctiveness to the landscape, streets, parks, gardens and other open spaces. The policy encourages new planting and protects trees, woodland and hedgerows because of their habitat value, important role in the mitigation and adaptation to climate change and the contribution to the amenity of a particular locality.</p> <p>Development proposals will demonstrate that opportunities have been considered for the restoration, enhancement or planting of trees, woodland and hedgerows and, where identified, that they have been incorporated into the design and layout. The planting of native species will be favoured. Any invasive species on site will be removed.</p> <p>Development resulting in the loss or deterioration of ancient woodland or veteran trees which are irreplaceable will be refused unless it accords with the exceptional reasons identified within the National Planning Policy Framework. If exceptional reasons are justified a suitable compensation including its delivery and ongoing upkeep will need to be secured.</p> <p>Development proposals which could potentially result in the loss of ancient wood pasture; or trees, woodlands and hedgerows located within historic parks and gardens will be considered in accordance with policy DC12, for those within Registered Parks and Gardens, or policy DC11 for those forming part of non-designated heritage assets.</p> <p>The removal of other protected trees, groups of trees woodland or important hedgerows will only be permitted in exceptional circumstances and in accordance with the relevant legislation, policy and good practice recommendations. Where protected trees are subject to felling, a replacement of an appropriate number, species and size in an appropriate location will be required.</p> <p>Loss or damage of non-protected trees, woodland or hedgerows should be avoided, and if demonstrated as being unavoidable, appropriate replacement or compensation including aftercare will be required.</p> <p>Development proposals will provide protection for retained trees, woodland and hedgerows in advance of any work on site.</p> <p>Sufficient space within developments will be reserved for the planting and sustainable growth of large trees individually, in groups or lines in order to maintain and improve tree canopy cover in the built environment, and in the District as a whole.</p>

Policy	Description
<p>RSA11 (relevant sections extracted)</p>	<p>Former Theale Sewage Treatment Works, Theale (Site Ref THE7)</p> <p>The site will be required to be developed in accordance with the following parameters:</p> <ul style="list-style-type: none"> b. iv. Tree planting throughout the development to break up the built form, and on the north eastern edge of the site to screen views from the Area of Outstanding Natural Beauty; and v. Retain a landscape buffer of a minimum of 15 metres to Blossom Lane and the footpath (THEA/5/1); h. No development will be permitted within Flood Zone 2; i. A Surface Water Drainage Strategy will be required ‘Natural’ vegetated SuDS (such as green roofs, swales, and ponds) will be preferred over ‘hard engineered’ and below ground SuDS; k. Sulham Brook is a Main River. A buffer of at least 10 metres will be provided and maintained between the riverbank and built structures, on either side of the riverbank. It will need to be demonstrated that the development would not result in adverse impacts on the springs arising from the chalk that feeds the brook; m. An Ecological Impact Assessment (EclA) will be required. Appropriate avoidance and mitigation measures will need to be implemented, to ensure any designated sites and/or protected habitats and/or species in the footprint of the development and indirect impacts such as changes in the groundwater; r. The development design will respond positively to the challenge of climate change and be designed for climate resilience, including maximising the efficient use of sustainable technologies, resources, materials and solar gain, in accordance with Policy SP5.

3.3 The Environment Act (2021)

The Environment Act (2021) requires all development schemes in England to deliver a mandatory 10% BNG to be maintained for a period of at least 30 years after the development has been completed. Schedule 14 makes provision for biodiversity gain to be a condition of planning permission in England. The concept seeks measurable improvements for biodiversity by creating or enhancing habitats in association with development. Part 6 on nature and biodiversity covers all areas of BNG across two core sections and the supporting Schedule 14, particularly sections 9(3), 13(2), 14(2) and 15. Although the Environment Act 2021 is a part of UK law, its policies – with mandatory BNG included – aren’t expected to be fully integrated until the year 2023 as it goes through a two-year transition period. Many local planning authorities, however, are already enforcing the NPPF in line with detailed guidance from DEFRA and Natural England and are applying a 10% BNG requirement on each new development proposal.

4 Methodology

4.1 Baseline Habitat Assessment

The BNG metric calculations were carried out as a desk-based exercise, using the results of the habitat condition assessment carried out in November 2022 (ADAS, 2022) and based on the updated design drawings ('JXXX_CJ_MP_CAD Background - A3 @ 1250-A3 @ 1250', 'J0059808_CJ_MP_002_Thames Water_Theale_Concept Plan_A3 @ 1250', and 'J0059808_CJ_MP_V2_003_Thames Water_Theale_Illustrative Masterplan_A3 @ 1250' received 18 November 2022 and 28 November 2022 respectively), shown in Appendix 2.

4.2 The Mitigation Hierarchy

The mitigation hierarchy was taken into account when assessing the ecological constraints and opportunities associated with the proposed development, and this fed into the design of the scheme. The mitigation hierarchy required that developers first take steps to avoid and then to minimise impacts on biodiversity. Only after these steps are taken should developers look to compensate for losses that cannot be avoided. Finally, if compensation within the development footprint is not possible or does not generate the most benefits for nature conservation, the losses should be offset elsewhere.

4.3 Biodiversity Metric Calculation

Biodiversity metrics (units) were calculated for the site using the "Biodiversity Metric 3.1 - Calculation Tool – April 2022 Update" and guidance available on the Natural England Website (Natural England 2021a, 2021b). The Biodiversity Metric calculation tool spreadsheet is provided as an Excel file with this report.

The metric uses area of habitats and lengths of linear features as a proxy measure for capturing the value and importance of biodiversity. It uses a calculation in Microsoft Excel to allow for the importance of these features for nature: their size, ecological condition, distinctiveness and location. The metric enables assessments to be made of the baseline (pre-intervention) biodiversity value of a site in terms of 'biodiversity units' and calculates the projected post-development (post-intervention) biodiversity value. The metric can also be used to measure off-site biodiversity changes for a project or development and can be applied from the level of an individual field to, for example, an entire river catchment.

In order to meet the transparent use of the calculator the following applies for each of the variable elements that can be changed based on the evidence of the information collected in the field:

Habitat type: The Biodiversity Metric 3.1 uses the UK Habitat (UKHabs) classification system (UK Habs, 2020). Provided within the Biodiversity Metric 3.1 is a translation table to convert from Phase 1 to UKHabs; ADAS used this conversion in undertaking this assessment.

Area (Hectares): A topographic survey of the site measures the area to be 5.00 ha. Measurements have been rounded up or down to the nearest two decimal places to achieve a minimal mapping unit (MMU) of 0.01 ha. Mapping habitats at different times of year may lead to variation into where one habitat starts, and another begins as there is potential overlap between habitats (the ecotone). The actual field mapping is based on both field survey and aerial imagery (Figure 1) in order to achieve the best representation of the areas covered by each habitat identified onsite. The areas for the post development site were taken from pdf versions of the latest development plans – Appendix 2; these drawings were georeferenced, and the habitat areas measured using GIS software and cross-referenced with the overall habitat areas on plan ‘JXXX_CJ_MP_CAD Background - A3 @ 1250-A3 @ 1250’ for accuracy.

Condition: The condition is a means to measure the quality of a habitat based on a series of physical characteristics and typical species of a particular habitat type. In order to aid the process, the Biodiversity Metric 3.1 Technical Supplement (Natural England, 2022), provides ‘habitat assessment condition sheets.’ Condition sheets provide a list of positive indicators for each habitat and dependent on how many positive indicators a particular habitat meets will equate to the relevant condition for that specific habitat. In order that this process can be followed, in relation to this calculation, the number of positive indicators that are met for each habitat type are presented in Appendix 3 for each habitat found onsite.

Distinctiveness: This element considers the total amount of a habitat in a national context, the proportion of the habitat protected in Sites of Special Scientific Interest (SSSIs), whether the habitat is a UK Priority Habitat and how rare the habitat is in a European context. Certain Very High distinctiveness habitats are considered irreplaceable due to their age, complexity, or rarity in the landscape. Replacement or enhancement of baseline habitats as a result of development must meet the trading rules as set by the metric. A development proposal which does not meet these trading rules must justify this and reach an agreement with the Local Planning Authority and relevant stakeholders.

Strategic significance: This element gives extra value to habitats that are located in optimal locations or are of a type that meet local objectives for biodiversity. This element is to assess the habitats on site in relation to the geographical location. Information to determine the significance of a habitat within a specific landscape can be found in a variety of sources that include local plans, local biodiversity, and National Character Areas.

The strategic significance is based on three categories which equates to a different score, which are as follows: Within area formally identified in local strategy (High); Location ecologically desirable but not in local strategy (Medium) and Area/compensation not in local strategy/no local strategy (Low).

4.4 Limitations

The site was assessed using UK Habitat classification for the condition assessment. Where there is any ambiguity, an assumption has been made based on the available information to achieve the closest match. In addition, the timing of the survey (November) may have missed certain plants which could be either early or late flowering which may affect the condition assessment of a specific habitat type where this is represented as a positive indicator. Therefore, the best case of the habitat condition is provided for each habitat identified onsite which was not initially assessed in the UK Habitats condition assessment.

Measurements are based on two-dimensional mapping and would assume the site is completely flat and therefore certain habitats may be greater in extent if they occur on a slope. However, this is considered to make little difference as the site is relatively flat in appearance.

In the field the surveyor will have judged the approximate area of each of the habitat type using a MMU of 0.01 hectares and where appropriate used aerial imagery to assist with mapping of the habitats as accurately as possible.

Within Metric 3.1, urban trees are captured as a habitat area due to their ability to grant additional biodiversity benefits but are not included within the total area footprint due to the fact that trees typically grow upon a ground level habitat type, such as grassland.

5 Results

5.1 On-site Baseline

The condition of each habitat has been assessed against the criteria listed in the BNG 3.1 condition sheets. Table 2 below shows the size and units for each of the area habitats, river (ditch), and hedgerow habitats on site. A full breakdown of the condition assessment is present in Appendix 3.

For strategic significance the following has been considered the most appropriate for each habitat:

- Other neutral grassland: Not named within the local strategy. The *Cotoneaster* sp., a non-native species, found within the other neutral grassland will be removed in accordance with the Emerging West Berkshire Local Plan (2020-2037).
- Modified grassland: Not a priority habitat as it is widespread across the south of England, but one that provides a level of connectivity and opportunities for biodiversity as part of a local habitat mosaic within a largely intensive agricultural setting. Not considered directly related to a local strategy.
- Bramble scrub: A fairly ubiquitous habitat that is widespread across central England and therefore is not associated with any specific local strategy.
- Developed land; sealed surface: a ubiquitous habitat that is widespread across England and the local area.
- Other woodland; broadleaved: This habitat is accounted for as UK BAP Priority Habitat, which is identified under the NPPF strategy to 'promote the conservation, restoration and re-creation of priority habitats' (NPPF, 2021). As the local plan states that it 'must be consistent with the NPPF' this habitat is therefore considered to be identified under the local strategy (Emerging West Berkshire Local Plans (2020-2037)). The policy encourages new planting of trees and woodland.
- Line of trees: Not a priority habitat and not within the local strategy as widespread across England and within the local area.
- Hedgerow with trees: Policy DC14 within the Emerging West Berkshire Local Plan (2020-2037) are considered to be valued visual and ecological assets which are to be retained where possible and protected during development. The policy encourages new planting of hedgerows because of their 'habitat value, important role in the mitigation and adaptation to climate change and the contribution to the amenity of a particular locality'.
- Ditch: fairly widespread feature of poor condition.

The existing habitats and linear features assessed in this report are based on information collected during the habitat condition assessment carried out by ADAS in November 2022. A summary of the habitat units and linear units for each baseline habitat is provided in Table 1 below.

Table 2: On-site baseline biodiversity unit assessment

UK Habs Classification	Area (ha)	Distinctiveness	Condition	Strategic significance	Total units
Other neutral grassland (area 1)	0.04	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	0.32
Other neutral grassland (area 2)	0.75	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	6.00
Modified grassland (area 1)	0.36	Low	Poor	Area/compensation not in local strategy/ no local strategy	0.72
Modified grassland (area 2)	1.33	Low	Good	Area/compensation not in local strategy/ no local strategy	7.98
Modified grassland (area 3)	0.68	Low	Poor	Area/compensation not in local strategy/ no local strategy	1.36
Modified grassland (area 4)	0.50	Low	Poor	Area/compensation not in local strategy/ no local strategy	1.00
Bramble scrub	0.30	Medium	N/A	Area/compensation not in local strategy/ no local strategy	1.20
Developed land; sealed surface	0.25	V.Low	N/A	Area/compensation not in local strategy/ no local strategy	0.00
Other woodland – broadleaved (plantation)	0.20	Poor	Moderate	Formally identified in local strategy	0.92
Other woodland - broadleaved	0.59	Medium	Moderate	Formally identified in local strategy	5.43
Total Area	5.00			Total habitat units	24.93

Site Hedge Baseline					
UK Habs Classification	Length (km)	Distinctiveness	Condition	Strategic significance	Total units
Line of trees (1)	0.04	Low	Moderate	Area/compensation not in local strategy/ no local strategy	0.16
Line of trees (2)	0.07	Low	Good	Area/compensation not in local strategy/ no local strategy	0.42
Line of trees (3)	0.05	Low	Moderate	Area/compensation not in local strategy/ no local strategy	0.20
Native hedgerow with trees	0.12	Medium	Moderate	Formally identified in local strategy	1.10
Total hedge lengths		0.28		Total hedge units	1.88
River Baseline					
UK Habs Classification	Length (km)	Distinctiveness	Condition	Strategic significance	Total units
Ditches	0.24	Medium	Poor	Low potential/action not identified in any plan	0.96
Total river lengths		0.24		Total river units	0.96

For habitat trading purposes, habitats of 'Low' distinctiveness (modified grassland, line of trees) must be replaced with habitats of the same distinctiveness or better. Habitats of 'Medium' distinctiveness (broadleaved woodland, urban trees, bramble (*Rubus fruticosus* agg.) scrub) must be replaced with habitats of the same distinctiveness or better. High distinctiveness habitats must be replaced with the same habitat, although no high habitats of High distinctiveness were identified on site.

5.2 Consideration of the Mitigation Hierarchy

Table 3 below outlines how the mitigation hierarchy is being considered.

Table 3: Mitigation hierarchy

Hierarchy Step	Site Considerations
Avoid	The development is avoiding all impacts on any statutory designated sites, ancient woodland, or other irreplaceable habitat. The semi-natural woodland and wet ditch in Area 1 are being retained and protected during development. The woodland around the boundary of the north, east, and south of the site will be retained.
Minimise	A buffer will be created to minimize any impacts of the development on the woodland.

Hierarchy Step	Site Considerations
Compensate/ offset	<p>Detailed habitat compensation measures have been identified through the use of the Biodiversity Metric 3.1, see following section.</p> <p>Retained areas of grassland will be replaced by grassland of a higher condition.</p> <p>Areas of bramble scrub will be replaced with mixed scrub, and areas of grassland on site will be enhanced.</p> <p>Bird boxes and invertebrate habitats are recommended in areas of the site where they are likely to remain undisturbed to create additional habitats for these species.</p>

5.3 On-site Post Development- Current Concept Plans

The proposals for new area habitat are based on the proposed concept plans in Appendix 2 and conversations with the client; and are summarised in Table 4 below. The table provides details on habitats that will be created on site including developed land sealed surface (the buildings and areas of hardstanding), vegetated gardens, modified grassland (public open space and play area), and urban trees.

Table 4: On-site habitat creation biodiversity unit assessment

UK Habs Classification	Area (hectares)	Distinctiveness	Condition	Strategic significance	Habitat units delivered
Developed land; sealed surface	1.4	Very Low	N/A- Other	Area/compensation not in local strategy/ no local strategy	0.00
Vegetated Garden	0.84	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	1.62
Modified grassland	0.06	Low	Moderate	Area/compensation not in local strategy/ no local strategy	0.21
Urban Tree	1.02	Medium	Moderate	Formally identified in local strategy	3.59
Total Habitat area	3.32			Total Habitat units	5.42

5.4 Biodiversity Metric Calculation

The total area biodiversity units of the baseline habitat are 24.93. Of these habitats, 0.25 ha of other neutral grassland is to be retained, which equates to 2.00 biodiversity units. All three lines of trees and the hedgerow with trees are to be retained, equating to 1.88 retained units.

All areas of modified grassland and the small area of other neutral grassland in the southwest of the site are to be lost, resulting in a loss of 11.68 habitat units. All of the bramble scrub (1.20 habitat units) on site would be lost.

5.5 On-site Post Development – Recommendations

Further recommendations for habitat creation and enhancement measures have been made, which should be incorporated into the proposed concept plans in Appendix 2 (see Table 5). These measures aim to assist the proposed plan in achieving the 10% net gain in biodiversity stipulated by the Environment Act (2021).

5.5.1 Enhancements

The recommended plans will enhance 0.50 ha (two-thirds) of the other neutral grassland of a moderate condition in the east of the site to other neutral grassland of a good condition, delivering 5.94 habitat units.

In addition, 0.20 ha of other woodland; broadleaved (currently plantation woodland) will be enhanced from poor condition to good condition over a period of 20 years. The broadleaved woodland on site will also be enhanced from moderate condition to good condition.

The 0.24 km ditch will be enhanced from poor condition to moderate condition.

5.5.2 Habitat Creation

It is suggested that approximately 0.88 ha of other neutral grassland of poor condition (as it may be used as amenity space by residents of the new housing development) be created around the periphery of the development, which will deliver 3.28 habitat units.

Approximately 0.23 ha of mixed scrub should be created to replace the lost bramble scrub. This will deliver 2.13 habitat units.

It is also recommended that 60 m of native-species hedgerow to be created along the highway/access road leading to the new development (30 m on each side of the road or more if possible). This will add a further 0.46 hedgerow units and will also be in keeping with other hedgerow-lined roads in the area.

Table 5: Summary of recommendations for habitat enhancement and creation

Enhanced Habitat Areas					
UK Habs Classification	Area (hectares)	Distinctiveness	Condition	Strategic significance	Habitat units delivered
Other neutral grassland	0.50	Medium	Good	Location ecologically desirable but not in local strategy	5.94
Other broadleaved woodland (plantation)	0.20	Medium	Good	Formally identified in local strategy	1.82

Enhanced Habitat Areas					
UK Habs Classification	Area (hectares)	Distinctiveness	Condition	Strategic significance	Habitat units delivered
Other broadleaved woodland (semi-natural broadleaved)	0.59	Medium	Good	Formally identified in local strategy	7.33
Total habitat area enhanced (ha)		1.29	Total habitat units enhanced		15.09
Enhanced River Habitats					
UK Habs Classification	Length (km)	Distinctiveness	Condition	Strategic significance	Habitat units delivered
Ditches	0.24	Medium	Moderate	Low potential/action not identified in any plan	1.52
Total river length enhanced (km)		0.24	Total river habitats enhanced		1.52
Created Habitat Areas					
UK Habs Classification	Area (hectares)	Distinctiveness	Condition	Strategic significance	Habitat units delivered
Other neutral grassland	0.93	Medium	Poor	Location ecologically desirable but not in local strategy	3.46
Mixed scrub	0.23	Medium	Good	Location ecologically desirable but not in local strategy	2.13
Total habitat area created (ha)		1.16	Total habitat units created		5.59
Created Hedgerows					
UK Habs Classification	Area (hectares)	Distinctiveness	Condition	Strategic significance	Habitat units delivered
Native Species Rich Hedgerow	0.06	Medium	Moderate	Formally identified in local strategy	0.46
Total hedgerows created (km)		0.06	Total hedgerow units created		0.46

5.6 Biodiversity Metric Calculation

These enhancement measures would increase the habitat units on site from a baseline of 24.93 habitat units to 28.10 post-intervention habitat units. This achieves an overall 12.71% net gain in habitat units. Hedgerow units would be increased from a baseline of 1.88 hedgerow units to 2.35 hedgerow units, resulting in a net gain of 24.52% in hedgerow units. River units would increase from a baseline of 0.96 river units to 1.52 river units, resulting in a 58.10% net gain in river units. Please see Table 6 for the headline results.

By implementing these recommendations and generating the aforementioned BNG in habitat, hedgerow, and river units, the proposed plan will exceed the requirements of the Environment Act (2021) which aims to implement a mandatory 10% net gain in biodiversity post-development.

Table 6: Summary of biodiversity metric 3.1 results with recommendations for BNG

On-site baseline	<i>Habitat units</i>	24.93
	<i>Hedgerow units</i>	1.88
	<i>River units</i>	0.96
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	28.10
	<i>Hedgerow units</i>	2.35
	<i>River units</i>	1.52
On-site net % change (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	12.71%
	<i>Hedgerow units</i>	24.52%
	<i>River units</i>	58.10%
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	3.17
	<i>Hedgerow units</i>	0.46
	<i>River units</i>	0.56
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	12.71%
	<i>Hedgerow units</i>	24.52%
	<i>River units</i>	58.10%
Trading rules Satisfied?	Yes ✓	

6 Habitat Management Objectives

The following management objectives give details on how post-construction habitats can achieve the target conditions that the assessment has been based on.

6.1 Enhanced Grassland

Two-thirds (0.50 ha) of the other neutral grassland of a moderate condition in the east of the site will be enhanced to other neutral grassland of a good condition. To achieve this a wildflower mix such as Emorsgate Meadow Mixture for Wetlands EM8 should be planted within this area as this will be suitable for occasional flooding. Sowing seed on ground prone to winter flooding is best done either in the later summer or early spring once the land has drained.

Management during the first year: soon after sowing the seed mix, a flush of annual weeds arising from the seed bank within the soil are likely to appear. They will die back by the end of the year. If you need to cut them, it is recommended that you cut them once in early August. Ensure to remove the cuttings from site and compost.

Management in subsequent years: do not cut or graze the meadow from spring through to late-July/August to give the sown species an opportunity to flower. After flowering in July or August take a 'hay cut' by cutting back with a scythe, petrol strimmer or tractor mower to c 50 mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from the site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in spring if needed.

Please note that wet habitats can vary in composition, reflecting local drainage and management. Localized differences may require a targeted approach. For example, boggy areas which remain waterlogged for much of the year may be best sown with pond edge mixture EP1. If you are unsure which seed mix would be best within different areas of the grassland, please contact Emorsgate to discuss this further.

A small cotoneaster bush was present within the other neutral grassland, this should be removed. The grassland should be checked regularly to ensure no invasive species are present.

6.2 Enhanced Woodland

Approximately 0.20 ha of other woodland; broadleaved (currently plantation woodland) will be enhanced from poor condition to good condition over a period of 20 years. This will be achieved by planting additional native and locally sourced tree species that occur within the adjacent broadleaved woodland to bring the total number of native tree species to 5 or more. Coppicing will be carried out to create at least three different heights within the woodland and provide more light to the understorey, leaving some cut logs in situ to benefit wildlife. Over time any standing deadwood should be left within the woodland. A woodland seed mix such as Emorsgate EW1 or EW1F should be sown in autumn or early spring to create

a diverse ground flora. This should require little to no management however, if needed, an annual cut mid-summer could be carried out for a more managed appearance and to keep weeds of semi-shade such as nettles and brambles in check. Make sure to remove cuttings and compost.

The 0.59 ha broadleaved woodland on site will also be enhanced from moderate condition to good condition. This will be achieved by replacing some of the non-native tree species with native ones of local provenance to ensure at least 80% of canopy trees and understorey shrubs are native. Additional tree planting and coppicing will ensure all three age classes are present in woodland and create three or more storeys within the woodland. Standing deadwood/dead branches/stems and stumps are to be retained throughout the woodland. Please see above for management information.

6.3 Enhanced Ditch

The 0.24 km ditch that divides the area to be developed in the west of the site from the area of other neutral grassland to be retained in the east of the site will be enhanced from poor condition to moderate condition. The ditch should be cleared of any injurious species such as nettles and a marginal seed mix be planted along the edges of the ditch such as Emorsgate Pond Edge Mixture EP1 (which is also suitable for ditch and stream margins).

Sowing seed on ground prone to winter flooding is best done either in the later summer or early spring once the land has drained. During the first year the annual weed growth may be cut back to encourage good ground flora cover. Localised conditions and typical duration of water within the ditch may impact management so it would be best to speak with the seed provider to ensure appropriate management is carried out in subsequent years.

When the ditch is wet, emergent and floating species that are tolerant of dry conditions (as the ditch is dry at times throughout the year) are to be planted within it. Regular checks should be carried out to ensure that no invasive species are present within the ditch and the surrounding riparian habitat.

6.4 Created Grassland

The existing modified grassland will be removed and then approximately 0.93 ha of other neutral grassland of poor condition will be re-sown with a seed mix. If the grass needs to be kept at a short sward for amenity purposes, it could be sown with Emorsgate flowering lawn mixture EL1. Alternatively, seed mix EM2 could be used.

During the first year, the grasslands should be subject to a cut after six weeks following sowing and be kept short (approximately 50 mm) for the rest of the growing season. The grassland should then be managed as to achieve a varied sward height across the site. In order to achieve this, it is recommended that the grassland areas be split into three sections, with one section being cut every three years, rotating sections every year. This will result in the site having short, intermediate and long areas of grassland. It is expected that all Assessment Criteria can be met and the grassland on site will achieve a good target condition within 10 years.

6.5 Created Mixed Scrub

It is recommended that 0.23 ha of mixed scrub be created to replace the bramble scrub being lost on site. It is important to incorporate at least three woody species, such as bramble, Hawthorn (*Crateagus monogyna*) and Blackthorn (*Prunus spinosa*), so that no one species makes up more than 75% of the cover. The areas of scrub will require an ongoing management plan to maintain a good target condition by ensuring there is a good mix of age ranges with seedlings, young shrubs, and mature shrubs present; and there is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).

6.6 Created Native Hedgerow

It is also recommended that 60 m of native-species hedgerow to be created along the highway/access road leading to the new development (30 m on each side of the road or more if possible).

Emorsgate Wildflowers for Hedgerows, mixtures EH1F or EH1, could be used to create a diverse shrub layer beneath the hedgerows, particularly the larger hedgerow around the south of the cottage/allotment area. The supplier's guidance on ground preparation and sowing should be followed.

These hedgerows will need to be managed to achieve a good condition score within 12 years. The hedgerows should ideally be maintained at an average height of more than 1.5 m along their lengths and have average widths of more than 1.5 m. Gaps at the hedge bases should be less than 0.5 m and the ground should be kept free of non-native invasive species.

Postponing hedgerow cutting, particularly of berry producing species, until February will provide foraging opportunities for overwintering birds and small mammals for a longer period of time. Reducing hedgerow cutting to every three years will increase the number of berries and flowers compared to a yearly cut.

6.7 Recommended Monitoring and Management

An appropriate BNG Management and Monitoring Plan will need to be prepared for the site to ensure that the goals for habitat enhancement and creation are achieved.

This plan should detail:

- Measures to protect biodiversity features on site that are to be retained;
- Where, when and how the proposed on-site biodiversity compensation/ enhancement will be undertaken, monitored in the long term (up to 30 years) and modified, when necessary, to achieve the stated objectives for the site;
- Persons responsible for implementing and funding the works; and
- Any requirements for ongoing updates to the Local Planning Authority that demonstrate the management of the site, how management is meeting the objectives or where appropriate changes in management have been advised.

If the assumed habitat enhancements detailed in this report are not possible or unlikely due to site constraints or client requirements, the biodiversity metric calculations must be reviewed, and this report updated.

7 Consideration of Biodiversity Net Gain Principles

This report has assessed the proposed development against the *Biodiversity Net Gain Good Practice Principles for Development* (CIEEM, CIRIA, IEMA, 2016) set of ten principles. It is important to demonstrate that BNG has been achieved. The proposed development is expected to be able to meet these 10 principles, which are assessed in Table 7.

Table 7: Assessment against Biodiversity Net Gain Good Practice Principles

Biodiversity Net Gain Good Practice Principle	How the principle has been met
Apply the mitigation hierarchy	This has been carefully considered for this site. See section 5.2 for detailed discussion.
Avoid losing biodiversity that cannot be offset elsewhere	The project will not result in losses to any statutory designated sites, ancient woodland or other irreplaceable habitat.
Be inclusive and equitable	The proposed landscaping will provide amenity areas for residents whilst benefitting wildlife.
Address risks	<p>Proposed habitat enhancements have been selected that will be practical to achieve on a site of this size and which balance the amenity pressures of the site with biodiversity goals. See section 6 for detailed habitat management recommendations.</p> <p>A management plan should be produced at the detailed design stage to ensure targets for the site are realised.</p>
Make a measurable net gain contribution	<p>Current Concept Plan: The current concept plan for the site results in a net loss for biodiversity. See section 5.4 for a detailed summary of the biodiversity metric calculation.</p> <p>Recommended Plan: The Defra metric has been used to track the changes from baseline, and a measurable net gain was achieved. See section 5.</p>
Achieve the best outcomes for biodiversity	<p>As changes in broad habitat type are discouraged, modified grassland, one of the dominant habitat types, has been replaced with grassland of higher distinctiveness.</p> <p>Modified grassland is widespread in the local area and the new grassland on site will be of benefit to numerous local species.</p> <p>Further habitats have been selected which can be achieved and maintained for the life of the development and benefit wildlife, such as hedgerows, mixed scrub and trees. See section 5 for a detailed summary of the habitats proposed.</p>
Be additional	<p>The site is not under any existing obligations to create or manage habitat, therefore the proposals for habitat creation and enhancement provided are additional to what would be expected to happen without the development.</p> <p>Bird boxes and invertebrate habitats are recommended in areas of the site where they are likely to remain undisturbed. The management of these features should be detailed within any future management and monitoring plans for the site.</p>

Biodiversity Net Gain Good Practice Principle	How the principle has been met
Create a net gain legacy	A suitable management plan should be produced at the detailed design stage to provide a long-term (minimum 30-year) plan for management of the habitats on site.
Optimise sustainability	By achieving net gain through recommendations suitable to the site and practical in the long term, ecological enhancements on site are contributing to the overall sustainability of the development.
Be transparent	The LPA will be provided with the BNG Assessment report, the Defra calculation sheet and supporting drawings used in the calculations. All biodiversity metric choices have been fully explained and justified.

8 Conclusion

This BNG assessment has been carried out as a feasibility scoping assessment to see whether a 10% BNG is achievable based on the current concept plans to support allocation as a site for a new housing development by West Berkshire Council as part of its draft emerging local plan.

The proposed development at the former Theale Sewage Treatment Works would lead to areas of modified grassland, other neutral grassland, and bramble scrub. It is recommended that the retained grassland in the east of the site be enhanced to improve its condition and species composition. Areas of mixed scrub should be created to replace the bramble scrub lost, and other neutral grassland should be created around the new housing development.

The unit calculation scores for post-development are based on expected conditions of the recommended habitats.

If the recommendations outlined within the metric and this report are followed, the proposed development will achieve a 12.71% net gain in habitat units, which will exceed the minimum 10% net gain requirement by 2.71%. It will also achieve 24.52% in hedgerow units, and 58.10% in river units. This will exceed the minimum 10% net gain requirement.

9 References

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Appendix 1: Baseline Habitats Map





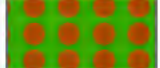
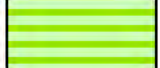



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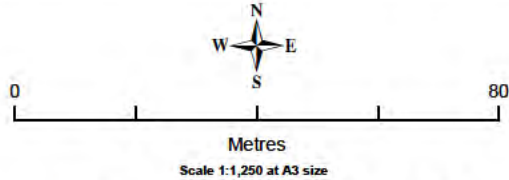
Kennet Properties

Land at Theale Sewage Treatment Works

Figure 1.


-  Site boundary
-  Ditch
-  Native hedgerow with trees
-  Line of trees
-  Other woodland, broadleaved
-  Other neutral grassland
-  Modified grassland
-  Developed land, sealed surface
-  Bramble scrub

Drawn by: Charlotte Larkins Date: 04.11.2022
 Verified by: Carina Morris Date: 04.11.2022



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Appendix 2: Proposed Development Plans

See following page.







- LEGEND**
- Site boundary (5.0 ha)
 - Existing improved access from Blossom Lane
 - Existing woodland to be retained
 - Proposed footpath
 - Potential link to public footpaths
 - Potential footpath / cycle link to Whitehart Meadows
 - Existing play area
 - Proposed trees
 - Development parcels
 - Primary road
 - Secondary road
 - Tertiary road
 - Key buildings
 - Building frontages
 - Proposed attenuation pond (SuDs)
 - Public Open Space emphasis (POS)
 - West Berkshire Area Of Natural Beauty (AONB)
 - Ancient Woodland
 - Wildflower planting
 - Shared surface
 - Restricted access for biodiversity area
 - Overhead power line
 - 15m wide landscape buffer
 - Public Right of Way (PRoW)

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PROJECT TITLE
**KENNET PROPERTIES
 FORMER THEALE, SEWAGE TREATMENT
 WORKS**

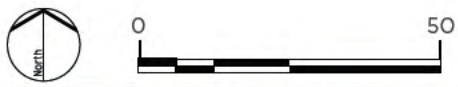
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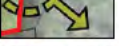
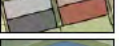
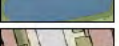

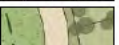


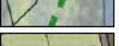
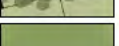
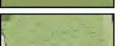

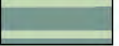
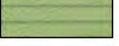

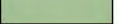


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DATE Nov 2022 **DRAWN** OT
SCALE@A3 1:1250 **CHECKED** JC
STATUS Planning **APPROVED** JC

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- LEGEND**
-  Site boundary (5.0 ha)
 -  Existing improved access from Blossom Lane
 -  Potential link to public footpaths
 -  Potential foot/cycle link to Whitehart Meadows
 -  Residential dwelling
 -  Attenuation basin location
 -  Primary route
 -  Secondary route
 -  Private drive
 -  Shared surface
 -  Proposed footpath
 -  Public Right of Way (PRoW)
 -  Proposed tree planting
 -  Proposed wildflower meadow (planting)
 -  Public Open Space (POS)
 -  Shared residential courtyards
 -  15 metre wide landscape buffer
 -  Restricted access for biodiversity area
 -  Overhead power line
 -  Existing woodland to be retained

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PROJECT TITLE
**KENNET PROPERTIES,
 FORMER THEALE SEWAGE TREATMENT
 WORKS**

DRAWING TITLE
ILLUSTRATIVE MASTERPLAN

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Appendix 3: Condition Assessment Tables

To tabulate the positive indicators in the tables below the text has been taken from the Biodiversity Metric 3.1: Technical Supplement. A best fit has been used to tabulate the following habitat assessments. A condition assessment was not applicable to the habitat types 'Urban; Developed land; sealed surface', or 'Bramble scrub'.

Grassland Condition Assessment (Modified Grassland Area 1)

1	There must be 6-8 species per m ² .	No
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm).	No
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note – patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat.	Yes
4	Physical damage is evident in less than 5% of total grassland area, examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes
5	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes
6	Cover of bracken less than 20%.	Yes
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Yes
Condition:		Poor

Grassland Condition Assessment (Modified Grassland Area 2)

1	There must be 6-8 species per m ² .	Yes
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm).	Yes
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note – patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat.	Yes
4	Physical damage is evident in less than 5% of total grassland area, examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes
5	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes
6	Cover of bracken less than 20%.	Yes
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Yes
Condition:		Good

Grassland Condition Assessment (Modified Grassland Area 3)

1	There must be 6-8 species per m ² .	No
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm).	No
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note – patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat.	Yes
4	Physical damage is evident in less than 5% of total grassland area, examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes
5	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes
6	Cover of bracken less than 20%.	Yes
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Yes
Condition:		Poor

Grassland Condition Assessment (Modified Grassland Area 4)

1	There must be 6-8 species per m ² .	No
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm).	No
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note – patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat.	Yes
4	Physical damage is evident in less than 5% of total grassland area, examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes
5	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes
6	Cover of bracken less than 20%.	Yes
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Yes
Condition:		Poor

Grassland Condition Assessment (Other Neutral Grassland Area 1)

1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type. Wildflowers, sedges, and indicator species for the specific habitat type are very clearly and easily visible throughout the sward.	Yes
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm)	Yes
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Yes
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area.	No
6	There are greater than 9 species per metre squared.	Yes
Condition:		Moderate

Grassland Condition Assessment (Other Neutral Grassland Area 2)

1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type. Wildflowers, sedges, and indicator species for the specific habitat type are very clearly and easily visible throughout the sward.	Yes
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm)	Yes
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	Yes
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Yes
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition ¹ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area.	No
6	There are greater than 9 species per metre squared.	Yes
Condition:		Moderate

Hedgerow Habitat Types Condition Assessment (Native Hedgerow with Trees)

A1	Height: >1.5 m average along length	Yes
A2	Width: >1.5 m average along length	Yes
B1	Gap – hedge base: Gap between ground and base of canopy <0.5 m for >90% of total length.	No
B2	Gap – hedge canopy continuity: Gaps make up <10% of total length and no canopy gaps >5 m.	No
C1	Undisturbed ground and perennial vegetation: >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of its length: - Measured from outer edge of hedgerow, and - is present on one side of the hedge (at least)	Yes
C2	Undesirable perennial vegetation: plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground (indicator sp. Include nettles, cleavers, and docks).	No
D1	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species (neophytes are plants that have naturalised in the UK since AD 1500)	Yes
D2	Current damage: >90% of the hedgerow or undisturbed ground is free of damage caused by human activities (could include evidence of pollution, piles of manure, rubble, excessive hedge cutting)	Yes
E1	Tree age: at least one mature tree per 30 m stretch of hedgerow. A mature tree is one that is at least 2/3 expected fully mature height for the species.	Yes
E2	Tree health: at least 95% of the hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little to no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests, or diseases, or human activity.	No
Condition:		Moderate

Other Woodland, Broadleaved

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
1	Age distribution of trees ¹	Three age classes present	Two age classes present	One age class present	3
2	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ²	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland	3
3	Invasive plant species ³	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	3
4	Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel	3
5	Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	< 50% of canopy trees and <50% of understory shrubs are native	3
6	Open space within woodland ⁴	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	2
7	Woodland regeneration ⁵	All three classes present in woodland; trees 4-7cm dbh, saplings and seedlings or advanced coppice regrowth	One or two classes only present in woodland	No classes or coppice regrowth present in woodland	2
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	3
9	Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	2
10	Woodland vertical structure ⁶	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots	2
11	Veteran trees ⁷	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	2

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	2
13	Woodland disturbance ⁸	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	2
Total Score					31
Condition Achieved					Moderate

Plantation Woodland

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
1	Age distribution of trees ¹	Three age classes present	Two age classes present	One age class present	1
2	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ²	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Evidence of significant browsing pressure is present in 40% or more of whole woodland	3
3	Invasive plant species ³	No invasive species present in woodland	Rhododendron or laurel not present, other invasive species < 10% cover	Rhododendron or laurel present, or other invasive species > 10% cover	3
4	Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Three to four native tree or shrub species found across woodland parcel	None to two native tree or shrub species across woodland parcel	2
5	Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	50-80% of canopy trees and 50-80% of understory shrubs are native	< 50% of canopy trees and <50% of understory shrubs are native	3
6	Open space within woodland ⁴	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	21- 40% of woodland has areas of temporary open space	More than 40% of woodland has areas of temporary open space	2

Indicator		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator
7	Woodland regeneration ⁵	All three classes present in woodland; trees 4-7cm dbh, saplings and seedlings or advanced coppice regrowth	One or two classes only present in woodland	No classes or coppice regrowth present in woodland	1
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	11% to 25% mortality and/or crown dieback or low risk pest or disease present	Greater than 25% tree mortality and or any high risk pest or disease present	3
9	Vegetation and ground flora	Ancient woodland flora indicators present	Recognisable NVC plant community present	No recognisable NVC community	2
10	Woodland vertical structure ⁶	Three or more storeys across all survey plots or a complex woodland	Two storeys across all survey plots	One or less storey across all survey plots	1
11	Veteran trees ⁷	Two or more veteran trees per hectare	One veteran tree per hectare	No veteran trees present in woodland	1
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	1
13	Woodland disturbance ⁸	No nutrient enrichment or damaged ground evident	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	2
Total Score					25
Condition Achieved					Poor

Line of Trees Condition Assessment (1)

1	More than 70% of trees are native species.	Yes
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide.	Yes
3	Includes one or more mature or veteran tree.	Yes
4	There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other anthropogenic operations.	No
5	At least 95% of the trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes
Condition:		Moderate

Line of Trees Condition Assessment (2)

1	More than 70% of trees are native species.	Yes
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide.	Yes
3	Includes one or more mature or veteran tree.	Yes
4	There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other anthropogenic operations.	Yes
5	At least 95% of the trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes
Condition:		Good

Line of Trees Condition Assessment (3)

1	More than 70% of trees are native species.	Yes
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5m wide.	No
3	Includes one or more mature or veteran tree.	Yes
4	There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other anthropogenic operations.	Yes
5	At least 95% of the trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes
Condition:		Moderate

Ditch Condition Assessment

1	The ditch is of good water quality with clear water (low turbidity) indicating no obvious signs of pollution.	Yes
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	No
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Yes
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	No
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Yes
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	No
7	Less than 10% of the ditch is heavily shaded.	No
8	There is an absence of non-native plants and animal species.	Yes
Condition:		Poor

The Biodiversity Metric

Project details	
Planning authority:	W
Project name:	Land at Former
Applicant:	Kenn
Application type:	
Planning application reference:	
Assessor:	C
Reviewer:	
Metric version:	
Assessment date:	
Planning authority reviewer:	

Cell style conventions	

On-site baseline map

Insert

Off-site baseline map

Insert

Figure 3.1 - Calculation Tool

West Berkshire Council
For Theale Sewage Treatment Works
Contract Properties Ltd (KPL)
N/A
THE7
Marina Morris (ADAS)
3.1
16/11/2022

Enter data
Automatic lookup
Result

Instructions

Main menu

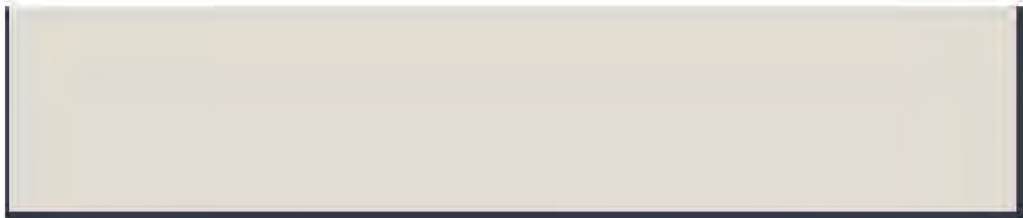
Results

View all

Reset view

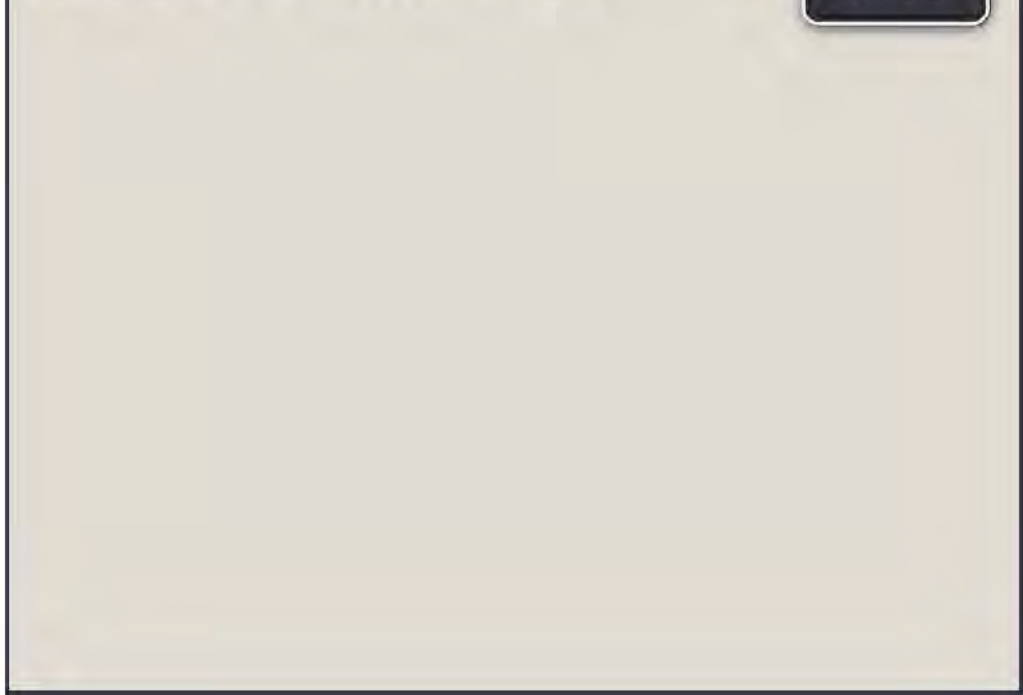
On-site post intervention map

Insert

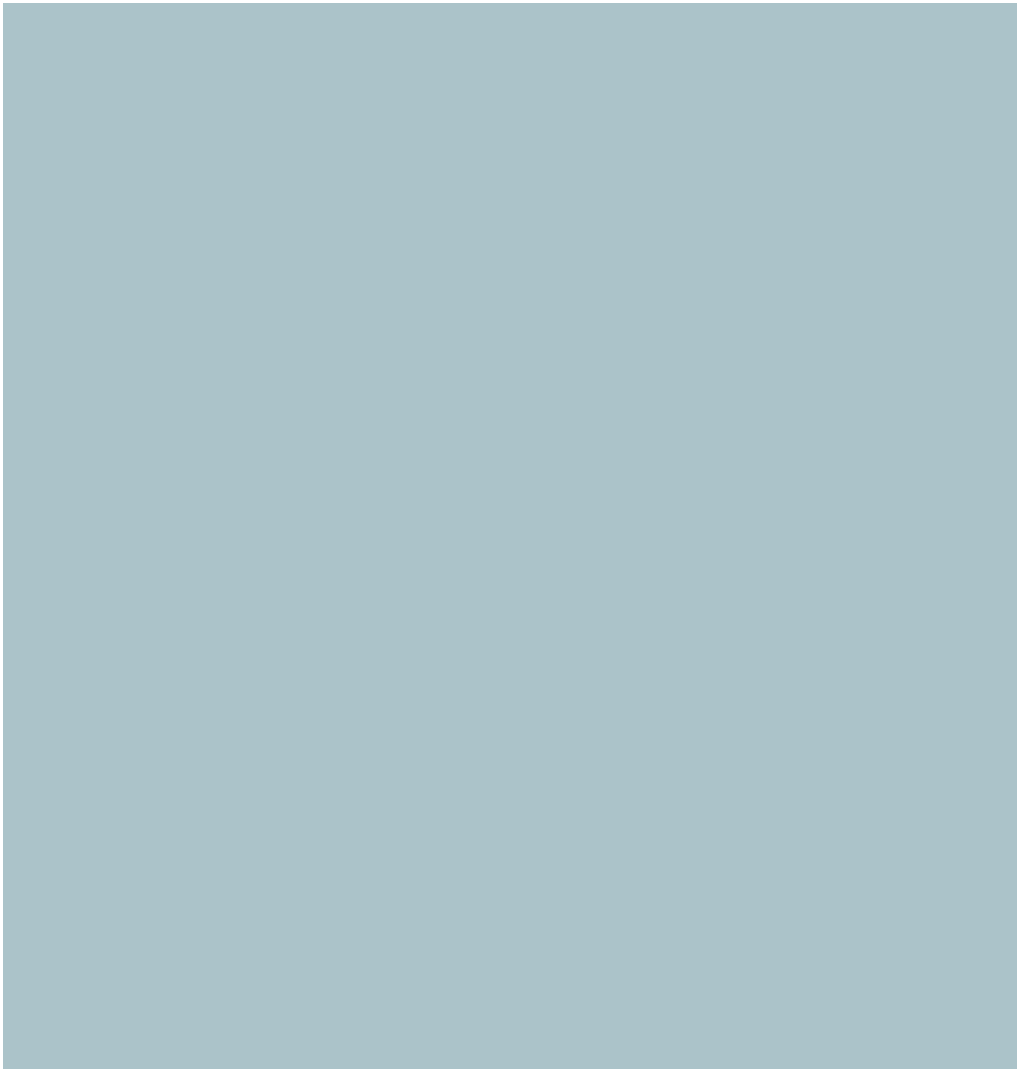


Off-site post intervention map

Insert







The Biodiversity Metric 3.1

Double click the front page

Start page

Main menu

Natural England Joint Publication JP039

Biodiversity Metric 3.1

Auditing and accounting for biodiversity

Calculation Tool: Short Guide

First published 21st April 2022

www.gov.uk/guidance/biodiversity-metric-3-1-calculation-tool-short-guide

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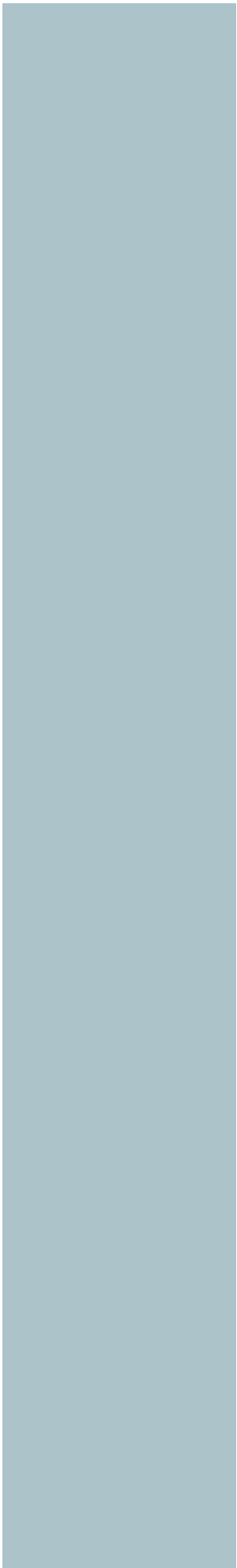
- Calculation Tool

Click the image below to open the file

le

NATURAL
ENGLAND





Key

-  Area habitats
-  Hedgerows and
-  Rivers and streams

The Biodiversity M

M

Start page

Instructio

Start here

1



2







On-site baseline

- A-1 On-site habitat baseline**

- 1 On-site hedge baseline**

- C-1 On-site river baseline**


On-site post development

- A-2 Habitat creation**

- A-3 Habitat enhancement**

- B-2 Hedgerow creation**

- B-3 Hedgerow enhancement**

- C-2 River creation**

- C-3 River enhancement**


Metric 3.1 - Calculation Tool

Main menu

Urban
Tree size
Small
Medium
Large
Total

ons

Technical data

Results



3



Off-site baseline

D-1
Off-site
habitat baseline

E-1
Off-site hedge
baseline

F-1
Off-site river
baseline

Off-sit

D-2 Off-site habit
creation

E-2 Off-site hedge
creation

F-2 Off-site river
creation

t

w
t

ement

tree helper

Number of trees and area (ha) for each condition state

Poor	Area	Moderate	Area	Good	Area
	0.0000		0.0000		0.0000
	0.0000		0.0000		0.0000
	0.0000		0.0000		0.0000
0	0.0000	0	0.0000	0	0.0000

4

te post development

at

D-3 Off-site habitat
enhancement



ge

E-3 Off-site hedge
enhancement



r

F-3 Off-site river
enhancement



Land at Former Theale Sewage Treatment Works

Headline Results

Return to results menu

On-site baseline	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>
On-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>
On-site net % change (Including habitat retention, creation & enhancement)	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>
Off-site baseline	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>
Off-site post-intervention (Including habitat retention, creation & enhancement)	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>

<p style="text-align: center;">Total net unit change</p> <p style="text-align: center;">(including all on-site & off-site habitat retention, creation & enhancement)</p>	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>
<p style="text-align: center;">Total on-site net % change plus off-site surplus</p> <p style="text-align: center;">(including all on-site & off-site habitat retention, creation & enhancement)</p>	<i>Habitat units</i>
	<i>Hedgerow units</i>
	<i>River units</i>
Trading rules Satisfied?	Ye

24.93
1.88
0.96

28.10
2.35
1.52

12.71%
24.52%
58.10%

0.00
0.00
0.00

0.00
0.00
0.00

3.17
0.46
0.56
12.71%
24.52%
58.10%
es✓







Detailed Results

Summary Figures

Net project biodiversity

(including all on-site & off-site habitat retention)

Total project biodiversity

(including all On-site & Off-site Habitat Creation)

Combined

Total on-site and off-site baseline area / length

Total on-site and off-site baseline units

Total on-site and off-site baseline area / length retained

Total on-site and off-site baseline units retained

Area / length proposed for enhancement

Baseline units proposed for enhancement

Total on-site and off-site baseline area / length lost

Total on-site and off-site baseline units lost

Area habitats

On site change

Area Habitats

Habitat group
Cropland
Grassland
Heathland and shrub
Lakes
Sparsely vegetated land
Urban
Wetland
Woodland and forest
Intertidal sediment
Coastal saltmarsh
Rocky shore
Coastal lagoons
Intertidal Hard Structures

Off site ch

Area Habitats

Habitat group
Cropland
Grassland
Heathland and shrub
Lakes
Sparsely vegetated land
Urban
Wetland
Woodland and forest
Intertidal sediment
Coastal saltmarsh
Rocky shore
Coastal lagoons
Intertidal Hard Structures

Combined on site and

Area Habitats

Habitat group

- Cropland
- Grassland
- Heathland and shrub
- Lakes
- Sparsely vegetated land
- Urban
- Wetland
- Woodland and forest
- Intertidal sediment
- Coastal saltmarsh
- Rocky shore
- Coastal lagoons
- Intertidal Hard Structures

Hedgerows and Lines of Trees

Hedgerows and lines of trees

On site

Hedgerow type

- Native Species Rich Hedgerow with trees - Associated with bank or ditch
- Native Species Rich Hedgerow with trees
- Native Species Rich Hedgerow - Associated with bank or ditch
- Native Hedgerow with trees - Associated with bank or ditch
- Native Species Rich Hedgerow
- Native Hedgerow - Associated with bank or ditch
- Native Hedgerow with trees
- Line of Trees (Ecologically Valuable)
- Line of Trees (Ecologically Valuable) - with Bank or Ditch
- Native Hedgerow
- Line of Trees
- Line of Trees - Associated with bank or ditch
- Hedge Ornamental Non Native

Off site

Hedgerow type

Native Species Rich Hedgerow with trees - Associated with bank or ditch

Native Species Rich Hedgerow with trees

Native Species Rich Hedgerow - Associated with bank or ditch

Native Hedgerow with trees - Associated with bank or ditch

Native Species Rich Hedgerow

Native Hedgerow - Associated with bank or ditch

Native Hedgerow with trees

Line of Trees (Ecologically Valuable)

Line of Trees (Ecologically Valuable) - with Bank or Ditch

Native Hedgerow

Line of Trees

Line of Trees - Associated with bank or ditch

Hedge Ornamental Non Native

Combined on and

Hedgerow type

Native Species Rich Hedgerow with trees - Associated with bank or ditch

Native Species Rich Hedgerow with trees

Native Species Rich Hedgerow - Associated with bank or ditch

Native Hedgerow with trees - Associated with bank or ditch

Native Species Rich Hedgerow

Native Hedgerow - Associated with bank or ditch

Native Hedgerow with trees

Line of Trees (Ecologically Valuable)

Line of Trees (Ecologically Valuable) - with Bank or Ditch

Native Hedgerow

Line of Trees

Line of Trees - Associated with bank or ditch

Hedge Ornamental Non Native

Rivers and Streams

On site

River type

Priority Habitat

Other Rivers and Streams

Ditches

Canals

Culvert

Off site

River type

Priority Habitat

Other Rivers and Streams

Ditches

Canals

Culvert

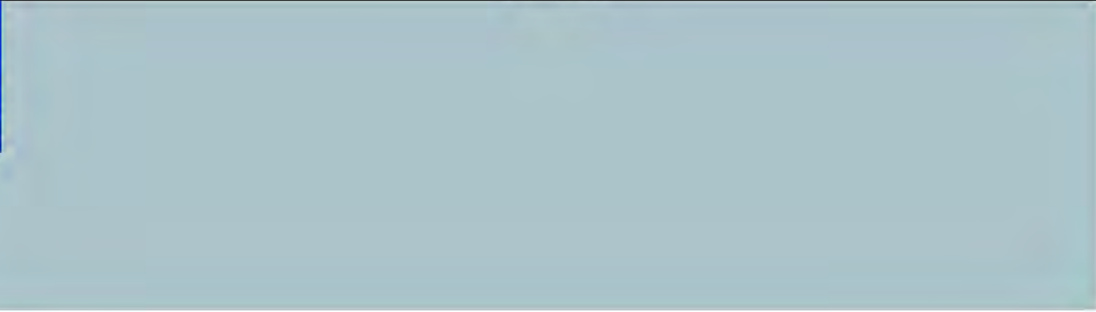
Combined on site

Rivers and Streams

Rivers and Streams

Rivers and Streams

River type
Priority Habitat
Other Rivers and Streams
Ditches
Canals
Culvert



Works

Return to results menu

ty units

(retention/creation)

Habitat units

Hedgerow units

River units

% change

(+ Retained Habitats)

Habitat units

Hedgerow units

River units

habitat retention and enhancement

	Habitats	Hedgerows
	5.00	0.28
	24.93	1.88
	0.25	0.28
	2.00	1.88
	1.29	0.00
	10.35	0.00
	3.46	0.00
	12.58	0.00

change by broad habitat type

Baseline		Post development on site		Onsite
Existing area	Existing value	Proposed area	Proposed value	Area change
0.00	0.00	0.00	0.00	0.00
3.66	17.38	1.74	11.61	-1.92
0.30	1.20	0.23	2.13	-0.07
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.25	0.00	3.26	5.21	3.01
0.00	0.00	0.00	0.00	0.00
0.79	6.35	0.79	9.15	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	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00

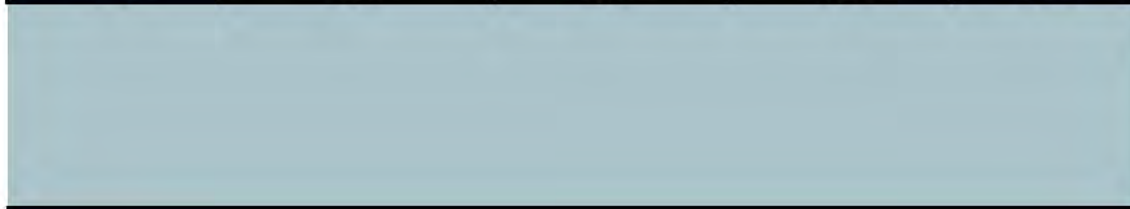
Change by broad habitat type

Baseline		Post development Off-site		Off-site
Existing area	Off-site Existing value	Off-site proposed area	Off site Proposed value	Off-site area change
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	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	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	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	0.00	0.00

Off site change by broad habitat type

Baseline	On-site and Off-site post development	Combined
----------	---------------------------------------	----------

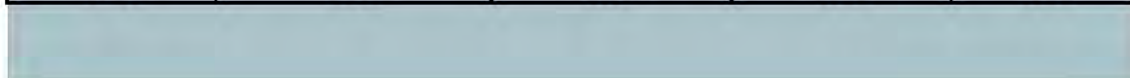
Existing area	Existing value	Combined proposed area	Combined proposed value	Proposed area
0.00	0.00	0.00	0.00	0.00
3.66	17.38	1.74	11.61	-1.92
0.30	1.20	0.23	2.13	-0.07
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.25	0.00	3.26	5.21	3.01
0.00	0.00	0.00	0.00	0.00
0.79	6.35	0.79	9.15	0.00
0.00	0.00	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	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



S

change by hedgerow type

Baseline		Post development on site		Onsite
Existing length on-site	Existing value	Proposed length on-site	Proposed value on-site	On-site length change
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	0.00	0.00	0.00
0.00	0.00	0.06	0.46	0.06
0.00	0.00	0.00	0.00	0.00
0.12	1.10	0.12	1.10	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
0.16	0.78	0.16	0.78	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00



change by hedgerow type

Off site baseline		Post development off site		Off site
Existing length off-site	Existing value off-site	Proposed length off-site	Proposed value off-site	Off-site length change
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	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	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	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	0.00	0.00
0.00	0.00	0.00	0.00	0.00

on site change by hedgerow type

Baseline		Post development on site		On site
Existing length	Existing value	Proposed length	Proposed value	length change
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	0.00	0.00	0.00
0.00	0.00	0.06	0.46	0.06
0.00	0.00	0.00	0.00	0.00
0.12	1.10	0.12	1.10	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	0.00	0.00	0.00	0.00
0.16	0.78	0.16	0.78	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00

te change by river type

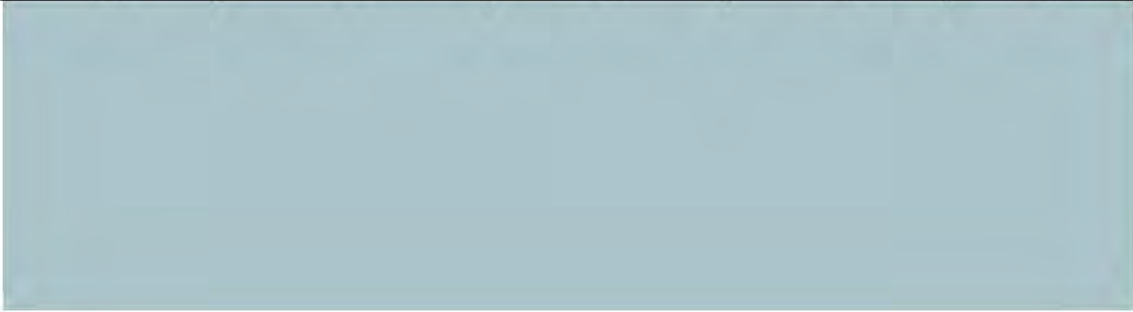
Baseline		Post development on site		Onsite
Existing length	Existing value	Proposed length	Proposed value	length change
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.2	1.0	0.2	1.5	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

te change by river type

Baseline		Post development off-site		Off-site
Existing length off-site	Existing value off-site	Proposed length off-site	Proposed value off-site	Off-site length change
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

and off site change by river type

Baseline		Post development on site		Onsite
Existing length	Existing value	Proposed length	Proposed value	length change
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.2	1.0	0.2	1.5	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0



3.17
0.46
0.56

12.71%
24.52%
58.10%

--

Rivers
0.24
0.96

0.00
0.00

0.24
0.96

0.00
0.00

--

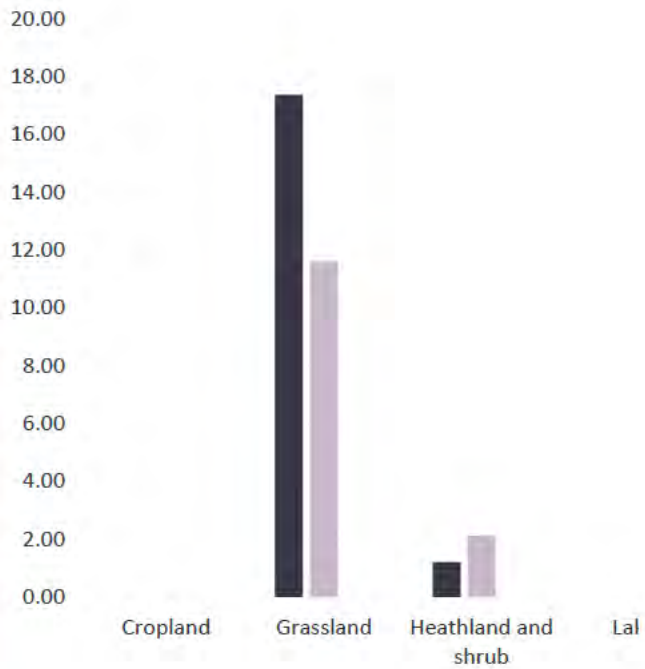
--

Onsite Unit change
0.00
-5.77
0.93
0.00
0.00
5.21
0.00
2.80
0.00
0.00
0.00
0.00
0.00
0.00

Combined area lost by distri

Category	Area lost (hectares)
V.High	0
High	0
Medium	0.34
Low	2.87
V.Low	0.25

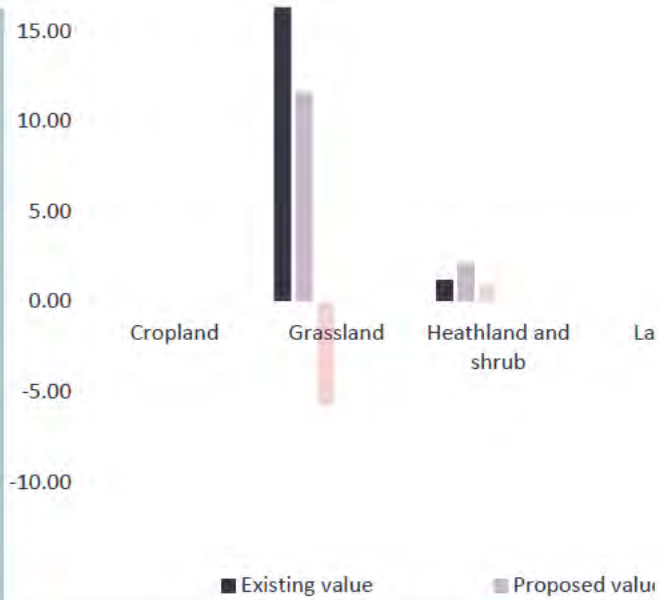
Off-site unit change
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00



ned change
0.00

20.00

Proposed value
0.00
-5.77
0.93
0.00
0.00
5.21
0.00
2.80
0.00
0.00
0.00
0.00
0.00
0.00



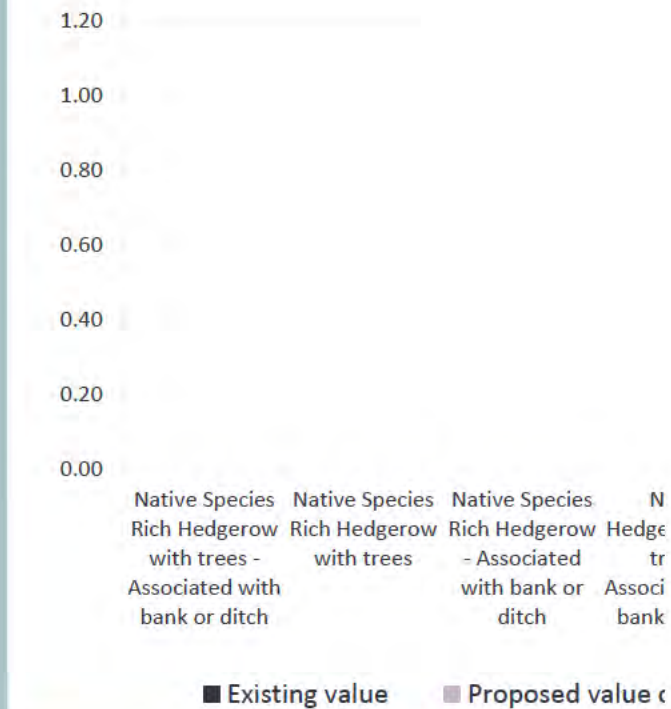
Change
On-site Unit change
0.00
0.00
0.00
0.00
0.46
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00

Combined length lost by dist	
Category	Length lost (KM)
V.High	0
High	0
Medium	0
Low	0
V.Low	0

Value Change
Off site Unit change
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



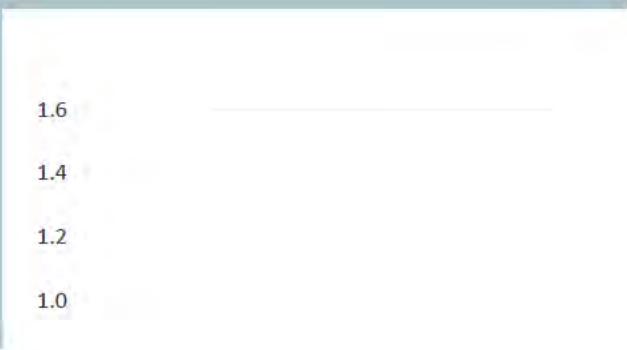
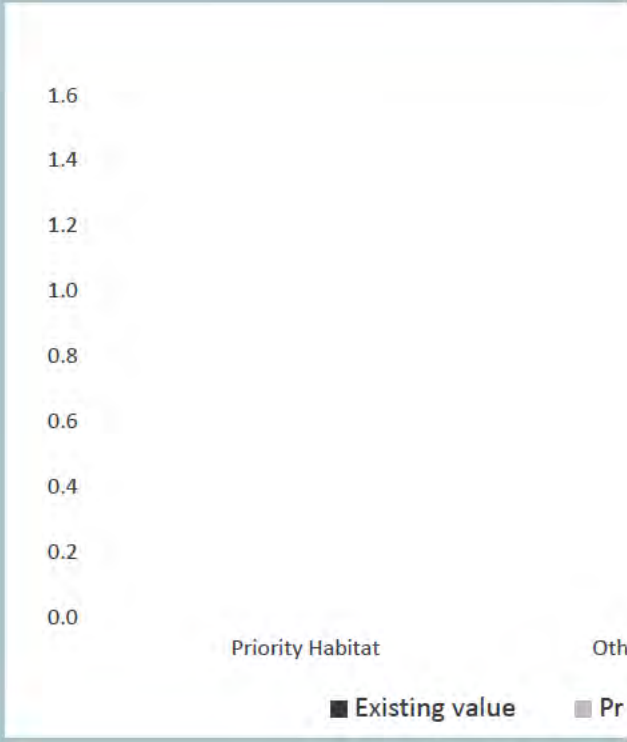
Value Change
Onsite Unit change
0.00
0.00
0.00
0.00
0.46
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00



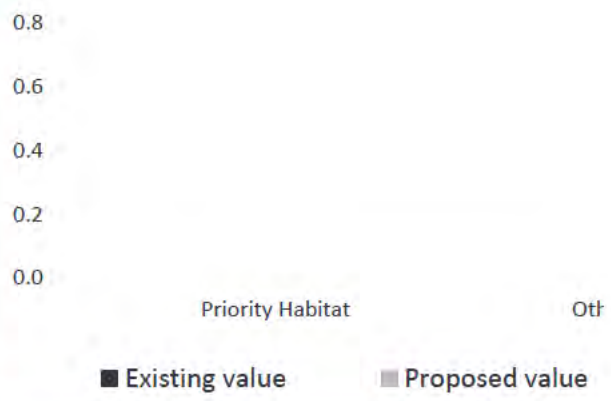
Onsite Unit change
0.0
0.0
0.6
0.0
0.0

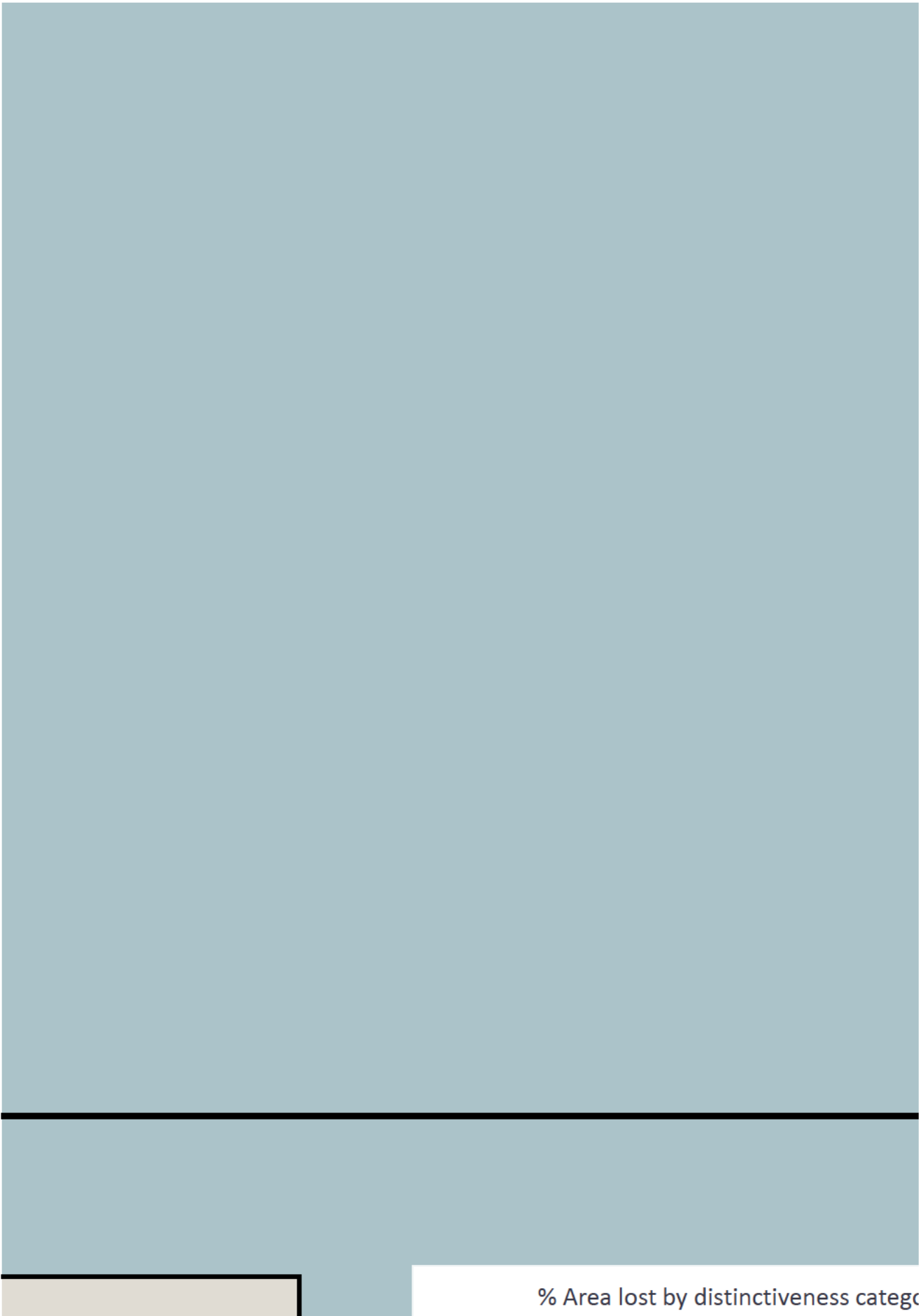
Combined length lost by disti	
Category	Length lost (KM)
V.High	0
High	0
Medium	0
Low	0

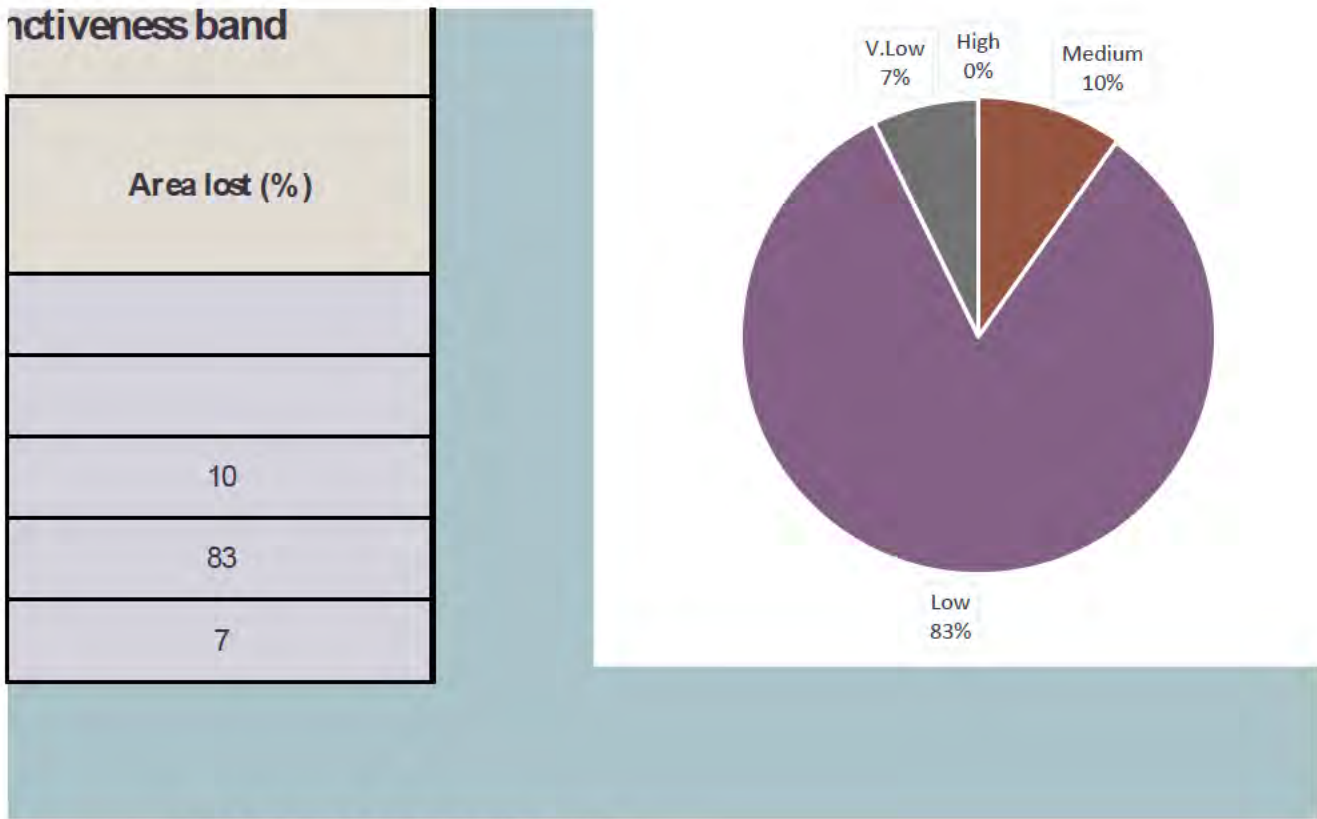
Off-site unit change
0.0
0.0
0.0
0.0
0.0



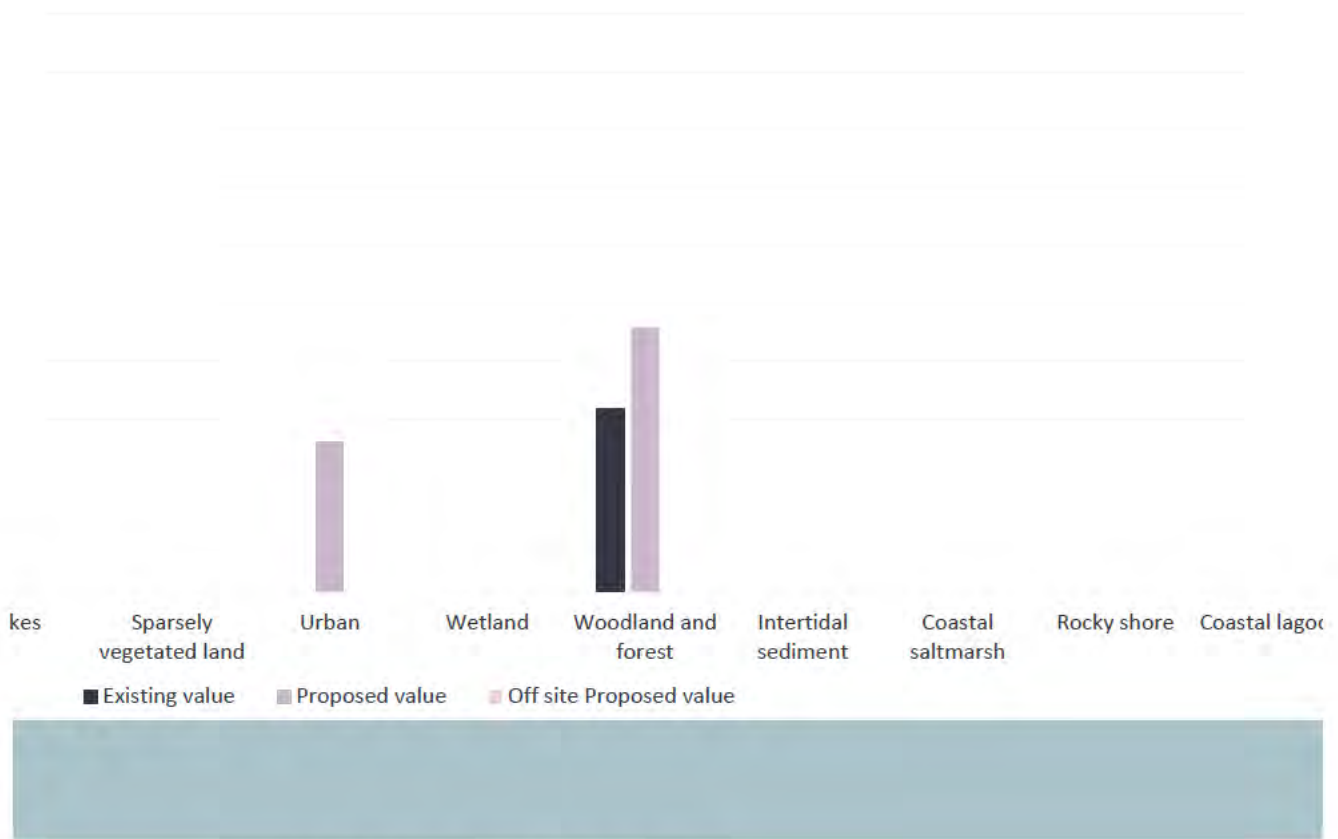
Change
Onsite Unit change
0.0
0.0
0.6
0.0
0.0



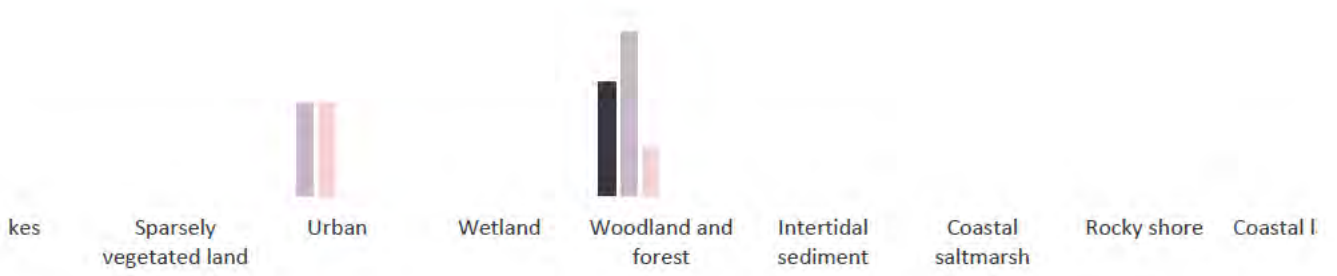




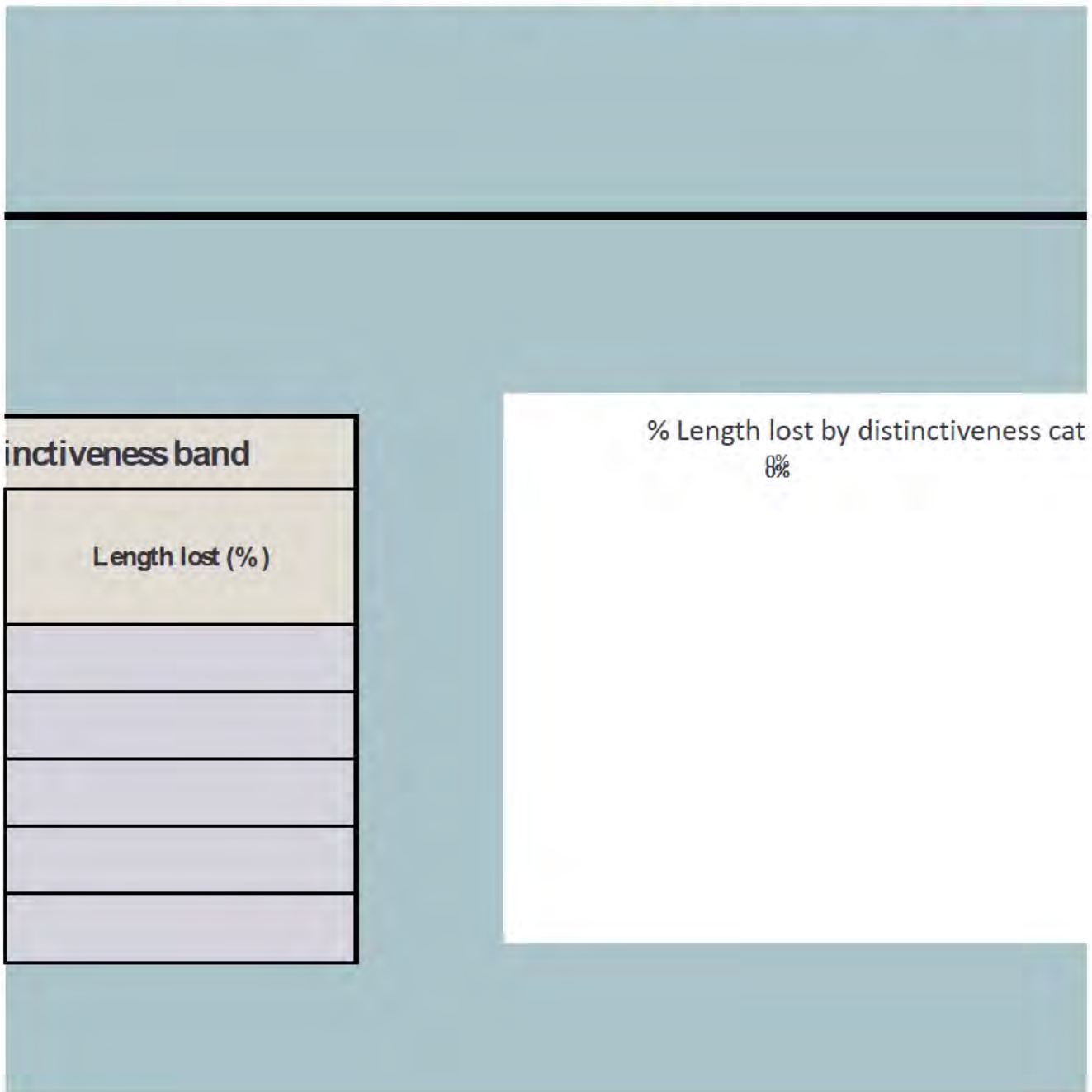
Unit change by habitat group



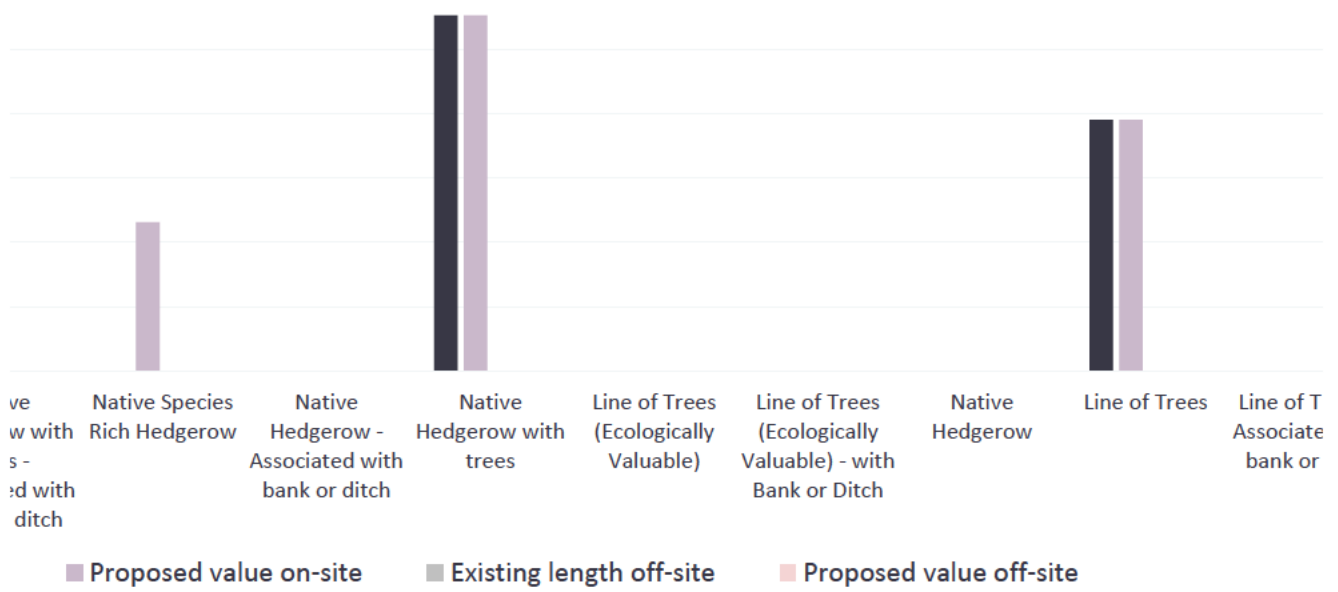
Combined Biodiversity Unit change



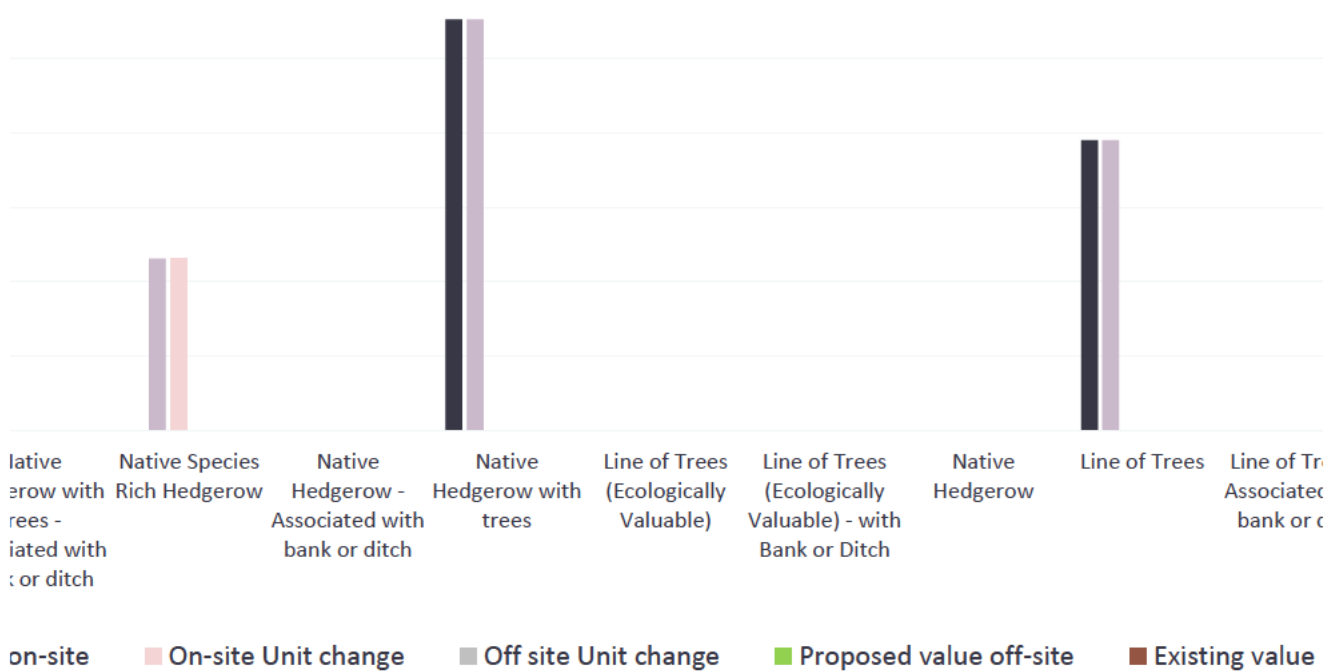
e ■ Onsite Unit change ■ Off-site unit change ■ Off site Proposed value ■ Off-site Existir

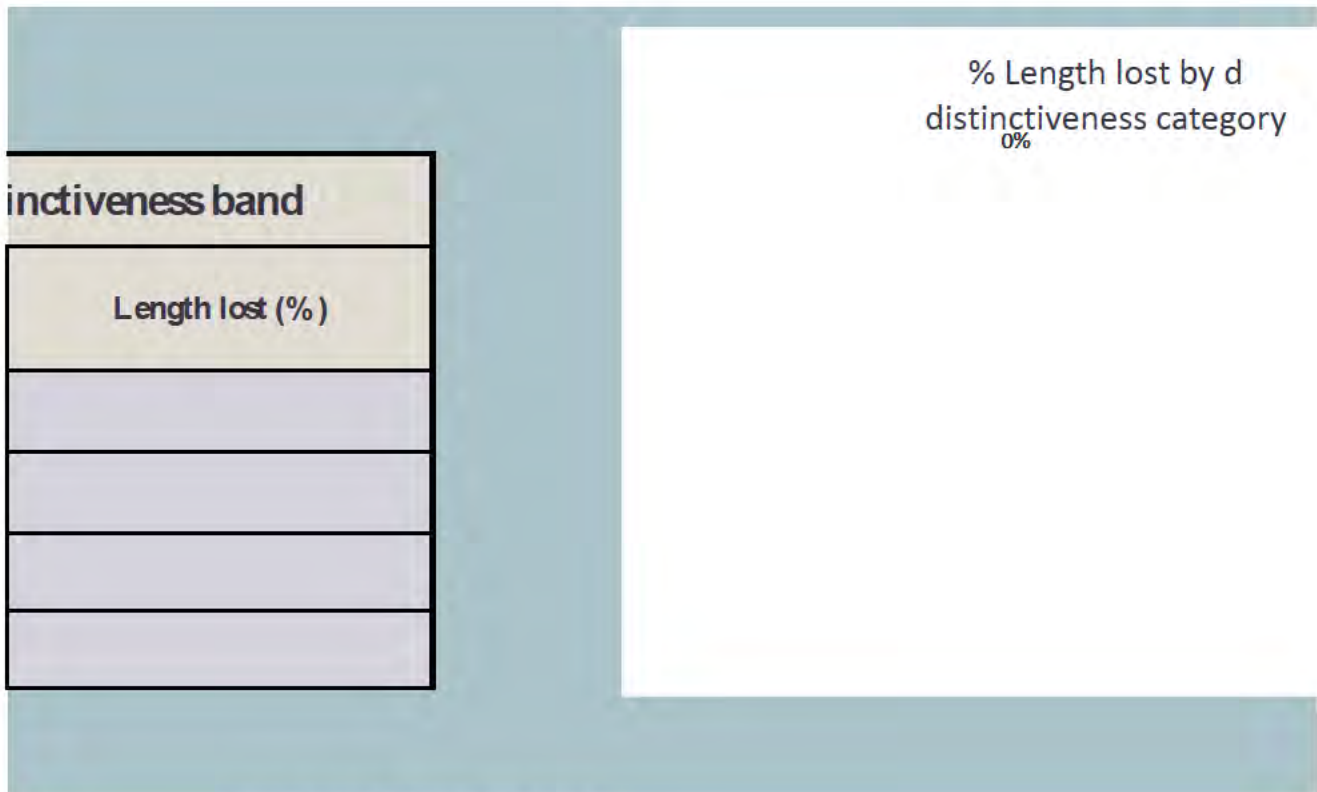


Change by hedgerow type (Hedgerow units)

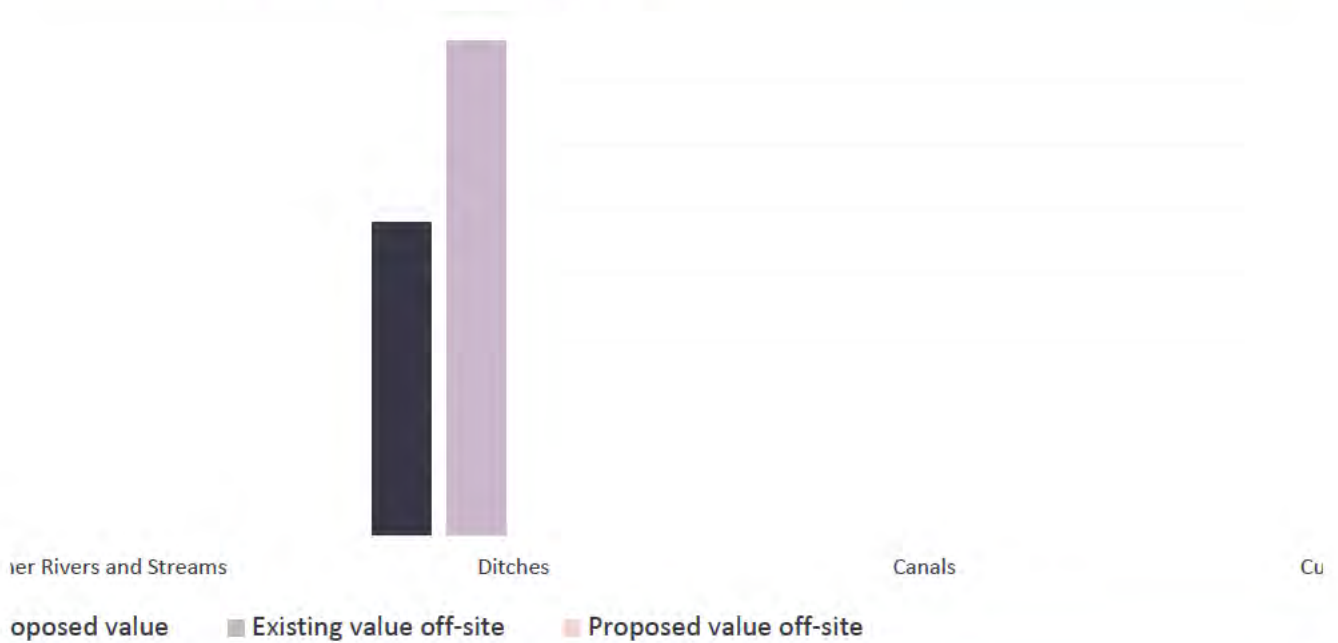


Combined Biodiversity unit change



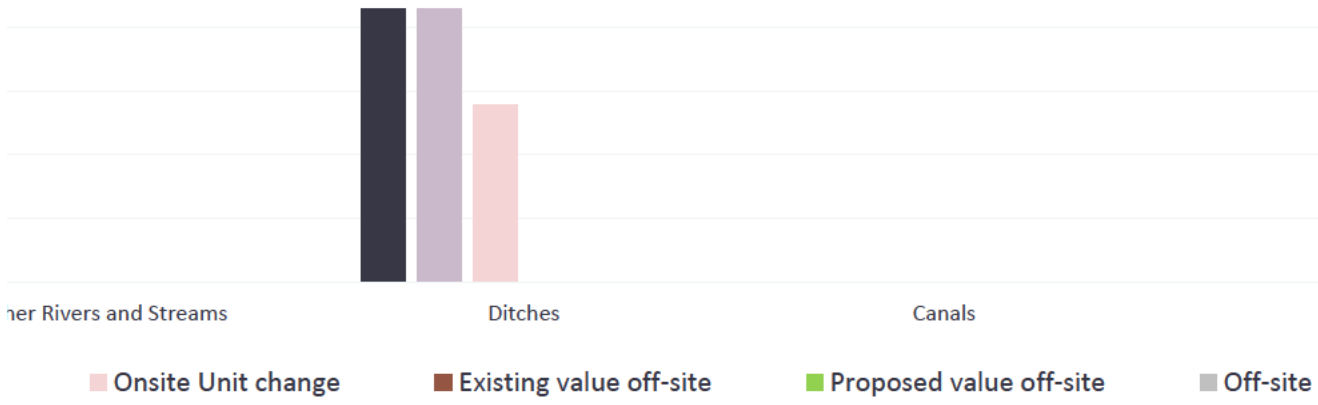


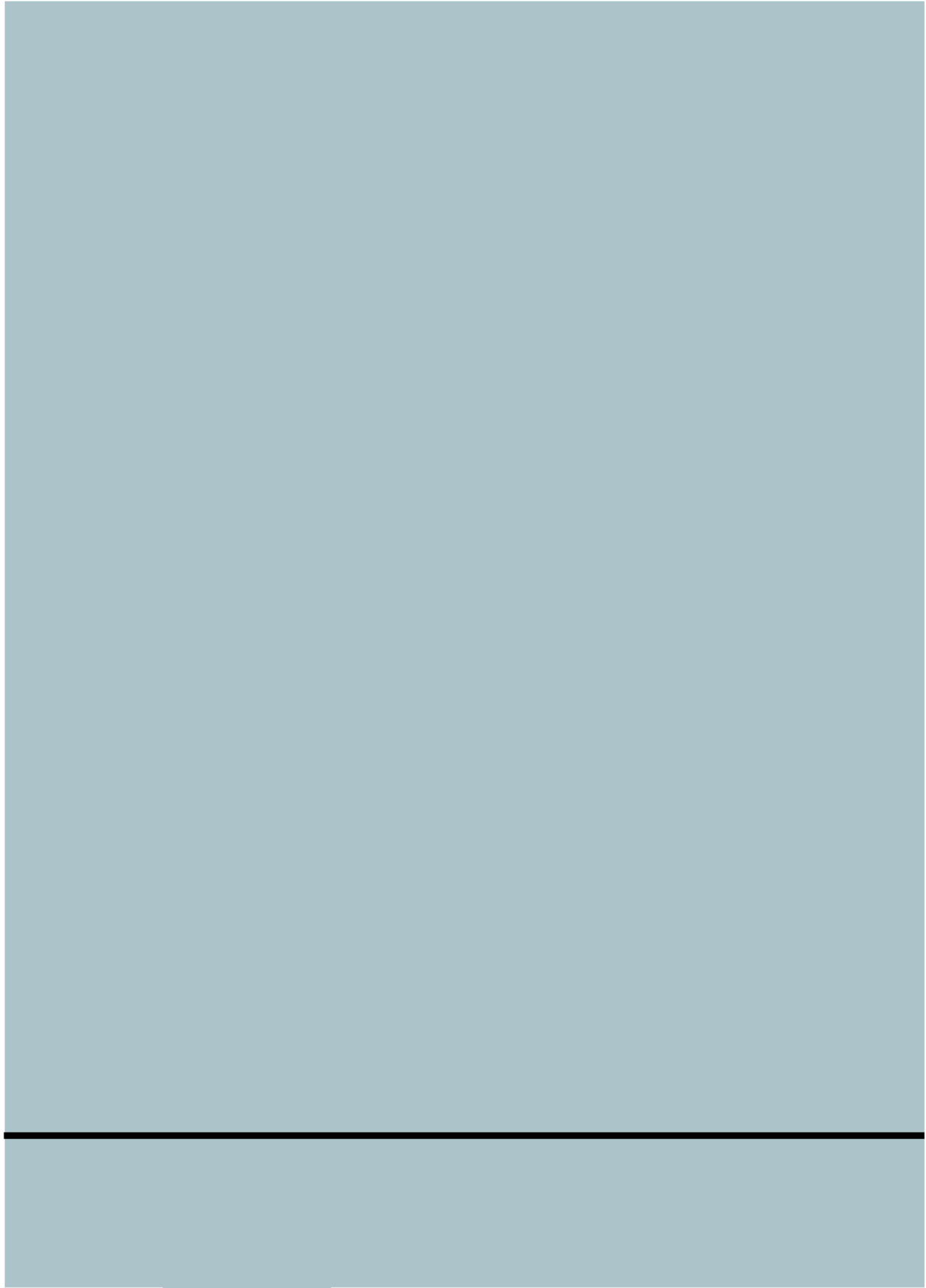
Unit change by river type



Combined Biodiversity Unit change







ory

On-site and off-site habitat retention by cate

On site and off site habitat retention by catch area (hectares)

■ V.High

■ High

■ Medium

■ Low

■ V.Low

4.00

3.50

3.00

2.50

2.00

1.50

1.00

0.50

0.00

Total on-site and off-site
baseline area / length retained

Area / length proposed for
enhancement

Total baseline

0.25

1.29

4.00

3.50

3.00

2.50

2.00

1.50

1.00

0.50

0.00

Cropland

Grassland

Heathland and
shrub

Lakes

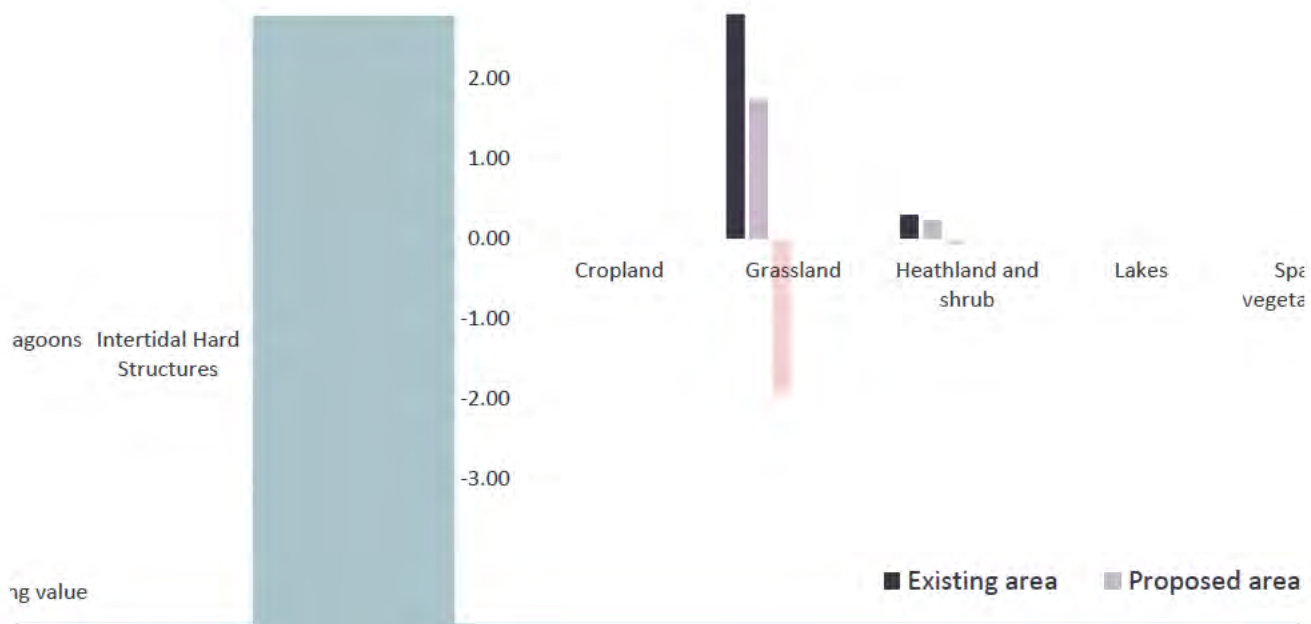
Spartan
vegetation

■ Existing area

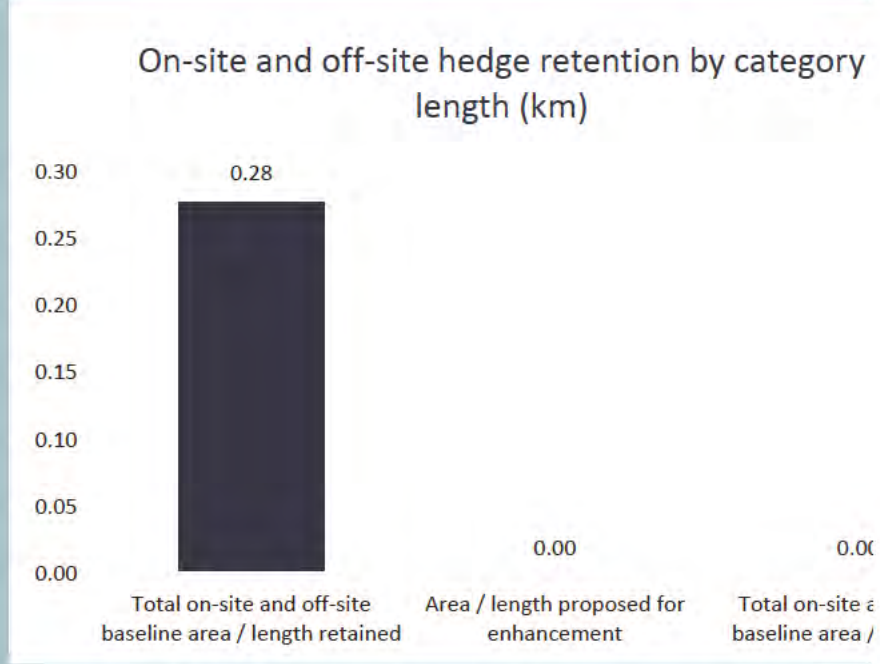
Intertidal Hard
Structures

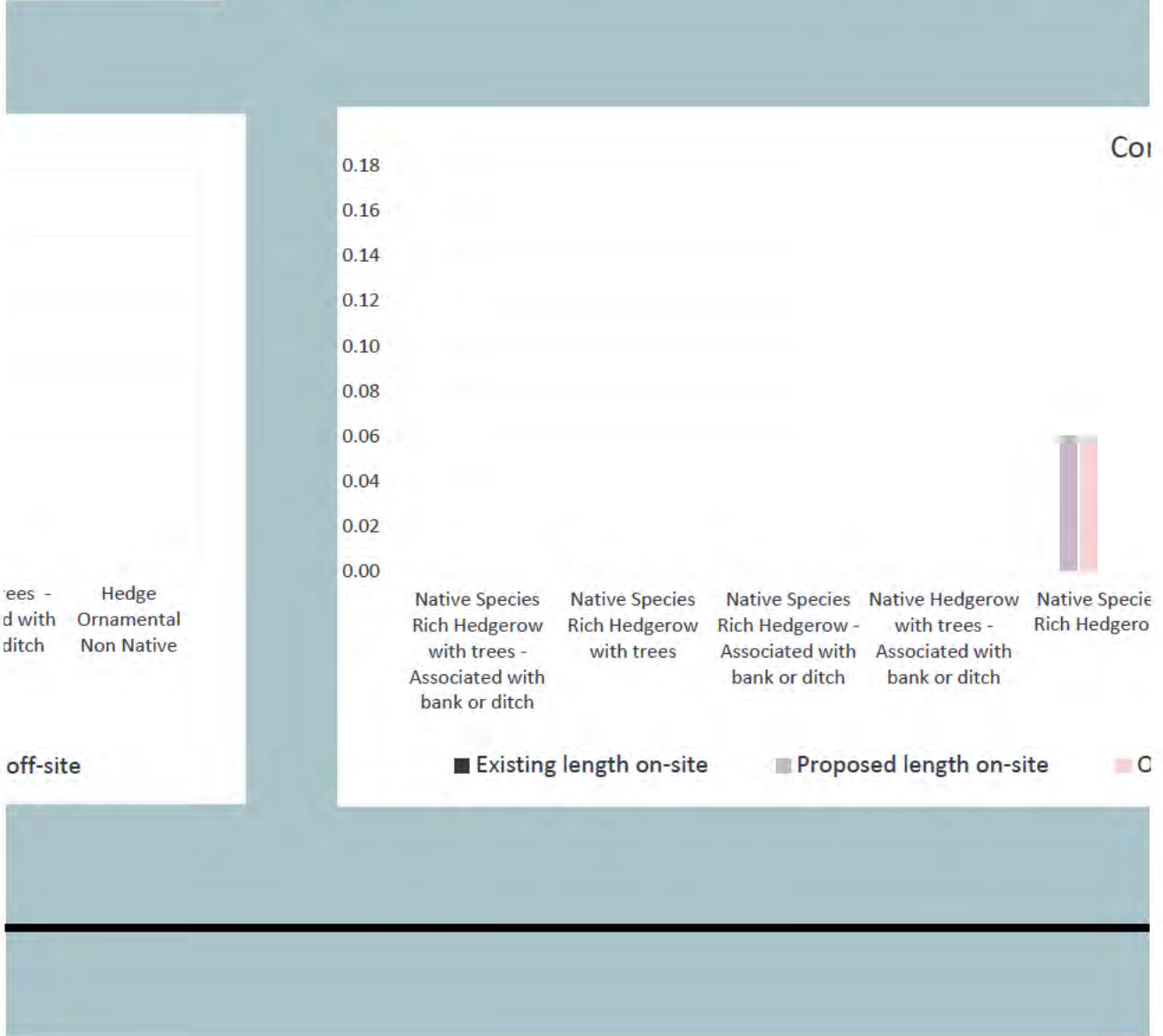
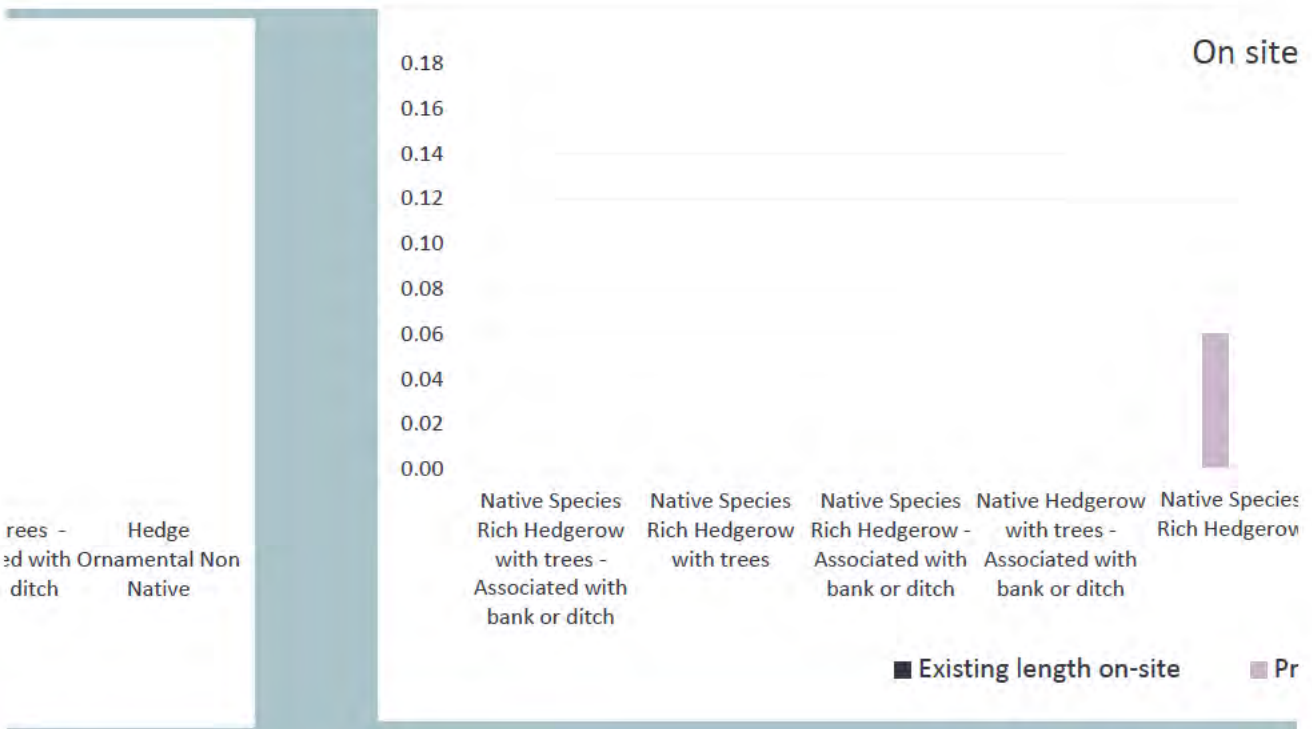
4.00

3.00



- Category
- V.High
 - High
 - Medium
 - Low
 - V.Low





River length retained, proposed for enhancement (length km)

■ V.High

■ High

■ Medium

■ Low

0.30

0.25

0.20

0.15

0.10

0.05

0.00

0.24

0.00

0.00

Total on-site and off-site
baseline area / length retained

Area / length proposed for
enhancement

Total on-site and c
baseline area / leng

0.3

0.3

0.2

0.2

0.1

0.1

0.0

Priority Habitat

Other Rivers and Streams

■ Existing length

■ Proposed length

■

alvert

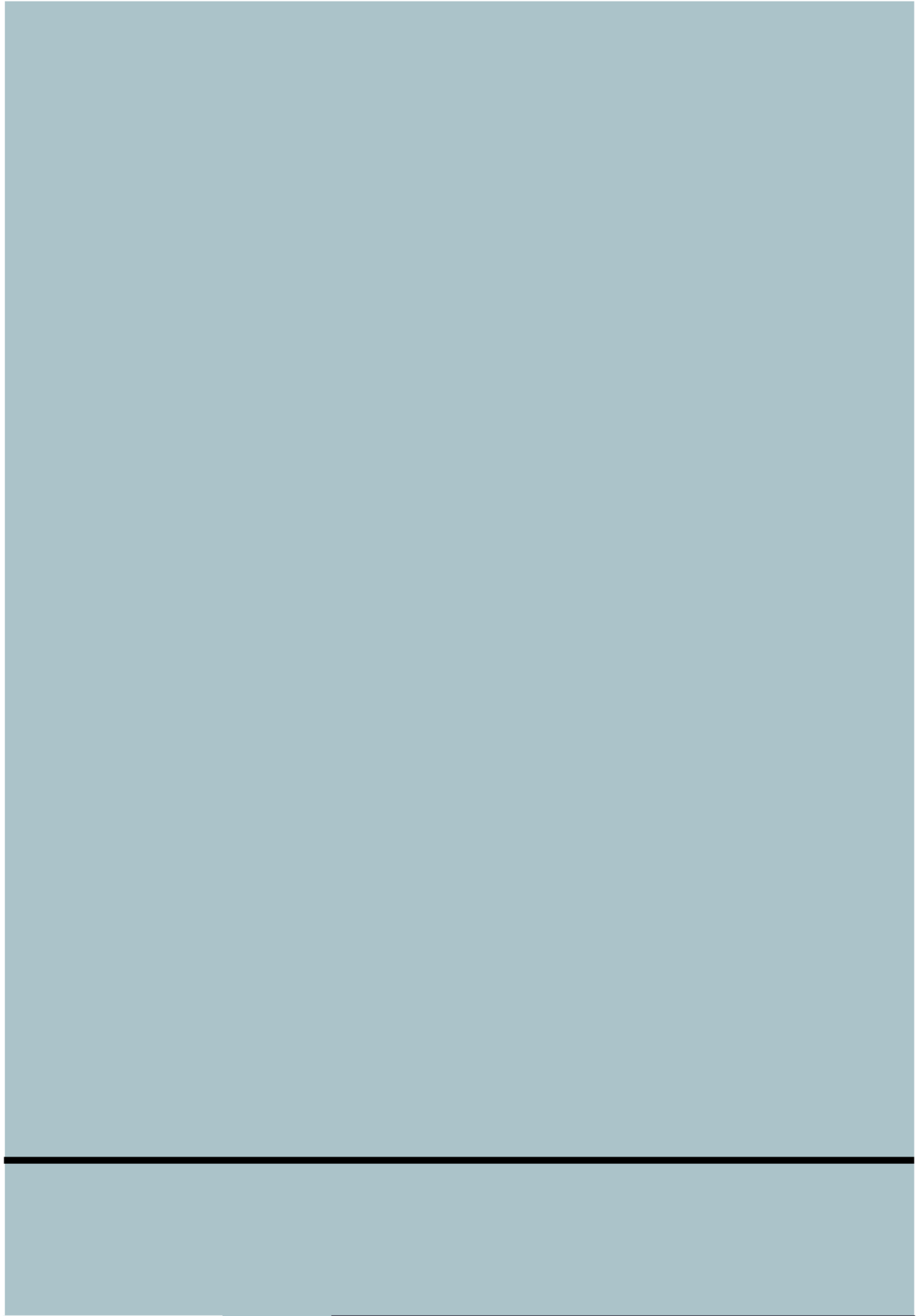
0.3

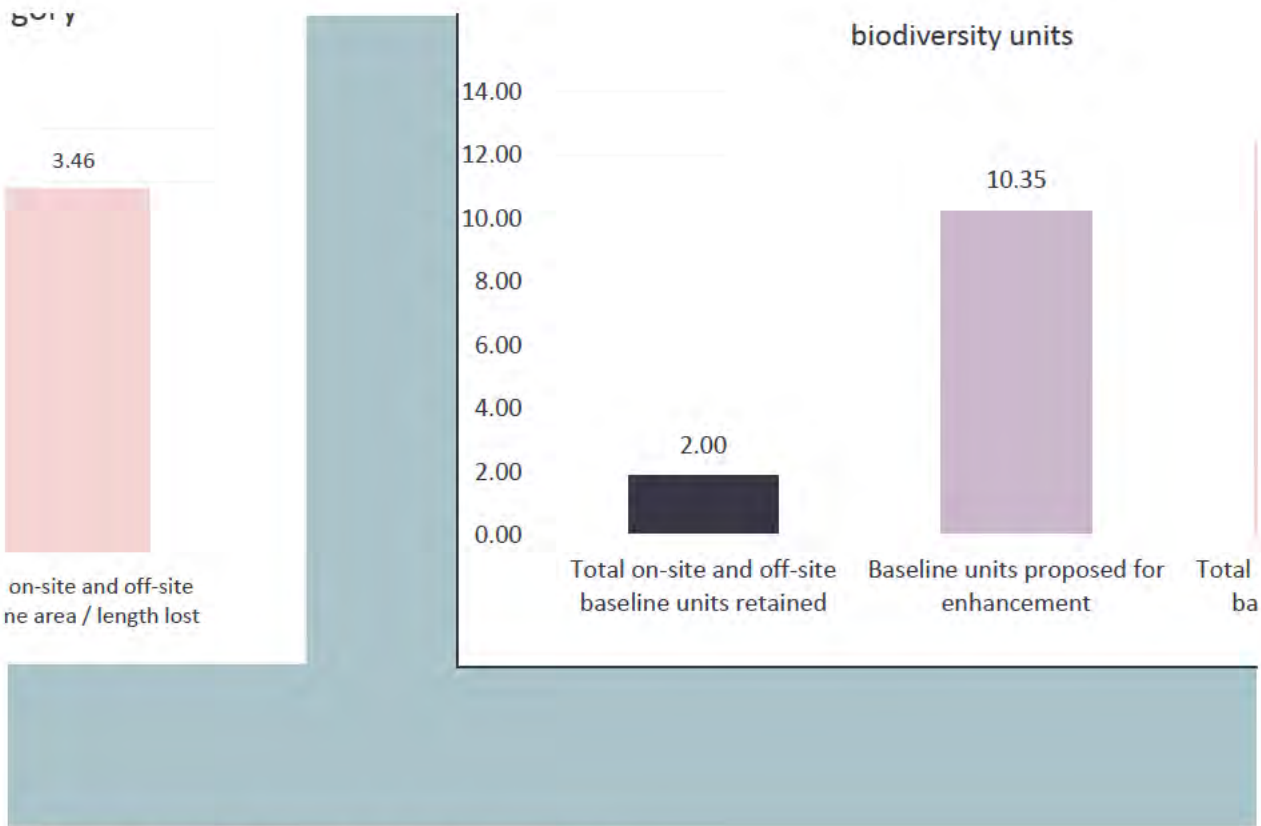
0.3

0.2

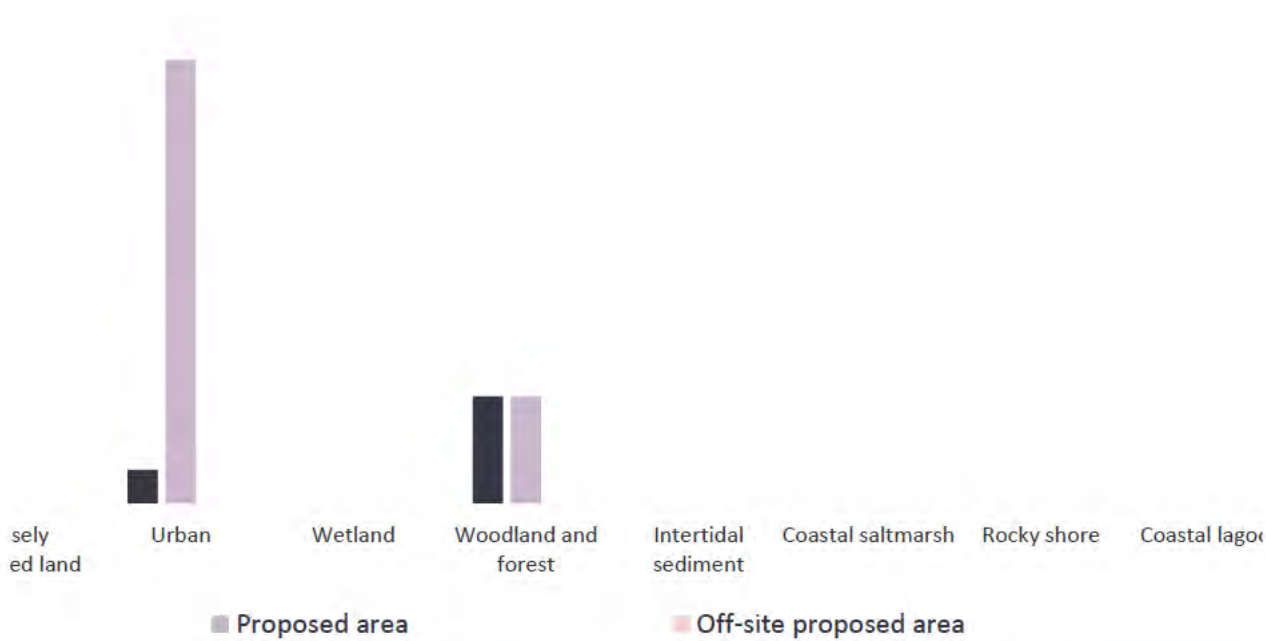
0.2





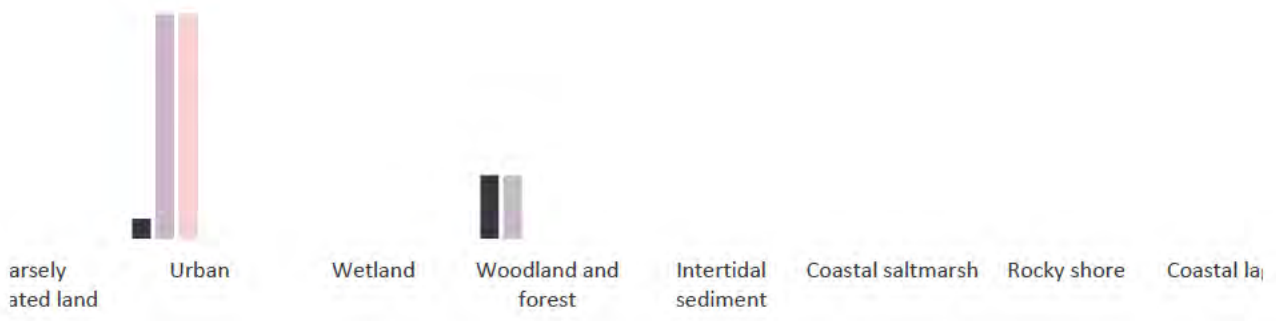


On site area change by habitat group



Combined habitat area change

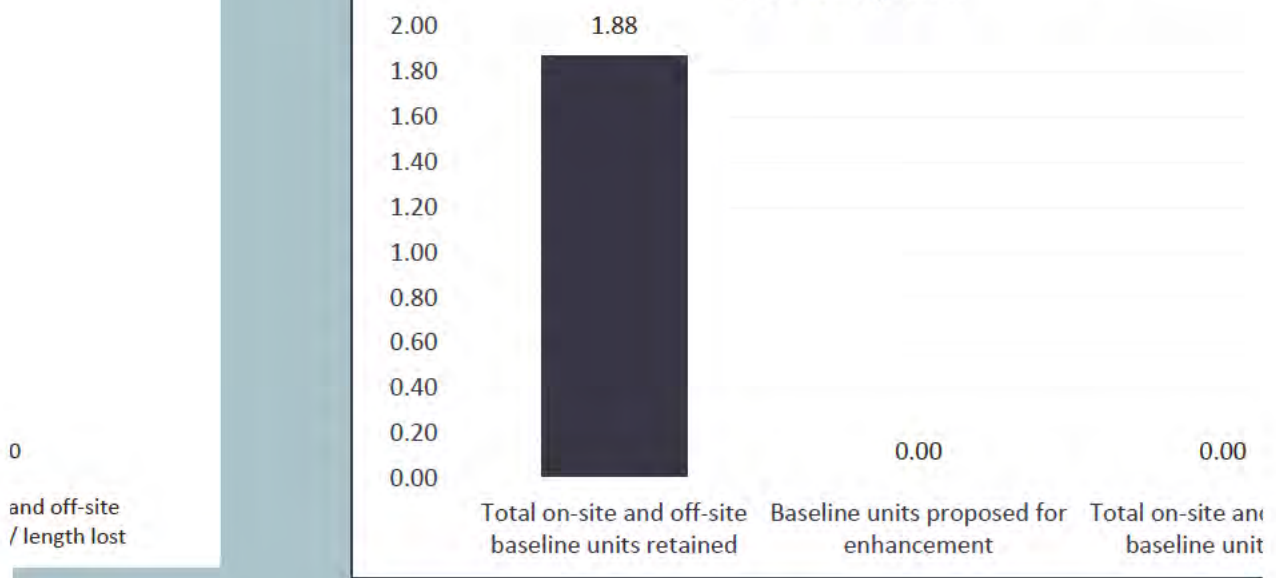




■ Area change
 ■ Off-site area change
 ■ Off-site proposed area
 ■ Existing area



On-site and off-site hedge retention category biodiversity units



0
and off-site
/ length lost

Length change by hedgerow length (km)



Proposed length on-site Existing length off-site Proposed length off-site

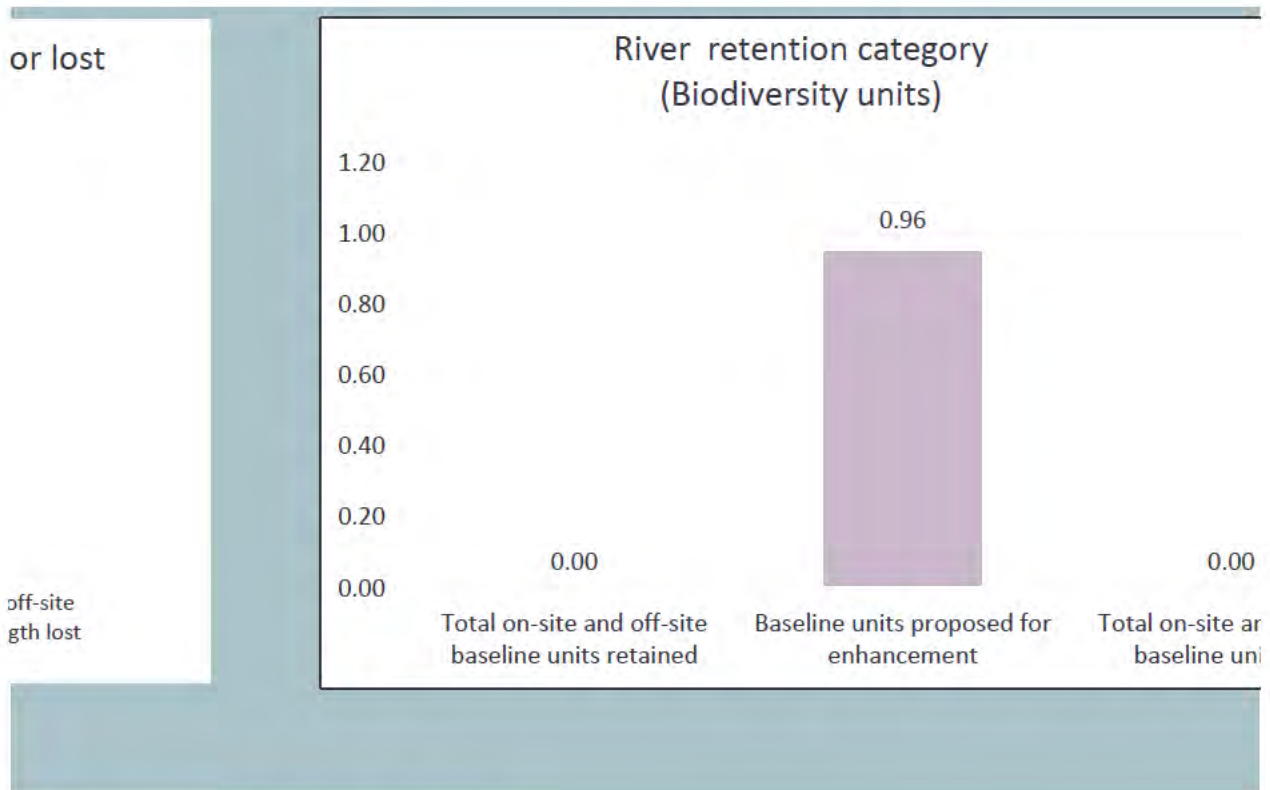


Combined hedgerow length change (km)

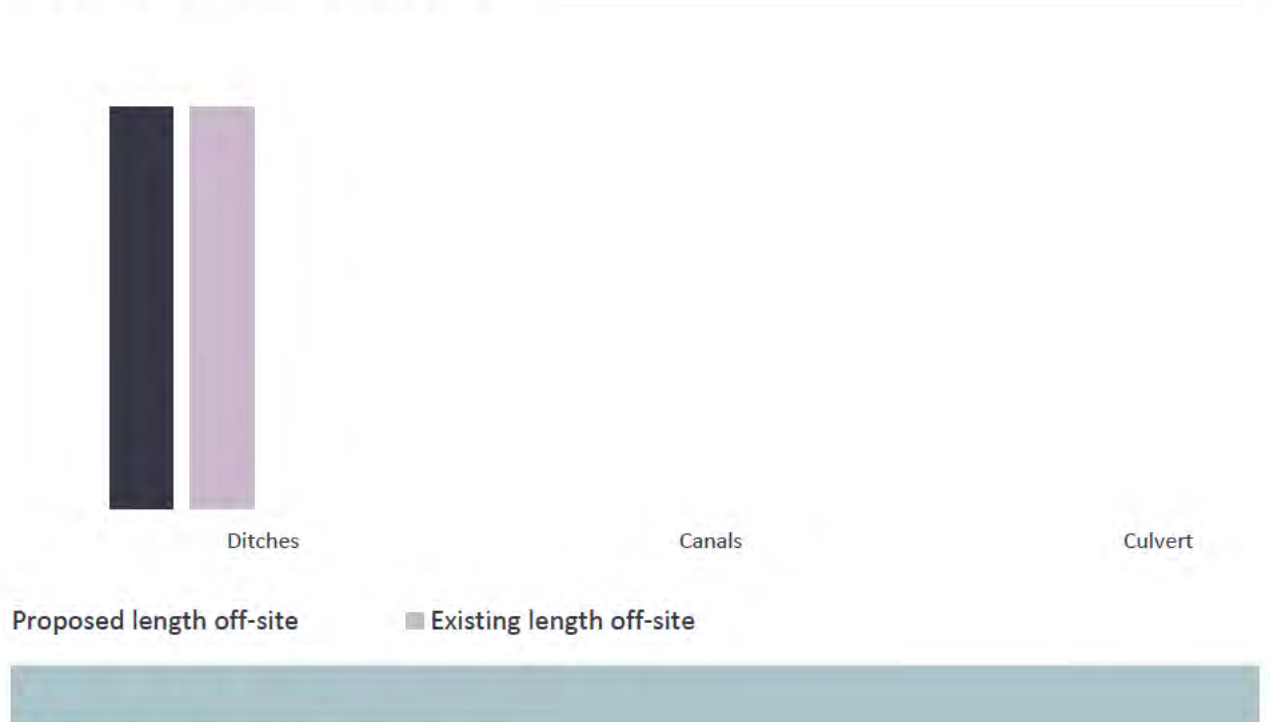


On-site length change Off-site length change Proposed length off-site Existing length



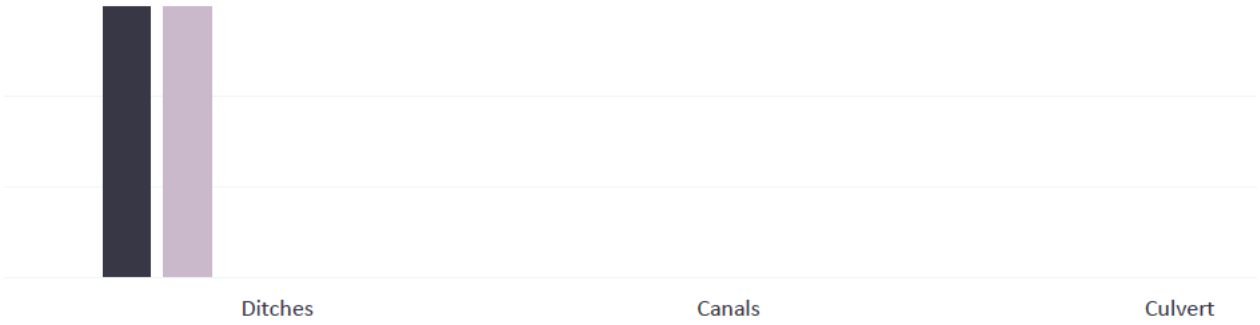


Length change by river type



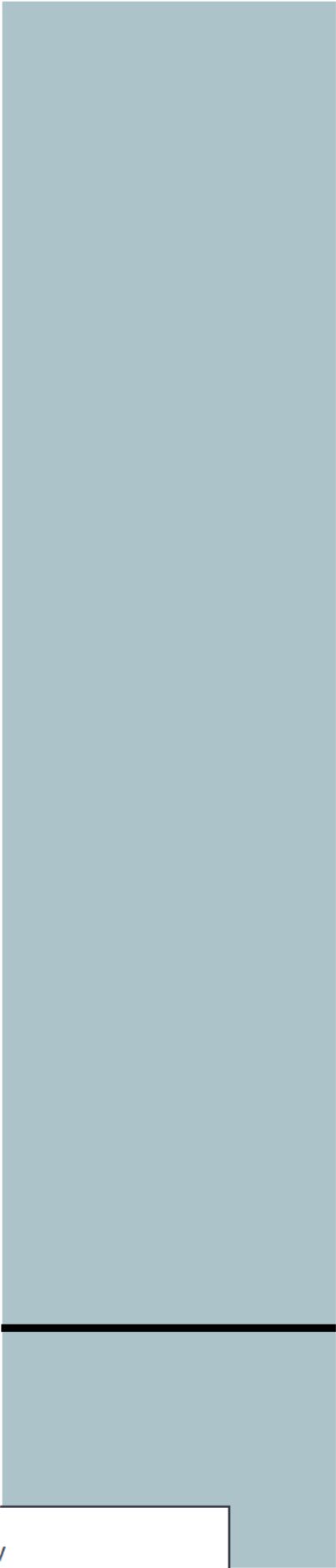
Combined river length change





change ■ Existing length off-site ■ Proposed length off-site ■ Off-site length change





12.58



on-site and off-site
baseline units lost

ons Intertidal Hard
Structures

goons Intertidal Hard Structures

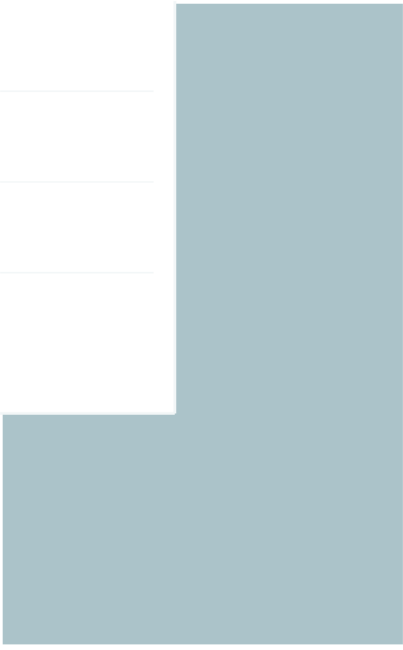
d off-site
ts lost

Hedge
Ornamental Non
Native

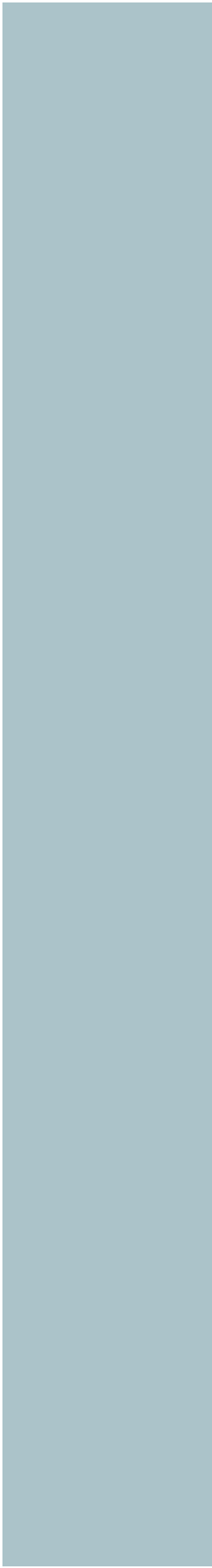


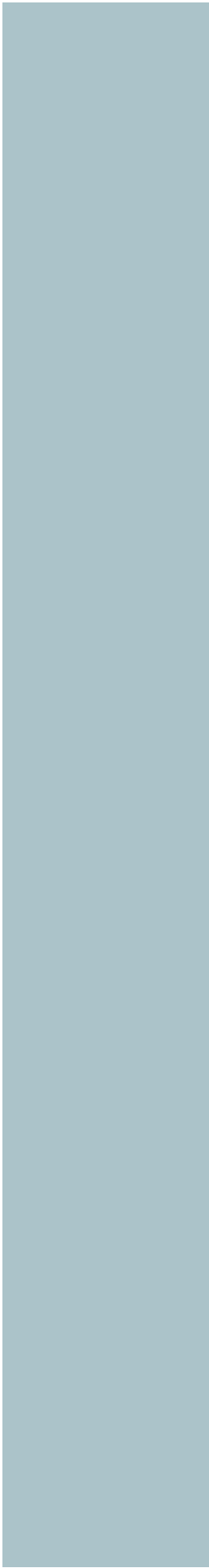
Hedge
Ornamental Non
Native

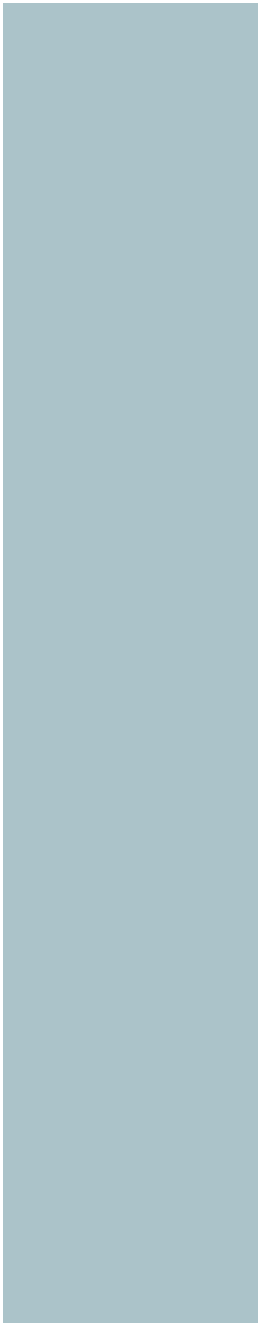
th off-site



Return to
results
menu







Tradin

Distinctiveness Group

Very High

High

Medium

Low

Very High

Habitat group

Grassland - Lowland dry acid grassland

Grassland - Lowland meadows

Grassland - Upland hay meadows

Heathland and shrub - Mountain heaths and willow scrub

Lakes - Aquifer fed naturally fluctuating water bodies

Sparsely vegetated land - Calaminarian grasslands

Sparsely vegetated land - Limestone pavement

Wetland - Blanket bog

Wetland - Depressions on Peat substrates (H7150)

Wetland - Fens (upland and lowland)

Wetland - Lowland raised bog

Wetland - Oceanic Valley Mire[1] (D2.1)

Wetland - Purple moor grass and rush pastures

Wetland - Transition mires and quaking bogs (H7140)

Woodland and forest - Wood-pasture and parkland

Rocky shore - High energy littoral rock - on peat, clay or chalk

Rocky shore - Moderate energy littoral rock - on peat, clay or chalk

Rocky shore - Low energy littoral rock - on peat, clay or chalk

Rocky shore - Features of littoral rock - on peat, clay or chalk

Intertidal sediment - Littoral seagrass on peat, clay or chalk

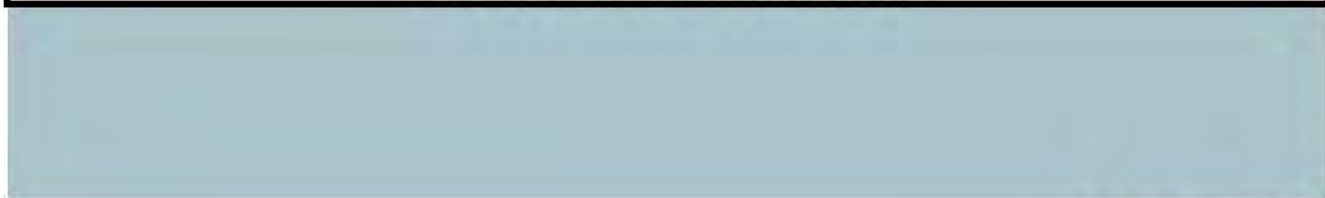
High Di

Habitat group

Grassland - Traditional orchards

Grassland - Floodplain Wetland Mosaic (CFGM)

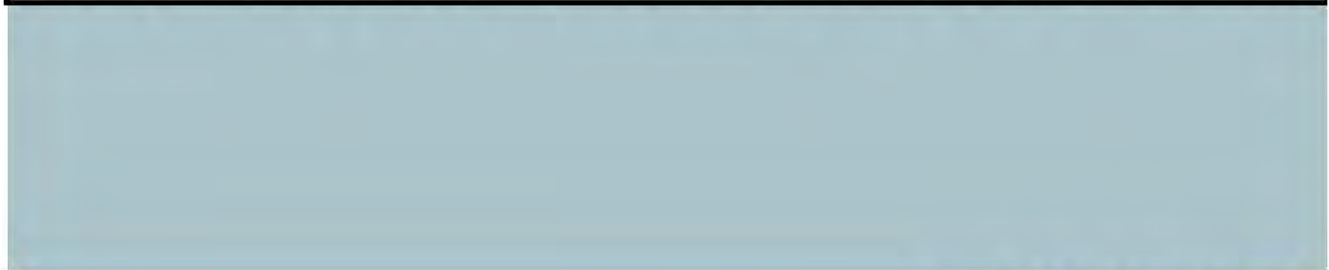
Grassland - Lowland calcareous grassland
Grassland - Tall herb communities (H6430)
Grassland - Upland calcareous grassland
Heathland and shrub - Lowland Heathland
Heathland and shrub - Sea buckthorn scrub (Annex 1)
Heathland and shrub - Upland Heathland
Lakes - High alkalinity lakes
Lakes - Low alkalinity lakes
Lakes - Marl Lakes
Lakes - Moderate alkalinity lakes
Lakes - Peat Lakes
Lakes - Ponds (Priority Habitat)
Lakes - Temporary lakes, ponds and pools
Sparsely vegetated land - Coastal sand dunes
Sparsely vegetated land - Coastal vegetated shingle
Sparsely vegetated land - Inland rock outcrop and scree habitats
Sparsely vegetated land - Maritime cliff and slopes
Urban - Open Mosaic Habitats on Previously Developed Land
Wetland - Reedbeds
Woodland and forest - Felled
Woodland and forest - Lowland beech and yew woodland
Woodland and forest - Lowland mixed deciduous woodland
Woodland and forest - Native pine woodlands
Woodland and forest - Upland birchwoods
Woodland and forest - Upland mixed ashwoods
Woodland and forest - Upland oakwood
Woodland and forest - Wet woodland
Coastal lagoons - Coastal lagoons
Rocky shore - High energy littoral rock
Rocky shore - Moderate energy littoral rock
Rocky shore - Low energy littoral rock
Rocky shore - Features of littoral rock
Intertidal sediment - Littoral mud
Intertidal sediment - Littoral mixed sediments
Coastal saltmarsh - Saltmarshes and saline reedbeds
Intertidal sediment - Littoral biogenic reefs - Mussels
Intertidal sediment - Littoral biogenic reefs - Sabellaria
Intertidal sediment - Features of littoral sediment
Intertidal sediment - Littoral muddy sand



Medium D

Habitat Group

Cropland - Arable field margins cultivated annually
Cropland - Arable field margins game bird mix
Cropland - Arable field margins pollen & nectar
Cropland - Arable field margins tussocky
Grassland - Other lowland acid grassland
Grassland - Other neutral grassland
Grassland - Upland acid grassland
Heathland and shrub - Blackthorn scrub
Heathland and shrub - Bramble scrub
Heathland and shrub - Gorse scrub
Heathland and shrub - Hawthorn scrub
Heathland and shrub - Hazel scrub
Heathland and shrub - Mixed scrub
Lakes - Ponds (Non- Priority Habitat)
Lakes - Reservoirs
Sparsely vegetated land - Other inland rock and scree
Urban - Cemeteries and churchyards
Urban - Biodiverse green roof
Urban - Urban Tree
Woodland and forest - Other Scot's Pine woodland
Woodland and forest - Other woodland; broadleaved
Woodland and forest - Other woodland; mixed
Intertidal sediment - Littoral coarse sediment
Intertidal sediment - Littoral sand
Intertidal Hard Structures - Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)



Low Distinctivene

Habitat group
Cropland - Cereal crops
Cropland - Horticulture
Cropland - Intensive orchards
Cropland - Non-cereal crops
Cropland - Temporary grass and clover leys
Cropland - Cereal crops winter stubble
Grassland - Modified grassland
Grassland - Bracken
Heathland and shrub - Rhododendron scrub
Lakes - Ornamental lake or pond

Sparsely vegetated land - Ruderal/Ephemeral
Urban - Bioswale
Urban - Allotments
Urban - Facade-bound green wall
Urban - Ground based green wall
Urban - Ground level planters
Urban - Other green roof
Urban - Intensive green roof
Urban - Introduced shrub
Urban - Rain garden
Urban - Actively worked sand pit quarry or open cast mine
Urban - Sustainable urban drainage feature
Urban - Vacant/derelict land/ bareground
Urban - Vegetated garden
Woodland and forest - Other coniferous woodland
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds
Intertidal sediment - Artificial littoral coarse sediment
Intertidal sediment - Artificial littoral mud
Intertidal sediment - Artificial littoral sand
Intertidal sediment - Artificial littoral muddy sand
Intertidal sediment - Artificial littoral mixed sediments
Intertidal sediment - Artificial littoral seagrass
Intertidal sediment - Artificial littoral biogenic reefs
Intertidal Hard Structures - Artificial hard structures
Intertidal Hard Structures - Artificial features of hard structures
Heathland and shrub - Sea buckthorn scrub (other)



g Summary

Trading Rule

Bespoke compensation likely to be required ✕

Same habitat required =

Same broad habitat or a higher distinctiveness habitat required (\geq)

Same distinctiveness or better habitat required \geq

Distinctiveness

Group	On Site Unit Change	Off Site Unit Change	Project wide Unit Change
Grassland	0.00	0.00	0.00
Grassland	0.00	0.00	0.00
Grassland	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
	0.00	0.00	0.00

Distinctiveness

Group	On Site Unit Change	Off Site Unit Change	Project wide Unit Change
Grassland	0.00	0.00	0.00
Grassland	0.00	0.00	0.00

Grassland	0.00	0.00	0.00
Grassland	0.00	0.00	0.00
Grassland	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Wetland	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Coastal Saltmarsh	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
	0.00	0.00	0.00

Distinctiveness

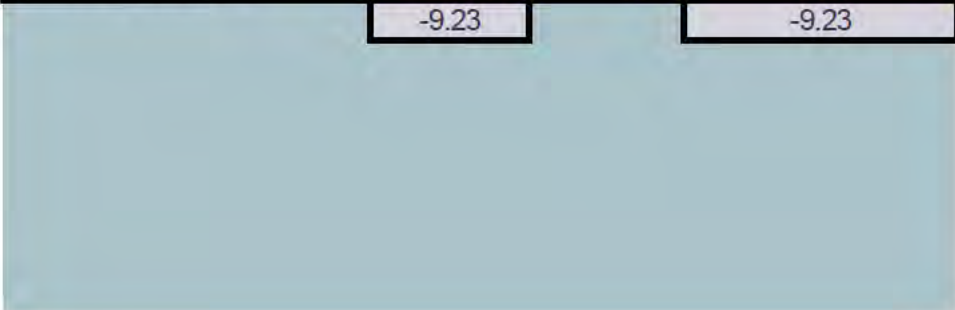
Group	On site unit change	Off Site unit Change	Project wide unit change
-------	---------------------	----------------------	--------------------------

Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Grassland	0.00	0.00	0.00
Grassland	5.08	0.00	5.08
Grassland	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Heathland and shrub	-1.20	0.00	-1.20
Heathland and shrub	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Heathland and shrub	2.13	0.00	2.13
Lakes	0.00	0.00	0.00
Lakes	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	3.59	0.00	3.59
Woodland and forest	0.00	0.00	0.00
Woodland and forest	2.80	0.00	2.80
Woodland and forest	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal	0.00	0.00	0.00
	12.40	0.00	12.40

SS

Group	On site unit change	Off Site Unit Change	Project wide unit change
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Cropland	0.00	0.00	0.00
Grassland	-10.85	0.00	-10.85
Grassland	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
Lakes	0.00	0.00	0.00

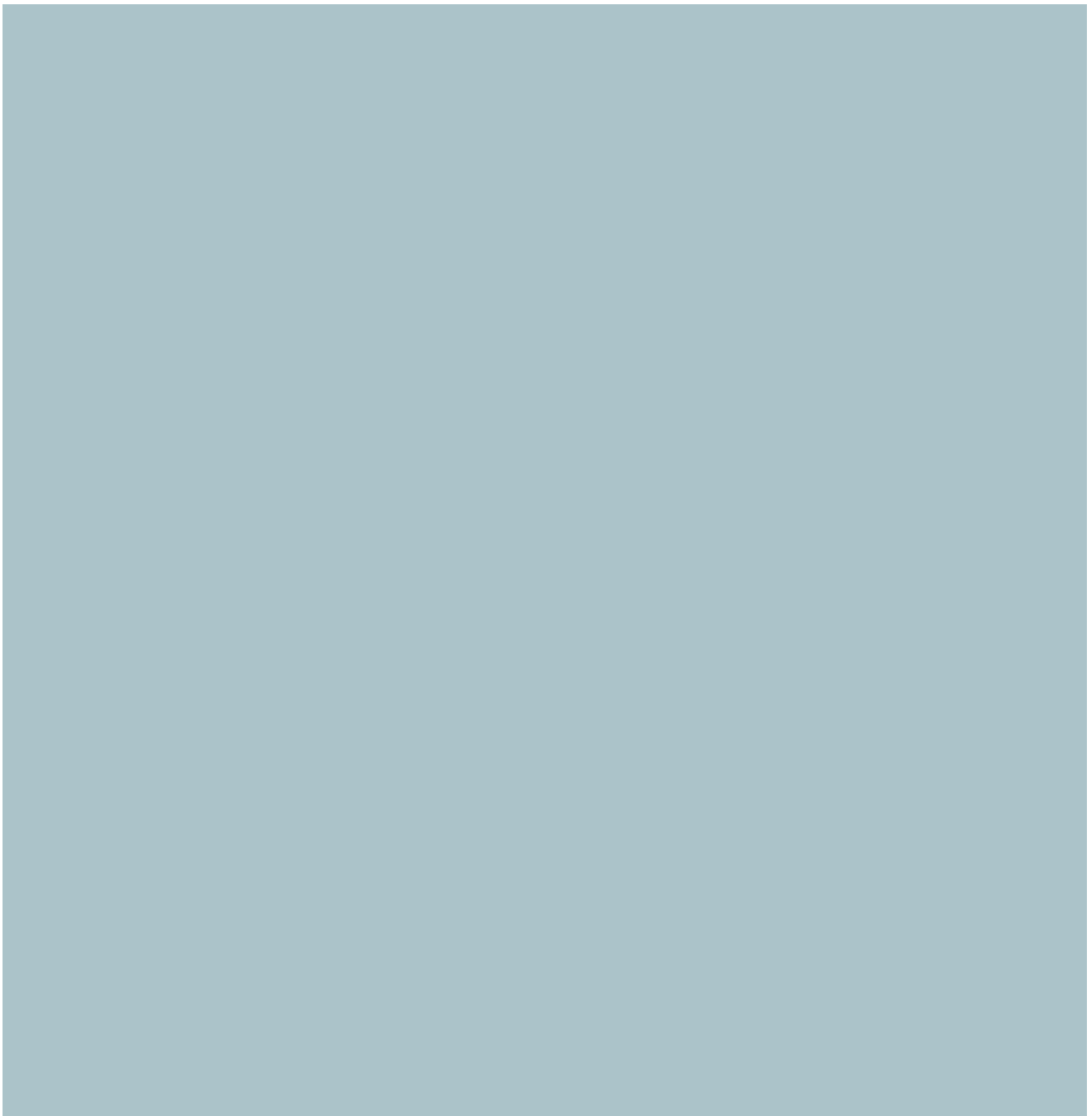
Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	0.00	0.00	0.00
Urban	1.62	0.00	1.62
Woodland and forest	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00
Intertidal	0.00	0.00	0.00
Intertidal	0.00	0.00	0.00
Heathland and shrub	0.00	0.00	0.00
	-9.23		-9.23



0.00
5.08
0.93
0.00
0.00
3.59
2.80
0.00

Medium Distinctiveness Broad Habitat Deficit to be offset by trading up
Higher distinctiveness surplus units minus Medium Distinctiveness Broad Habitat Deficit
Cumulative surplus of units

Low Distinctiveness Summary
Low Distinctiveness Net Change in Units
Cumulative surplus of units



ary

0.00

y

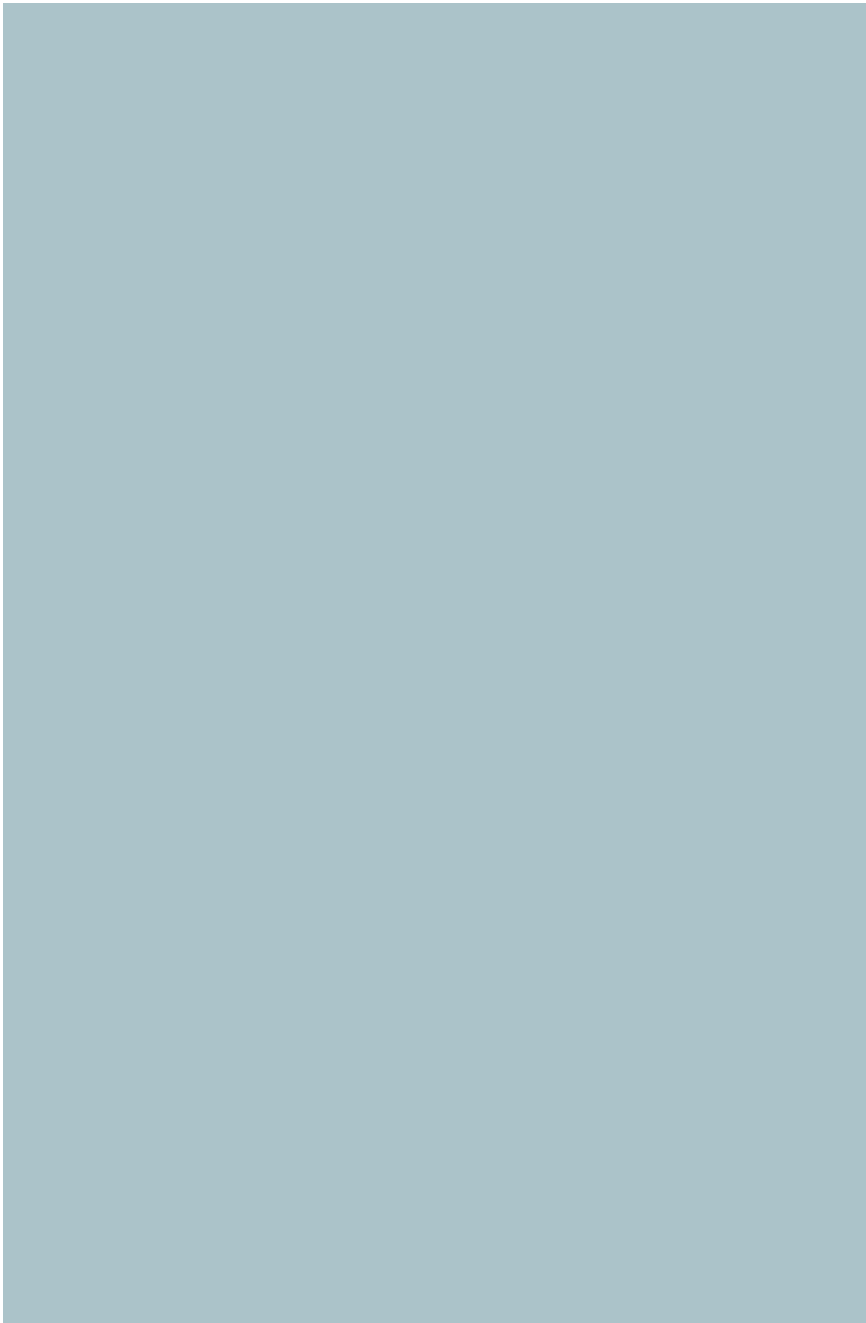
0.00

0.00

ary
12.40

0.00
0.00
12.40

y
-9.23
3.17



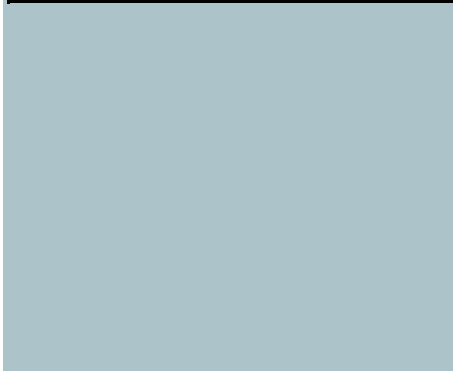
Land

Condense / Show C

Main Menu

Ref	Broad Habitat
1	Grassland
2	Grassland
3	Grassland
4	Grassland
5	Grassland
6	Grassland
7	Heathland and shrub
8	Urban
9	Woodland and forest

10	Woodland and forest
11	
12	
13	
14	
15	



at Former Theale Sewage Treatment Works

A-1 Site Habitat Baseline

Columns

Condense / Show Rows

Instructions

Habitats and areas

Habitat Type	Area (hectares)
Other neutral grassland	0.04
Other neutral grassland	0.75
Modified grassland	0.36
Modified grassland	1.33
Modified grassland	0.68
Modified grassland	0.5
Bramble scrub	0.3
Developed land; sealed surface	0.25
Other woodland; broadleaved	0.2

Other woodland; broadleaved	0.59
Total habitat area	5.00



Distinctiveness		Condition	
Distinctiveness	Score	Condition	Score
Medium	4	Moderate	2
Medium	4	Moderate	2
Low	2	Poor	1
Low	2	Good	3
Low	2	Poor	1
Low	2	Poor	1
Medium	4	Condition Assessment N/A	1
V.Low	0	N/A - Other	0
Medium	4	Poor	1

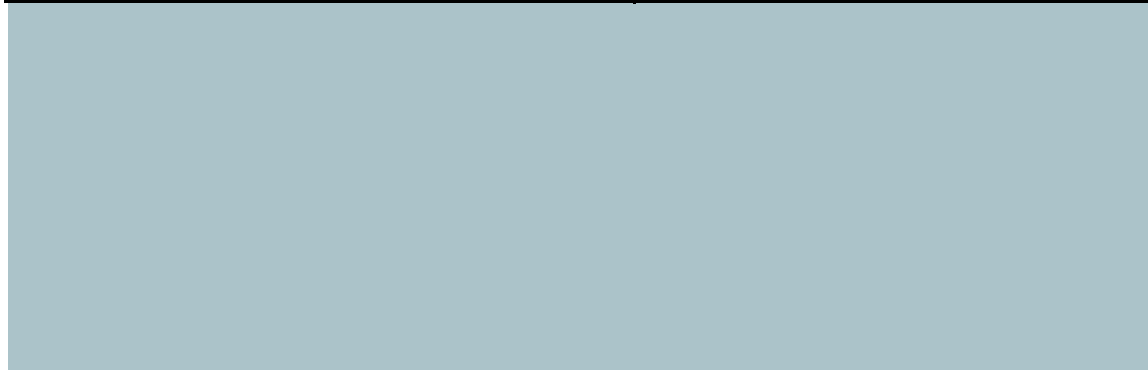
Medium	4	Moderate	2





Strategic significance		
Strategic significance	Strategic significance	Strategic Significance multiplier
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Formally identified in local strategy	High strategic significance	1.15

Formally identified in local strategy	High strategic significance	1.15



Suggested action to address habitat losses	Ecological baseline
	Total habitat units
Same broad habitat or a higher distinctiveness habitat required (\geq)	0.32
Same broad habitat or a higher distinctiveness habitat required (\geq)	6.00
Same distinctiveness or better habitat required \geq	0.72
Same distinctiveness or better habitat required \geq	7.98
Same distinctiveness or better habitat required \geq	1.36
Same distinctiveness or better habitat required \geq	1.00
Same broad habitat or a higher distinctiveness habitat required (\geq)	1.20
Compensation Not Required	0.00
Same broad habitat or a higher distinctiveness habitat required (\geq)	0.92

Retention ca		
Area retained	Area enhanced	Baseline units retained
0	0	0.00
0.25	0.5	2.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0	0.00
0	0.2	0.00

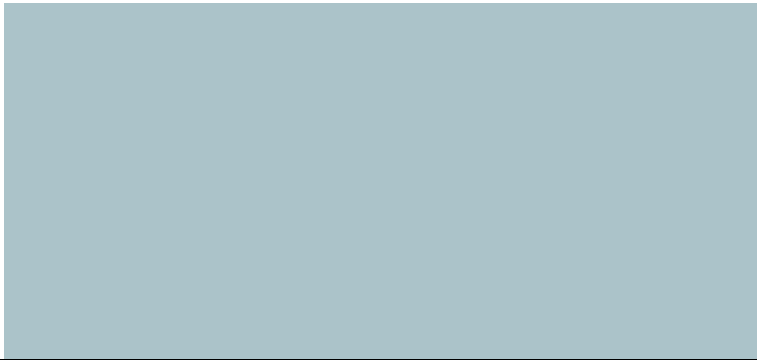
Same broad habitat or a higher distinctiveness habitat required (≥)	5.43	0	0.59	0.00
	24.93	0.25	1.29	2.00

Total area lost (excluding area of Urban Green walls)

Category biodiversity value			Bespoke compensation agreed for unacceptable losses
Baseline units enhanced	Area habitat lost	Units lost	
0.00	0.04	0.32	
4.00	0.00	0.00	
0.00	0.36	0.72	
0.00	1.33	7.98	
0.00	0.68	1.36	
0.00	0.50	1.00	
0.00	0.30	1.20	
0.00	0.25	0.00	
0.92	0.00	0.00	

5.43	0.00	0.00	
10.35	3.46	12.58	

van trees and	3.46
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Comr

Assessor comments

Smaller area of other neutral grassland (area 1) in the west of the site. Passed criteria 1,2,3,4, and 6, but failed criterion 5. Moderate condition.

Larger area of other neutral grassland (area 2) in the east of the site. Passed criteria 1,2,3,4, and 6, but failed criterion 5.

Modified grassland area 1 in the west of the site. Passed 5 criteria (3,4,5,6, and 7) but failed criteria 1 and 2. Poor condition.

Modified grassland area 2 in centre of the site. Passed all 7 criteria. Good condition.

Modified grassland area 3 in the north of the site. Passed 5 criteria (3,4,5,6, and 7) but failed criteria 1 and 2. Poor condition.

Modified grassland area 4 in the south of the site. Passed 5 criteria (3,4,5,6, and 7) but failed criteria 1 and 2. Poor condition.

11 patches of bramble scrub within the site. Condition assessment N/A. Will be lost.

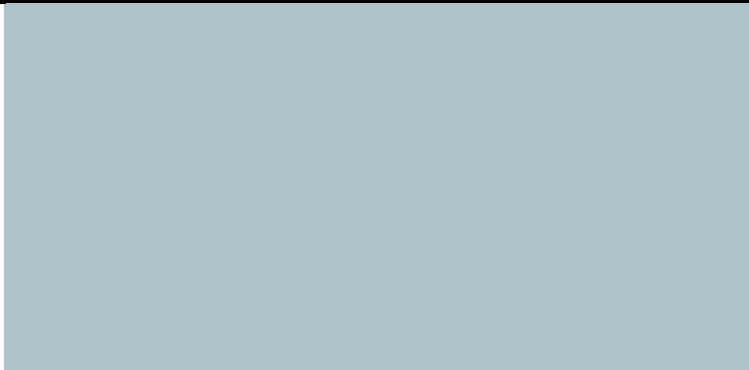
Hardstanding in south west of site. Based on illustrative plans, this will be removed and replaced with new areas of hardstanding.

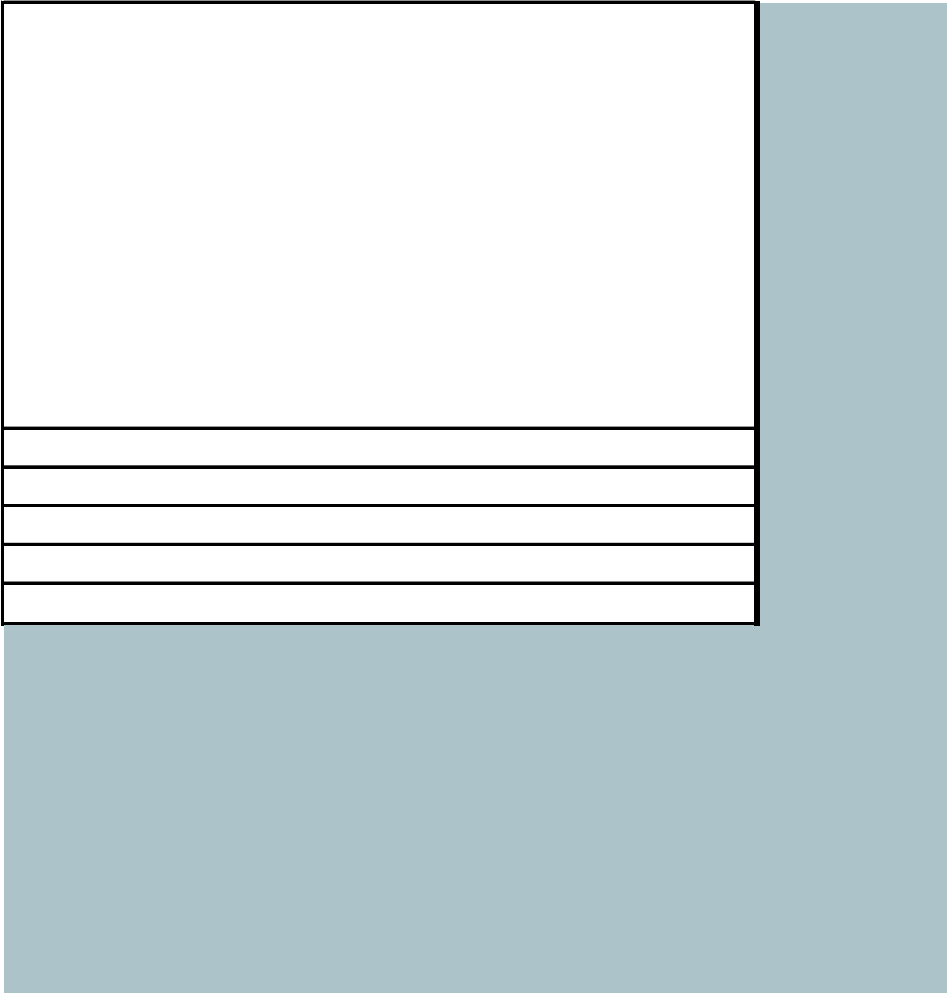
Woodland in the north of the site (to the west of the ditch). Looks like a plantation woodland as trees are in clear rows, some with tree guards, different composition to the rest of the woodland within the site. Total condition assessment score of 25. Categorised as poor condition.

Woodland is to be retained with an opportunity to enhance.

Remaining areas of semi-natural broadleaved woodland in the north east, east, and south east of the site. Ground saturated at time of survey but not boggy/spongy. Total condition assessment score of 31. Categorised as moderate condition. To be retained with an opportunity to enhance.

This habitat is immediately adjacent to an area of ancient woodland, and also falls within the North Wessex Downs AONB which is mentioned within the local plan. The woodland is to be retained.





La

Condense / Sh

Main M

Broad Habitat

Urban

Urban

Grassland

Grassland

Heathland and shrub

Urban



and at Former Theale Sewage Treatment Works

A-2 Site Habitat Creation

Show Columns

Condense / Show Rows

Menu

Instructions

Proposed habitat

Developed land; sealed surface

Vegetated garden

Modified grassland

Other neutral grassland

Mixed scrub

Urban Tree

Total habitat area

Site Area (Excluding area of Urban trees and Green walls)

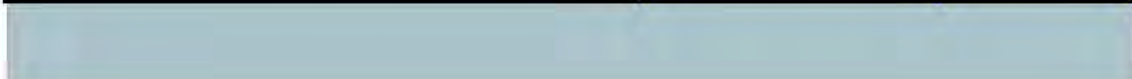


Area (hectares)	Distinctiveness		Condition	
	Distinctiveness	Score	Condition	Score
1.4	V.Low	0	N/A - Other	0
0.84	Low	2	Condition Assessment N/A	1
0.06	Low	2	Moderate	2
0.93	Medium	4	Poor	1
0.23	Medium	4	Good	3
1.02	Medium	4	Moderate	2
4.48				





Strategic significance		
Strategic significance	Strategic significance	Strategic position multiplier
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
Formally identified in local strategy	High strategic significance	1.15





Post development/ post intervention habitats

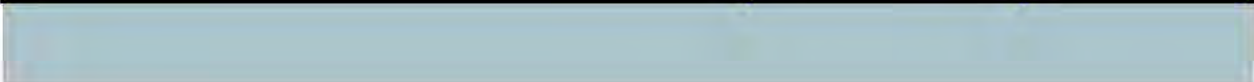
Standard time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years
0		
1		
4		
2		
10		
27		



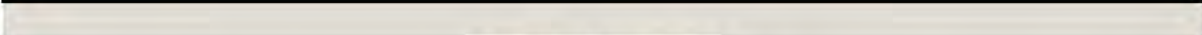


Temporal multiplier

Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier
Standard time to target condition applied	0	1.000
Standard time to target condition applied	1	0.965
Standard time to target condition applied	4	0.867
Standard time to target condition applied	2	0.931
Standard time to target condition applied	10	0.700
Standard time to target condition applied	27	0.382







Difficulty multipliers

Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied
Low	Standard difficulty applied	Medium	0.67
Low	Standard difficulty applied	Low	1
Low	Standard difficulty applied	Low	1
Low	Standard difficulty applied	Low	1
Low	Standard difficulty applied	Low	1
Low	Standard difficulty applied	Low	1

Total Units





Habitat units delivered	Assessor comments
0.00	<p>Access roads, driveways, and buildings to be developed. This is a rough illustration based on the latest illustrative layout received with ca 62 houses plotted.</p> <p>During conversations with the client it was proposed that a pathway may be created around the site and around the northern third of the other neutral grassland area in the east. We have approximated an 800m long, 1.5m wide path around the edge of the site.</p>
1.62	Gardens associated with dwellings. This is a rough illustration based on the latest illustrative layout received with ca 62 houses plotted.
0.21	A small area of modified grassland to be used as a public open space in the centre of the new development.
3.46	<p>An area of other neutral grassland to be created around the new housing development, to be planted with a wildflower mix such as Emorsgate meadow mixture EM1 or EM2.</p> <p>Assumed this will be of a poor condition as may be disturbed on a regular basis.</p>
2.13	Areas of mixed scrub to be planted around the site (outside of the main housing development) to replace the bramble scrub that has been lost with habitat of better condition.
3.59	Plans show up to 90 urban trees are to be planted around the site. These should be native species of local provenance.
11.01	



Land at Former Theale Sewage Treatment Works

A-3 Site Habitat Enhancement

Condense / Show Columns

Condense / Show Rows

Main Menu

Instructions

Baseline ref	Baseline habitat	Total habitat area (hectares)
2	Grassland - Other neutral grassland	0.75
9	Woodland and forest - Other woodland; broadleaved	0.2
10	Woodland and forest - Other woodland; broadleaved	0.59

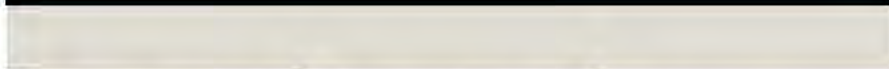




Baseline habitats

Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score
Medium	4	Moderate	2
Medium	4	Poor	1
Medium	4	Moderate	2




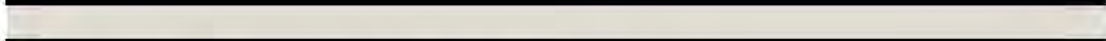
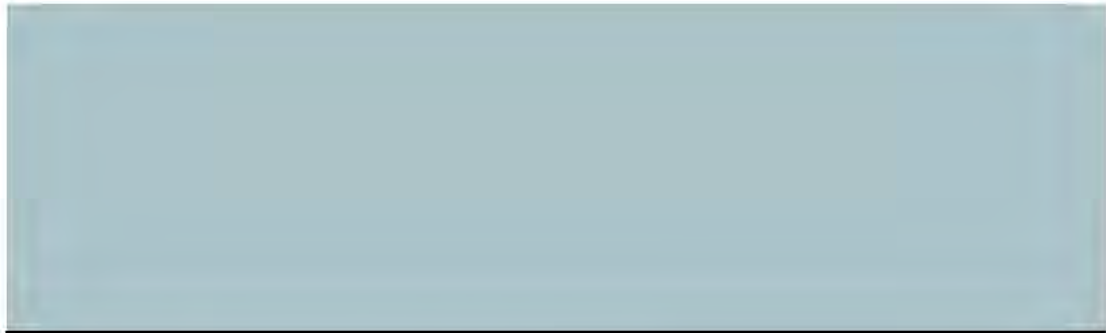


Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units
Low Strategic Significance	1	6.00
High strategic significance	1.15	0.92
High strategic significance	1.15	5.43



	Prop
Suggested action to address habitat losses	Proposed Broad Habitat
Same broad habitat or a higher distinctiveness habitat required (\geq)	Grassland
Same broad habitat or a higher distinctiveness habitat required (\geq)	Woodland and forest
Same broad habitat or a higher distinctiveness habitat required (\geq)	Woodland and forest





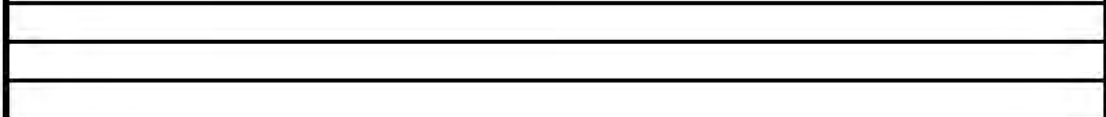
Used Habitat (Pre-populated but can be overridden)

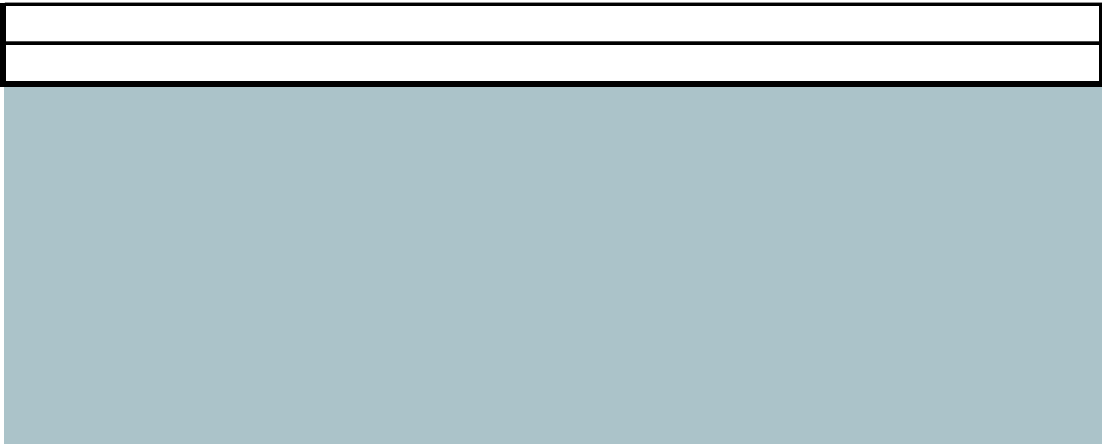
Proposed habitat

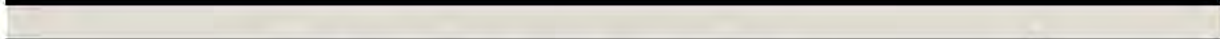
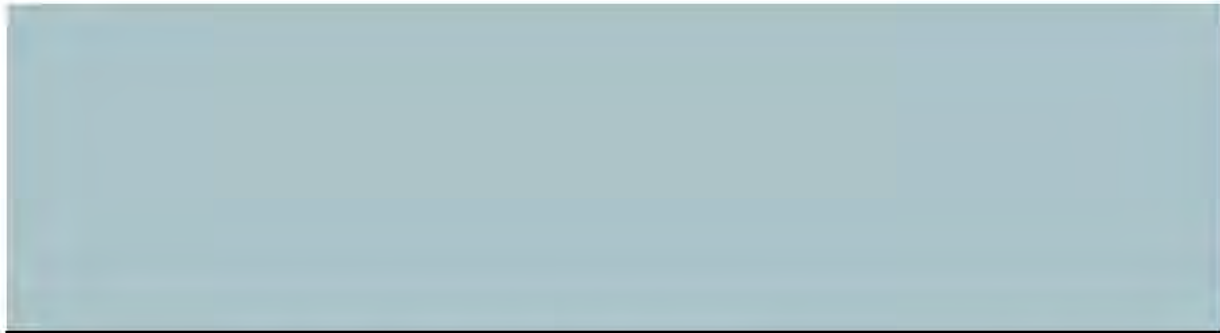
Other neutral grassland

Other woodland; broadleaved

Other woodland; broadleaved

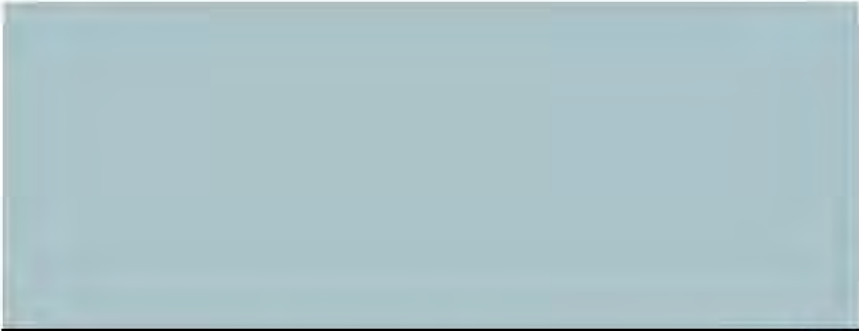






Change in distinctiveness and condition		Area (hectares)
Distinctiveness change	Condition change	
Medium - Medium	Moderate - Good	0.5
Medium - Medium	Poor - Good	0.2
Medium - Medium	Moderate - Good	0.59

		1.29



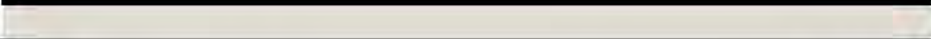
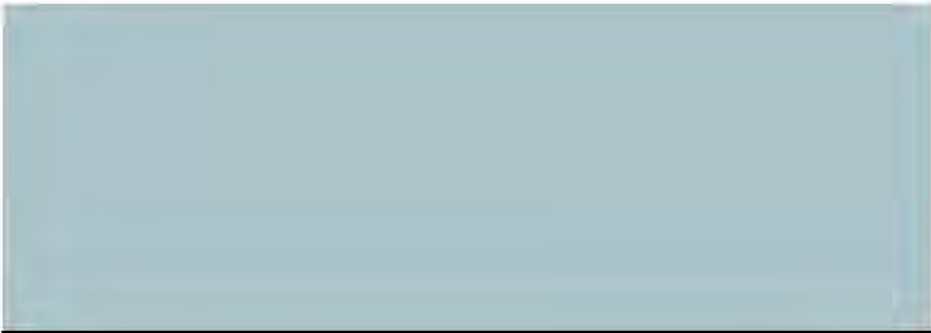
Post

Distinctiveness	Score	Condition	Score
Medium	4	Good	3
Medium	4	Good	3
Medium	4	Good	3



development/ post intervention habitats

Strategic significance		
Strategic significance	Strategic significance	Strategic position multiplier
Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
Formally identified in local strategy	High strategic significance	1.15
Formally identified in local strategy	High strategic significance	1.15



Temporal

Standard time to target condition/years	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years
10	0	0
20	0	0
10	0	0



risk multiplier			
Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of enhancement
Standard time to target condition applied	10	0.700	Low
Standard time to target condition applied	20	0.490	Low
Standard time to target condition applied	10	0.700	Low



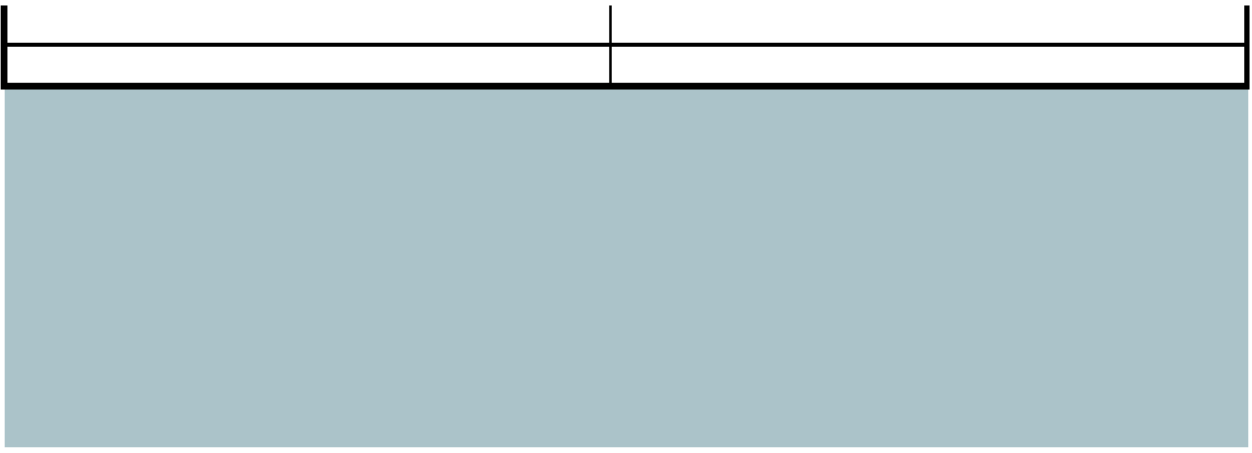


Difficulty risk multipliers			Habitat units delivered
Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	
Standard difficulty applied	Low	1	5.94
Standard difficulty applied	Low	1	1.82
Standard difficulty applied	Low	1	7.33

			15.09



Comments	
Assessor comments	Reviewer comments
<p>Two-thirds of the retained other neutral grassland in the east of the site will be enhanced to good condition by planting a wildflower mix such as Emorsgate Meadow Mixture for Wetlands EM8. A small cotoneaster bush was present, which should be removed. The grassland should be checked regularly to ensure no invasive species are present.</p>	
<p>Plantation woodland to be enhanced by planting additional native and locally sourced tree species that occur within the adjacent broadleaved woodland to bring the total number of native tree species to 5 or more. Coppicing to be carried out to create at least three different heights within the woodland and provide a bit more light to the understorey. Leave some cut logs in situ. Over time any standing deadwood should be left within the woodland. A woodland seed mix such as Emorsgate EW1 or EW1F to be used to create a good ground flora.</p>	
<p>The broadleaved woodland is to be enhanced to good condition by replacing some of the non-native tree species with native ones of local provenance to ensure at least 80% of canopy trees and understorey shrubs are native. Additional tree planting and coppicing will ensure all three age classes are present in woodland and create three or more storeys within the woodland. Standing deadwood/dead branches/stems and stumps to be retained throughout the woodland.</p>	



Blank input field

Condense / Show Co

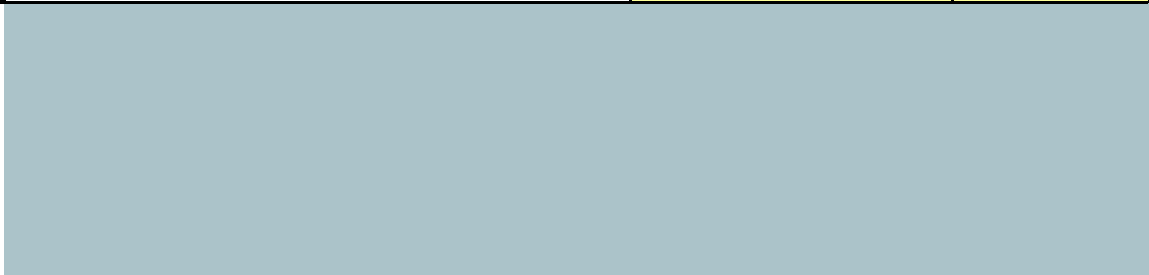
Main Menu

Baseline ref	Hedge number
1	1
2	2
3	3
4	4
5	
6	
7	
8	
9	

Habitat distinctiveness		Habitat condition	
Distinctiveness	Score	Condition	Score
Low	2	Moderate	2
Low	2	Good	3
Low	2	Moderate	2
Medium	4	Moderate	2



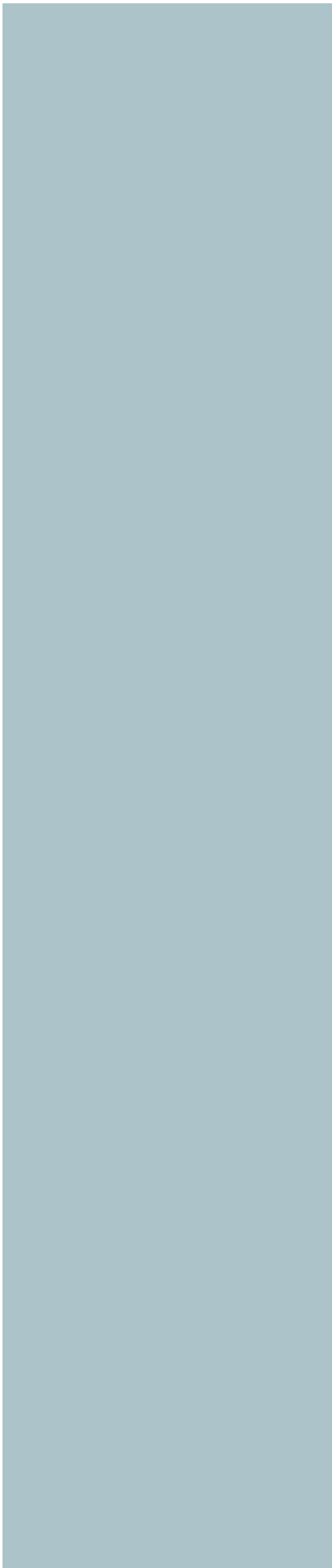
Strategic significance		
Strategic significance	Strategic significance	Strategic position multiplier
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
Formally identified in local strategy	High strategic significance	1.15



Suggested action to address habitat losses	Ecological baseline
	Total hedgerow units
Same distinctiveness band or better	0.16
Same distinctiveness band or better	0.42
Same distinctiveness band or better	0.20
Like for like or better	1.10
	1.88

Retention category biodiversity value			
Length retained	Length enhanced	Units retained	Units enhanced
0.04	0	0.16	0.00
0.07	0	0.42	0.00
0.05	0	0.20	0.00
0.12	0	1.10	0.00
0.28	0.00	1.88	0.00

ie		Comr
Length lost	Units lost	Assessor comments
0.00	0.00	Line of trees (1) on the north-western boundary of the site (just north of 4 areas of bramble scrub). Passed criteria 1,2,3, and 5, but failed condition 4. Moderate condition. It is assumed based on illustrative plans that this will be retained.
0.00	0.00	Line of trees (2) on northern boundary of the site. Passed all 5 criteria. Good condition. It is assumed based on illustrative plans that this will be retained.
0.00	0.00	Line of trees (3) between modified grassland area 4 and other neutral grassland area 2. Passed criteria 1,3, 4, and 5, but failed condition 2. Moderate condition. It is assumed based on illustrative plans that this will be retained.
0.00	0.00	Hedgerow with trees on western boundary of the site. Passed criteria A1,A2,C1, D1, D2, and E1. Failed B1, B2, C2, and E2. Moderate condition. Native hedgerows are a habitat of principal importance and are mentioned within the local plan. It is assumed based on illustrative plans that this will be retained.
0.00	0.00	



Two empty rectangular input fields stacked vertically.

Condense / Show

Main Me

Baseline ref	New hedge number
1	
2	
3	
4	
5	
6	

Habitat distinctiveness		Habitat condition	
Distinctiveness	Score	Condition	Score
Medium	4	Moderate	2



Strategic significance		
Strategic significance	Strategic significance	Strategic position multiplier
Formally identified in local strategy	High strategic significance	1.15





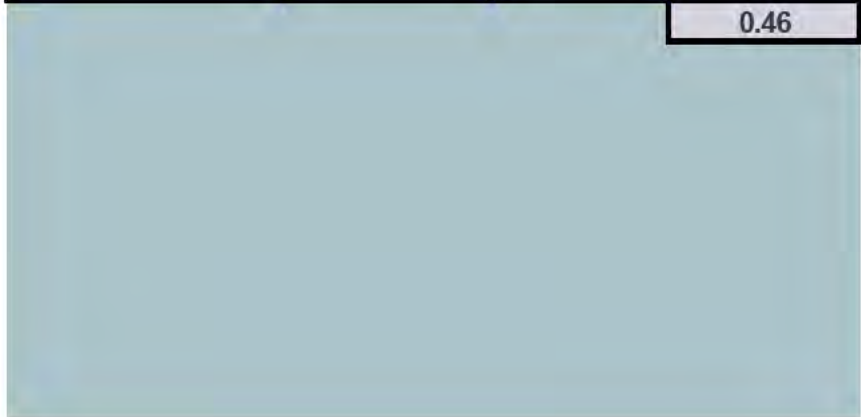
Ter		
Standard Time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years
5	0	0



Temporal multiplier			
Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation
Standard time to target condition applied	5	0.837	Low



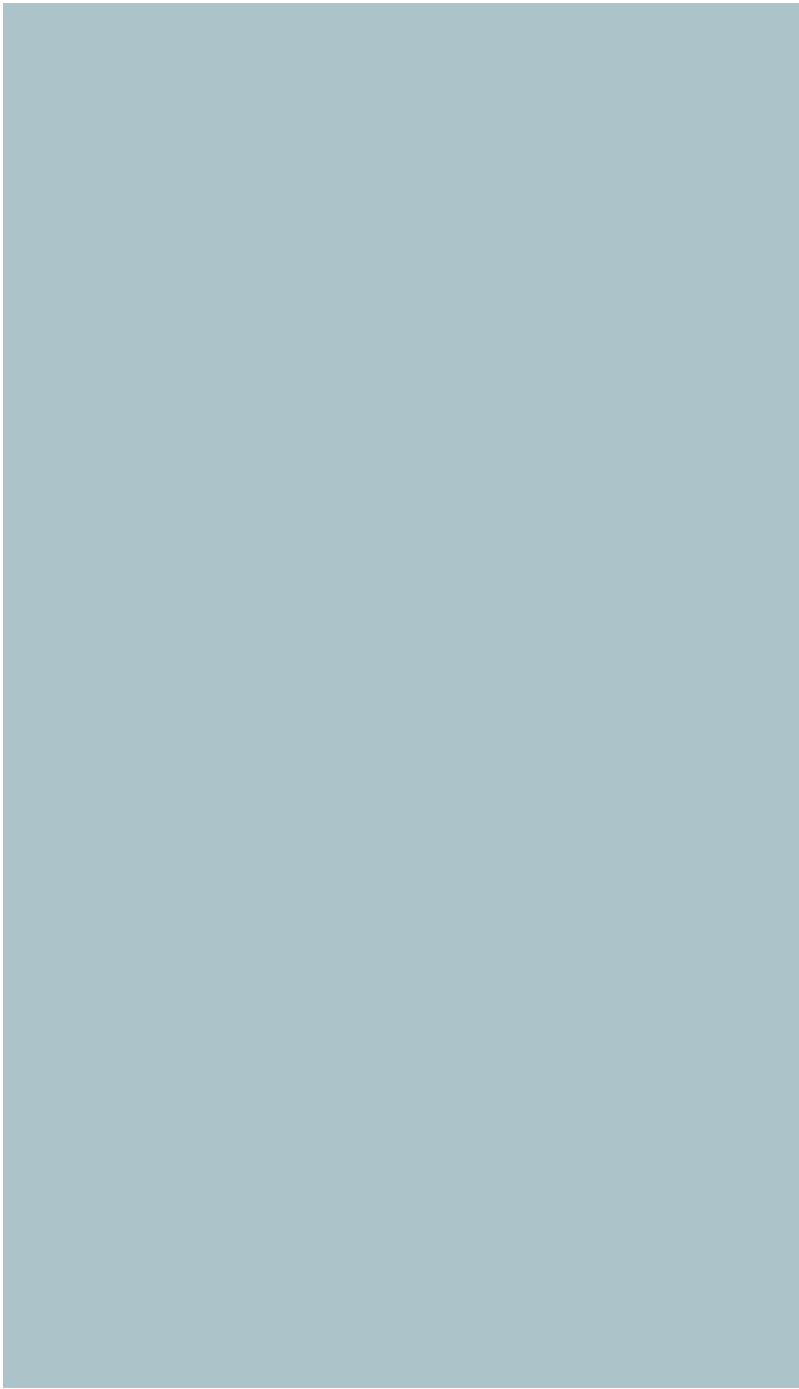
Difficulty risk multipliers			Hedge units delivered
Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	
Standard difficulty applied	Low	1	0.46
			0.46





Comments	
Assessor comments	Reviewer comments
60m of native-species hedgerow to be created along the highway/access road leading to the new development (30m on each side of the road or more if possible). This will also be in keeping with other hedgerow lined roads in the area.	





C-1 Site River Baseline

Condense / Show Columns

Condense / Show Rows

Main Menu

Instructions

Existing river type

Baseline ref	River type	Length (km)
1	Ditches	0.24
2		
3		
4		
5		
6		
		0.24

Habitat distinctiveness		Habitat condition	
Distinctiveness	Score	Condition	Score
Medium	4	Poor	1

Strategic significance			Water course en
Strategic significance	Strategic significance	Strategic significance multiplier	Extent of encroachment
Low potential/action not identified in any plan	Low Strategic Significance	1	No Encroachment

Encroachment	Riparian encroachment		Suggested action	Ecological baseline
Multiplier	Extent of encroachment	Multiplier		Total river units
1	No Encroachment	1	Restore	0.96
				0.96

Retention category biodiversity value

Length retained	Length enhanced	Units retained	Units enhanced	Length Lost	Units Lost
	0.24	0.00	0.96	0.00	0.00
0.00	0.24	0.00	0.96	0.00	0.00



Comr

Assessor Comments

Ditch dry along entire length during survey on 01/11/2022 however no terrestrial plants within it so therefore assumed to be wet for part of year. Passed 4 of 8 criteria, therefore assessed as poor condition.

It is assumed based on illustrative plans that this will be retained.



C-3 Site River Enhancement

Condense / Show Columns

Condense / Show Rows

Main Menu

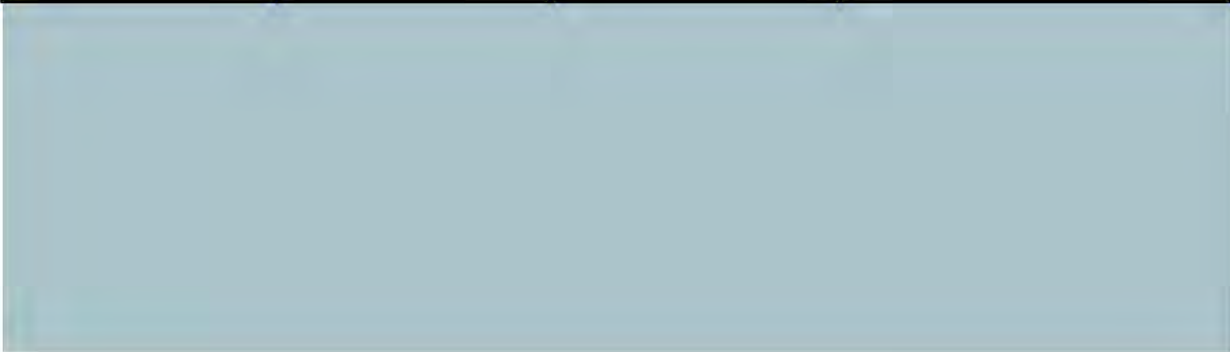
Instructions

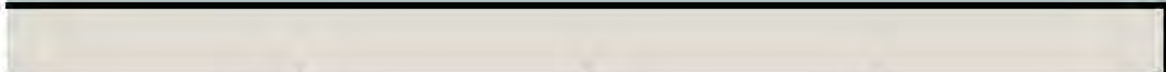
Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band
1	Ditches	0.24	Medium



Baseline habitats

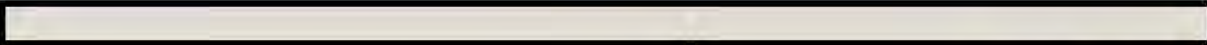
Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category
4	Poor	1	Low potential/action not identified in any plan



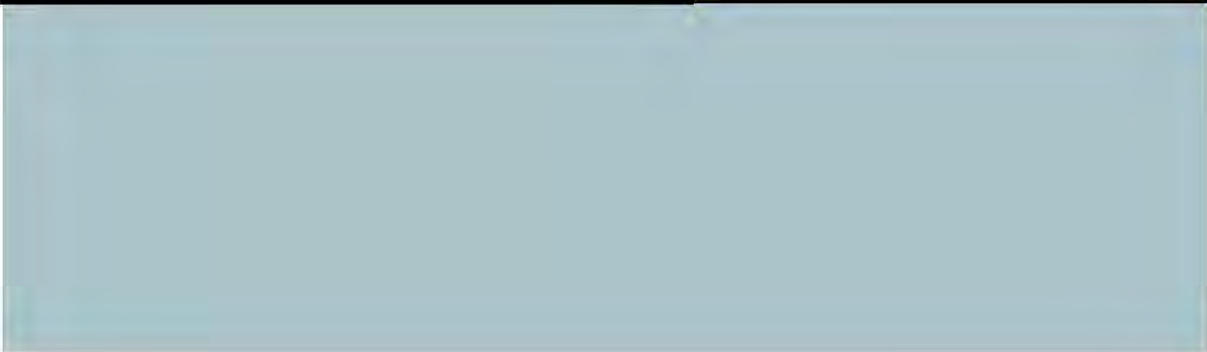


Strategic significance	Baseline strategic significance Score	Suggested action	Total units
Low Strategic Significance	1	Restore	0.96





Proposed River Type (Pre-populated can be overridden)	Change in distinctiv
	Distinctiveness movement
Ditches	Medium - Medium



Fitness and condition		Habitat distinctiveness	
Condition movement	Length (km)	Distinctiveness	Score
Poor - Moderate	0.24	Medium	4
	0.24		

Habitat condition		Strategic significance		
Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier
Moderate	2	Low potential/action not identified in any plan	Low Strategic Significance	1



development/ post intervention habitats

Tempor

Standard Time to target condition/years	Habitat enhanced in advance/years	Delay in starting habitat enhancement/years
4		



al multiplier			
Standard or adjusted time to target condition	Final time to target condition/years	Final Time to target multiplier	Standard difficulty of enhancement
Standard time to target condition applied	4	0.867	Medium



Difficulty multipliers

Difficulty multipliers			Watercourse er
Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Extent of encroachment
Standard difficulty applied	Medium	0.67	No Encroachment



Encroachment		Riparian encroachment		River units delivered
Multiplier	Extent of encroachment	Multiplier		
1	No Encroachment	1		1.52
				1.52

Comments	
Assessor comments	Reviewer comments
The ditch should be cleared of any injurious species such as nettles and a marginal seed mix be planted along the edges of the ditch such as Emorsgate Pond Edge Mixture EP1. When the ditch is wet, emergent species that are tolerant of dry conditions (as the ditch is dry at times throughout the year) are to be planted within it. Regular checks should be carried out to ensure that no invasive species are present.	



Return to start

Phase 1 Habitat
Woodland
Broadleaved woodland
Semi-natural broadleaved woodland
Plantation broadleaved woodland
Coniferous woodland
Semi-natural coniferous woodland
Plantation coniferous woodland
Mixed woodland
Semi-natural mixed woodland
Plantation mixed woodland
Scrub
Dense / continuous scrub
Scattered scrub
Parkland / scattered trees
Broadleaved parkland / scattered trees
Coniferous parkland / scattered trees
Mixed parkland / scattered trees
Recently-felled woodland
Broadleaved recently felled woodland
Coniferous recently felled woodland
Mixed recently felled woodland
Acid grassland
Acid grassland
Unimproved acid grassland
Unimproved acid grassland
Semi-improved acid grassland (Good quality)
Semi-improved acid grassland (Good quality)
Semi-improved acid grassland (Poor quality)
Neutral grassland
Unimproved neutral grassland
Semi-improved neutral grassland (Good quality)
Semi-improved neutral grassland (Poor quality)
Calcareous grassland
Calcareous grassland
Unimproved calcareous grassland
Unimproved calcareous grassland
Semi-improved calcareous grassland (Good quality)
Semi-improved calcareous grassland (Good quality)
Semi-improved calcareous grassland (Poor quality)
Improved grassland
Marsh/marshy grassland
Marsh/marshy grassland
Marsh/marshy grassland
Poor semi-improved grassland
Strandline vegetation coastland

Sand dune
Dune slack sand dune coastland
Dune grassland sand dune coastland
Dune heath sand dune coastland
Dune scrub sand dune coastland
Open dune sand dune coastland
Maritime cliff coastland
Hard maritime cliff coastland
Soft maritime cliff
Crevice/ledge vegetation
Crevice/ledge vegetation
Coastal grassland
Coastal grassland
Coastal grassland
Coastal grassland
Coastal heathland
Coastal heathland
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Standing open water
Dry dwarf shrub heath
Dry dwarf shrub heath
Acidic dry dwarf shrub heath
Acidic dry dwarf shrub heath
Basic dry dwarf shrub heath
Basic dry dwarf shrub heath
Wet dwarf shrub heath
Wet dwarf shrub heath
Lichen / bryophyte heath
Lichen / bryophyte heath
Montane heath / dwarf herb
Dry heath / acidic grass mosaic
Wet heath / acidic grass mosaic
Dry heath / acidic grass mosaic
Wet heath / acidic grass mosaic
Bracken
Continuous bracken
Scattered bracken
Other tall herb or fern (Good quality)
Other tall herb or fern
Tall ruderal
Non-ruderal

Bog
Sphagnum bog
Blanket bog
Raised bog
Wet modified bog
Dry modified bog
Dry modified bog
Flush and spring
Acid/neutral flush
Basic flush
Bryophyte-dominated spring
Fen
Valley mire
Basin mire
Floodplain mire
Bare peat
Swamp
Marginal and inundation
Marginal and inundation
Marginal vegetation
Inundation vegetation
Natural rock exposures and caves (Good quality)
Natural rock exposures and caves
Inland cliff (High quality)
Inland cliff
Acidic inland cliff
Basic inland cliff
Scree
Acidic scree
Basic scree
Limestone pavement
Other natural rock exposure
Other acidic natural rock exposure
Other basic rock exposure
Artificial rock exposures
Artificial rock exposures
Artificial rock exposures
Artificial rock exposures
Artificial rock exposures
Artificial rock exposures
Quarry
Spoil heap
Mine
Refuse tip
Cultivated/disturbed ground
Arable
Amenity grassland
Ephemeral / short perennial
Introduced shrub
Fence

Wall
Built-up areas
Caravans
Sea wall (artificial materials)
Buildings
Bare ground

Metric habitat	Distinctiveness band
Woodland and forest - Other woodland; mixed	Medium
Woodland and forest - Other woodland; broadleaved	Medium
Woodland and forest - Lowland mixed deciduous woodland	High
Woodland and forest - Other woodland; broadleaved	Medium
Woodland and forest - Other coniferous woodland	Low
Woodland and forest - Native pine woodlands	High
Woodland and forest - Other coniferous woodland	Low
Woodland and forest - Other woodland; mixed	Medium
Woodland and forest - Lowland mixed deciduous woodland	High
Woodland and forest - Other woodland; mixed	Medium
Heathland and shrub - Mixed scrub	Medium
Heathland and shrub - Mixed scrub	Medium
Heathland and shrub - Mixed scrub	Medium
Woodland and forest - Wood-pasture and parkland	High
Woodland and forest - Wood-pasture and parkland	High
Woodland and forest - Other coniferous woodland	Medium
Woodland and forest - Wood-pasture and parkland	High
Woodland and forest - Felled	High
Woodland and forest - Felled	High
Woodland and forest - Felled	High
Woodland and forest - Felled	High
Grassland - Other lowland acid grassland	Medium
Grassland - Upland acid grassland	Medium
Grassland - Lowland dry acid grassland	V.High
Grassland - Upland hay meadows	V.High
Grassland - Upland acid grassland	Medium
Grassland - Other lowland acid grassland	Medium
Grassland - Modified grassland	Low
Grassland - Other neutral grassland	Medium
Grassland - Lowland meadows	V.High
Grassland - Other neutral grassland	Medium
Grassland - Modified grassland	Low
Grassland - Upland calcareous grassland	High
Grassland - Lowland calcareous grassland	High
Grassland - Lowland calcareous grassland	High
Grassland - Upland calcareous grassland	High
Grassland - Upland calcareous grassland	High
Grassland - Lowland calcareous grassland	High
Grassland - Modified grassland	Low
Grassland - Modified grassland	Low
Wetland - Purple moor grass and rush pastures	V.High
Grassland - Other neutral grassland	Medium
Grassland - Modified grassland	Low
Grassland - Modified grassland	Low
Sparsely vegetated land - Coastal vegetated shingle	High

Sparsely vegetated land - Coastal sand dunes	High
Sparsely vegetated land - Coastal sand dunes	High
Sparsely vegetated land - Coastal sand dunes	High
Sparsely vegetated land - Coastal sand dunes	High
Sparsely vegetated land - Coastal sand dunes	High
Sparsely vegetated land - Coastal sand dunes	High
Sparsely vegetated land - Maritime cliff and slopes	High
Sparsely vegetated land - Maritime cliff and slopes	High
Sparsely vegetated land - Maritime cliff and slopes	High
Sparsely vegetated land - Maritime cliff and slopes	High
Grassland - Tall herb communities	High
Sparsely vegetated land - Maritime cliff and slopes	High
Grassland - Lowland meadows	V.High
Grassland - Lowland dry acid grassland	V.High
Grassland - Other lowland acid grassland	Medium
Sparsely vegetated land - Maritime cliff and slopes	High
Heathland and shrub - Lowland Heathland	High
Lakes - Aquifer fed naturally fluctuating water bodies	V.High
Lakes - Ditches	Medium
Lakes - High alkalinity lakes	High
Lakes - Low alkalinity lakes	High
Lakes - Marl Lakes	High
Lakes - Moderate alkalinity lakes	High
Lakes - Peat Lakes	High
Lakes - Ponds (Priority Habitat)	High
Lakes - Ponds (Non- Priority Habitat)	Medium
Lakes - Reservoirs	Medium
Lakes - Temporary lakes, ponds and pools	High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Upland Heathland	High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Upland Heathland	High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Upland Heathland	High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Upland Heathland	High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Upland Heathland	High
Heathland and shrub - Mountain heaths and willow scrub	V.High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Lowland Heathland	High
Heathland and shrub - Upland Heathland	High
Heathland and shrub - Upland Heathland	High
Grassland - Bracken	Low
Grassland - Bracken	Low
Grassland - Bracken	Low
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Grassland - Bracken	Medium
Sparsely vegetated land - Ruderal/Ephemeral	Low
Sparsely vegetated land - Ruderal/Ephemeral	Low

Wetland - Lowland raised bog	V.High
Wetland - Lowland raised bog	V.High
Wetland - Blanket bog	V.High
Wetland - Lowland raised bog	V.High
Wetland - Transition mires and quaking bogs (H7140)	V.High
Wetland - Blanket bog	V.High
Wetland - Lowland raised bog	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Oceanic Valley Mire[1] (D2.1)	V.High
Wetland - Oceanic Valley Mire[1] (D2.1)	V.High
Wetland - Oceanic Valley Mire[1] (D2.1)	V.High
Wetland - Depressions on Peat substrates (H7150)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Fens (upland and lowland)	V.High
Wetland - Reedbeds	High
Use the Feature that it is within, i.e. River, Lake type etc.	
Wetland - Reedbeds	High
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Inland rock outcrop and scree habitats	High
Sparsely vegetated land - Limestone pavement	V.High
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Sparsely vegetated land - Other inland rock and scree	Medium
Urban - Active sand pit quarry or open cast mine	Low
Urban - Active sand pit quarry or open cast mine	Low
Urban - Active sand pit quarry or open cast mine	Low
Urban - Artificial unvegetated, unsealed surface	V.Low
Cropland - Cereal crops	Low
Cropland - Cereal crops	Low
Grassland - Modified grassland	Low
Sparsely vegetated land - Ruderal/Ephemeral	Low
Urban - Introduced shrub	Low
Urban - Built linear features	V.Low

Urban - Built linear features	V.Low
Urban - Developed land; sealed surface	V.Low
Urban - Developed land; sealed surface	V.Low
Urban - Developed land; sealed surface	V.Low
Urban - Developed land; sealed surface	V.Low
Urban - Vacant/derelict land/ bareground	Low





West Berkshire Local Plan Review 2022-2039
Proposed Submission Representation Form

Ref:

(For official use only)

Please complete online or return this form to:	Online: http://consult.westberks.gov.uk/kse
	By email: planningpolicy@westberks.gov.uk
	By post: Planning Policy, Development and Regulation, Council Offices, Market Street, Newbury, RG14 5LD
Return by:	4:30pm on Friday 3 March 2023

This form has two parts:

- Part A - Your details: need only be completed once
- Part B - Your representation(s): please fill in a separate sheet for each representation you wish to make

PART A: Your Details

Please note the following:

- *We cannot register your representation without your details.*
- *Representations cannot be kept confidential and will be available for public scrutiny, however, your contact details will not be published.*
- *All information will be sent for examination by an independent inspector*
- *All personal data will be handled in line with the Council's Privacy Policy on the Development Plan. You can view the Council's privacy notices at <http://info.westberks.gov.uk/privacynotices>*

	Your details	Agent's details (if applicable)
Title:	Mr	
First Name:*	David	
Last Name:*	Wilson	
Job title (where relevant):	Town Planner	
Organisation (where relevant):	Thames Water Property	
Address* <i>Please include postcode:</i>	1 st Floor West, Clearwater Court Vastern Road Reading RG1 8DB	
Email address:*	[REDACTED]	
Telephone number:	[REDACTED]	

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**Mandatory field*

Part B – Your Representation

Please use a separate sheet for each representation

The accompanying guidance note available at: <https://www.westberks.gov.uk/lpr-proposed-submission-consultation> will assist you in making representations.

*Your representation should cover succinctly all the information, evidence and supporting information necessary to support/justify the representation and the suggested change(s) as there will **not normally** be a subsequent opportunity to make further representations, **further submissions will ONLY be at the request of the Inspector, based on the matters and issues they identify for examination.***

Your name or organisation (and client if you are an agent):	Thames Water
---	--------------

Please indicate which part of the Local Plan Review this representation relates to:

Section/paragraph:	Site Allocations
Policy:	
Appendix:	
Policies Map:	
Other:	

1. Legally Compliant

Please see the guidance notes for an explanation of what 'legally compliant' means.

Do you consider the Local Plan Review is legally compliant?

Yes

No

Please give reasons for your answer:

2. Soundness

Please see the guidance notes for an explanation of what 'soundness' means.

Do you consider the Local Plan Review is sound?

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF)

Please tick all that apply:

NPPF criteria	Yes	No
Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development		
Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence		
Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground		
Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF		x

Please give reasons for your answer:

The information contained within the new Local Plan will be of significant value to Thames Water as we prepare for the provision of future water supply/wastewater infrastructure.

The attached table provides Thames Water's site specific comments from desktop assessments on water supply, sewerage/waste water network and waste water treatment infrastructure in relation to the proposed sites, but more detailed modelling may be required to refine the requirements.

Early engagement between the developers and Thames Water would be beneficial to understand:

- *What drainage requirements are required on and off site*
- *Clarity on what loading/flow from the development is anticipated*
- *Water supply requirements on and off site*

The time to deliver water/wastewater infrastructure should not be underestimated. It can take 18 months – 3 years for local upgrades and 3 – 5 years plus for more strategic solutions to be delivered. It is therefore vital that the Council and Developers work alongside Thames Water so that we can build up a detailed picture what is being built where, get confidence of when that development is going to start and what the phasing of that development will be.

To support this Thames Water offers a Free pre planning service where developer can engage Thames water to understand what if any upgrades will be needed to serve the development where and when.

Link here > <https://www.thameswater.co.uk/developers/larger-scale-developments/planning-your-development/water-and-wastewater-capacity>

We recommend developers attach the information we provide to their planning applications so that the Council and the wider public are assured water and waste matters for the development are being addressed.

3. Complies with the Duty to Co-operate

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

Do you consider the Local Plan Review complies with the Duty to Co-operate?

Yes

No

Please give reasons for your answer:

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the LPR legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Include reference to concerns regarding waste water/water supply network capacity and the need to liaise with Thames Water to determine whether a detailed drainage/water infrastructure strategy informing what infrastructure is required, where, when and how it will be delivered is required.

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)?

Yes

No

x

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply:

Tick

The submission of the Local Plan Review for Independent Examination	
The publication of the report of the Inspector appointed to carry out the examination	
The adoption of the Local Plan Review	

Please ensure that we have either an up to date email address or postal address at which we can contact you. You can amend your contact details by logging onto your account on the Local Plan Consultation Portal or by contacting the Planning Policy team.

Signature	David Wilson	Date	28/02/2023
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Your completed representations must be received by the Council by 4:30pm on Friday 3 March 2023.

Site ID	Site Name	Net Gain to System (l/day)	Net Foul Water Increase to System (l/s)	Net Property Equivalent Increase - Waste	Net Increase in Demand (l/day)	Net Increase in Peak Demand (l/s)	Net Property Equivalent Increase - Water
40897	72 Purley Rise, Purley on Thames (Site Ref HSA 11)	37422	0.43	35	12250	0.43	35
69375	BEEN10- Northway Porsche, Grange Lane, Beenham	126720	1.47	119	25600	0.89	73

74339	Beenham Landfill, Pips Way, Beenham	277200	3.21	259	56000	1.94	160
41285	EMP1 Whitehart Meadow, Theale	42768	0.5	40	14000	0.49	40

40830	Former Theale Sewage Treatment Works, Theale (Site Ref THE7)	64152	0.74	60	21000	0.73	60
74336	Land adjacent Station Road, Hermitage	36352.8	0.42	34	11900	0.41	34

40892	Land adjacent to Bath Road and Dorking Way, Calcot (Site Ref HSA 13)	37422	0.43	35	12250	0.43	35
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61427	Land adjacent to Padworth IWMF, Padworth Lane, Padworth (Site Ref: PAD4)	245520	2.84	230	49600	1.72	142
40849	Land adjoining Pondhouse Farm, Clayhill Road, Burghfield Common (Site Ref: HSA15)	106920	1.24	100	35000	1.22	100

40874	Land adjoining The Haven, Kintbury (Site Ref: KIN6)	21384	0.25	20	7000	0.24	20
40802	Land at Bath Road, Speen, Newbury, Berkshire, RG14 8AA (approved feb 2020)	106920	1.24	100	35000	1.22	100
68015	Land at Chieveley Glebe, Chieveley (Site Ref: CHI23)	16038	0.19	15	5250	0.18	15

40805	Land at Coley Farm, Stoney Lane, Newbury (Site Ref: HSA 3) (SITE ALLOCATED PENDING)	80190	0.93	75	26250	0.91	75
40820	Land at Lower Way, Thatcham (Site Ref: THA025)	90882	1.05	85	29750	1.03	85

48917	Land at Newbury Road, Lambourn (Site Ref: HSA 20)	5346	0.06	5	1750	0.06	5
40841	Land between A340 and The Green, Theale (Site Ref: HSA 14)	106920	1.24	100	35000	1.22	100

66742	Land east of Colthrop Industrial Estate, Thatcham (Site Ref: MID5)	396000	4.58	370	80000	2.78	229
40843	Land north of A4 Bath Road, Woolhampton	17107.2	0.2	16	5600	0.19	16

40790	Land north of Newbury College, Monks Lane, Newbury (Site ref HSA 1))	16038	0.19	15	5250	0.18	15
40855	Land North of Southend Road, Bradfield Southend (Site Ref: BRAD5)	21384	0.25	20	7000	0.24	20
40863	Land off Charlotte Close, Hermitage (Site Ref: HSA 24)	16038	0.19	15	5250	0.18	15

41814	Land off Greenham Road, South East Newbury (Site Refs: HSA 4)	171072	1.98	160	56000	1.94	160
40864	Land to the south east of the Old Farmhouse, Hermitage (Site Ref HSA 25)	10692	0.12	10	3500	0.12	10

74337	Land to the south of Trinity Grain, Membury Industrial Estate, Lambourn Woodlands	102960	1.19	96	20800	0.72	59
63982	Land west of Ramsbury Road, Membury Industrial Estate, Lambourn Woodlands	205543.8	2.38	192	41524	1.44	119

61416	Land west of Spring Meadows, Great Shefford (Site Ref: GS1)	16038	0.19	15	5250	0.18	15
68017	Long Copse Farm, Enborne (Site Ref: TS2)	35640	0.41	33	8640	0.3	25

62237	North East Thatcham Strategic Site Allocation	1640100	18.98	1534	530500	18.42	1516
40861	Pirbright Institute Site, High Street, Compton (Site Ref: HSA 22)	149688	1.73	140	49000	1.7	140

41821	RSA 22 Land adjoining Lynch Lane, Lambourn (Site Ref: HSA 19)	64152	0.74	60	21000	0.73	60
68016	RSA 32 New Stocks Farm, Paices Hill, Aldermaston (Site Ref: TS1)	11880	0.14	11	2880	0.1	8

41427	Sandleford Park, Newtown Road, Newtown, Newbury, Berkshire (PENDING)	1603800	18.56	1500	525000	18.23	1500
40899	Stoneham's Farm, Long Lane, Tilehurst (Site Ref: HSA 9)	0	0	0	0	0	0

Water Response

On the information available to date we do not envisage infrastructure concerns regarding water supply network infrastructure in relation to this development/s. It is recommended that the Developer and the Local Planning Authority liaise with Thames Water at the earliest opportunity to advise of the developments phasing. Please contact Thames Water Development Planning, either by email Devcon.team@thameswater.co.uk tel: 02035779998 or in writing Thames Water Utilities Ltd, Maple Lodge STW, Denham Way, Rickmansworth, Hertfordshire, WD3 9SQ

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Waste Response	Additional Comments
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