



Cornwall Site Allocations Development Plan Document

Habitat Regulation Assessment
Update Report

August 2018

Addendum to the Cornwall Site Allocations Development Plan – Habitats Regulations Assessment (HRA) Report
February 2017

5 SCREENING ASSESSMENT & APPROPRIATE ASSESSMENT

NOTE: This is an addendum to the Cornwall Site Allocations Development Plan – Habitats Regulations Assessment (HRA) Report February 2017. This document is an updated version of Chapter 5 of the Feb 2017 HRA Report, and supersedes the previous Chapter 5. The main HRA Report will still need to be referred to in relation to this addendum document.

This update to the HRA has been prepared to ensure the HRA for the Cornwall Site Allocations Document is legally compliant following the judgement handed down on 12 April 2018 in the case of *People Over Wind and Sweetman v Coillte Teoranta*.¹ The essence of that judgment is that measures to avoid or reduce effects of plans or programmes on protected habitats should be considered via appropriate assessment, as opposed to being integrated with an earlier screening assessment. This addendum ensures that any mitigation measures are considered via Appropriate Assessment, ensuring that the Cornwall Site Allocations Development Plan – Habitats Regulations Assessment Report February 2017 when read in conjunction with this Chapter 5 HRA Addendum Report August 2018, is legally compliant.

For clarity, this addendum ensures that any mitigation, for individual sites or strategic mitigation, has not been considered at the screening stage of the HRA, but at the Appropriate Assessment stage.

This report has been prepared by Cornwall Council following discussion with Natural England.

¹ Environment – Conservation of natural habitats, [2018] EUECJ C-323/17.

1.1 STEP 1: THE STRATEGY AND MANAGEMENT OF INTERNATIONAL SITES

- 1.1.1 This stage considers whether the Cornwall Site Allocations are directly connected with or necessary to the management of the European sites listed, and where relevant sets out the required Appropriate Assessment. Within this context 'directly' means that the plan is solely conceived for the conservation management of a site or group of sites and 'management' refers to the management measures required in order to maintain in favourable condition the features for which the European site has been designated.
- 1.1.2 The Cornwall Site Allocations are neither directly connected with, nor necessary for, the management of any of the European sites listed. As such it is clear that further consideration of the plan by way of a HRA screening assessment is required.

1.2 STEP 2: DESCRIPTION OF PROJECT OR PLAN

A description of the Cornwall Site Allocations is provided in Section 3 of the main Cornwall Site Allocations Development Plan – Habitats Regulations Assessment (HRA) Screening Report February 2017 document.

1.3 STEP 3: INITIAL SCOPING FOR IMPACTS AND EFFECTS ON EUROPEAN SITES

- 1.3.1 Development of the site allocations in proximity to European sites has the potential to result in a number of short- and long-term impacts, as detailed in Table 5.1 below.

Table 5-1 Potential Impacts on European Sites as a Result of the Site Allocations

Impact	Development actions and activities
Direct Habitat Loss and Fragmentation (of European site or functionally linked habitat)	<ul style="list-style-type: none"> • Direct land take. • Land take of supporting, functionally linked habitats. • Introduction of barriers to migration of key species due to physical obstruction or disturbance effect.
Changes to Water Resources/flow and quality	<ul style="list-style-type: none"> • Sewage and industrial effluent discharges from new developments. • Abstraction to secure water supplies for planned growth. • Land drainage to enable development. • Piling to support development. • Flood and coastal risk management development (for example, implementation of new flood defences). <p>Surface water drainage of resultant development</p>
Coastal Squeeze	<ul style="list-style-type: none"> • Development in locations that would compromise natural processes or managed retreat projects.
Changes to Air quality	<ul style="list-style-type: none"> • Increase in atmospheric pollutants including dust and nitrogen deposition.
Recreational Pressure	<ul style="list-style-type: none"> • Recreational pressures resulting in increased visits causing for example, trampling of interest features, eutrophication and disturbance (from for example, dog walking).
Disturbance	<ul style="list-style-type: none"> • Construction and operation in proximity to sensitive features may result in disturbance impacts (noise, lighting, and vibration, visual).

- 1.3.2 Taking into account the specific vulnerabilities, issues and threats for each European site within the Zol (identified and described in Table 4.2 in the main HRA), an assessment has been made as to whether any of the impacts described in Table 5.1 might arise as a result of the implementation of the Site Allocations DPD. The results of this screening assessment are summarised in Table 5.2. Where insufficient detail is available, potential development requirements are described and considered, and assumptions are made regarding likely impacts.
- 1.3.3 It should be noted that coastal squeeze has been discounted for all Site Allocations due to their locations (none are located in areas that would affect the natural processes of European sites or proposed managed retreat areas).
- 1.3.4 In Combination Impacts and Effects on European Sites)
- 1.3.5 Table 5.1 above outlines (at a strategic level) the broad types of effects that may arise from the implementation of other policies, plans and projects and which have the potential to act in-combination with the Site Allocations.
- 1.3.6 In accordance with the process for consideration of in-combination effects in HRA, if it is determined as part of the screening provided in Table 5.2 below, that the Site Allocations would not have any effect at all on a European Site, then no further in-combination assessment would be considered necessary. However, if it is assessed that the Site allocations would not have an effect alone, but a pathway exists and there might be an effect in-combination, further assessment would be carried out.
- 1.3.7 As demonstrated in Table 5.2 below, the pathways considered for in-combination effects relate to changes to air quality, recreational pressure, and changes to water quality/flow as a result of discharge from sewage treatment works. All of these pathways/impacts and the potential for in-combination effects on European sites have been considered in detail in the Local Plan HRA with specific regard to the level of in-combination development proposed within the period of the Local Plan. This assessment is not repeated here; however, the results, where appropriate, are referenced below.
- 1.3.8 Where mitigation measures are considered these are set out in the corresponding 'Appropriate Assessment' tables for sites, below each screening assessment.
- 1.3.9 Table 6.1 in the main Cornwall Site Allocations Development Plan – Habitats Regulations Assessment (HRA) Report February 2017, should be referred to in relation to this addendum – as it clearly sets out for each site where an Appropriate Assessment was undertaken, the mitigation requirements which are needed to enable the conclusion of 'no likely significant effects' occurring as a result of the allocation. The mitigation measures in table 6.1 in the main HRA Report (which correspond to the measures set out in the Appropriate Assessment tables in this addendum) will be incorporated into the Cornwall Site Allocations Development Plan as policy requirements, for each relevant site.
- 1.3.10 Appendix 1 to this Addendum sets out the Habitats Regulation Assessment for three new sites proposed during the examination process of the Cornwall Site Allocations Document. The HRA's for the three sites: PZ-H14 Jennings Street in Penzance; Bd-H1 Westheath Road in Bodmin, and SLT-H1 North Pill in Saltash, have all been previously prepared in consultation with Natural England and published on the Examination library, but are appended to this HRA addendum for completeness regarding the Habitats Regulation Assessment evidence base. The three sites have been subject to Appropriate Assessment where LSE were identified.

Table 5-2 a - j Potential Impacts and Likely Significant Effects (LSE) – Refer to Table 5.3 for Resultant Policy Considerations

5.2a Saltash Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

SALTASH Site Allocation	Location in relation to Nature 2000 Site(s) in ZoI	Possible Impacts and Likely Significant Effects Arising from Site Allocation					Recreational Disturbance (for housing development)
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
<p>SLT-UE1: Broadmoor Urban Extension (1200 dwellings and minor infrastructure improvement schemes²)</p> <p>Site is situated on largely arable land with woodland fringe immediately to the west of Saltash.</p> <p>Site is bounded by A-roads.</p>	<p>Tamar Estuaries Complex SPA is located to the north-east and south-west of SLT-UE1. Its closest point is to the north 639m distant from SLT-UE1.</p> <p>Plymouth Sound Estuaries SAC is located at its closest point, 529 m north east of SLT-UE1.</p> <p>Refer to Figure 3.1</p>	<p>No direct loss of SPA/SAC habitat will occur.</p> <p>The landscape within which SLT-UE1 is situated is immediately connected to Saltash and is bounded by A-Roads.</p> <p>Due to its location outside of estuary corridors SLT-UE1 is not considered likely to be of particular importance to the qualifying features of the SPA.</p> <p>No loss of supporting habitat or fragmentation will therefore occur³.</p>	<p>Noise/Vibration Disturbance, Water Quality, Visual Disturbance</p> <p>It is considered unlikely that LSE will arise as a result of noise/vibration or visual disturbance at a distance > 500 m from the SPA/SAC during construction or operation either alone or in-combination. However, this issue is also considered at the Appropriate Assessment stage in Table 5.2A.1 for completeness. Sewage Treatment will also be considered as part of the AA.</p> <p>Air Quality</p> <p>The SAC is located within 200 m⁴ of the A38 (an affected road)⁵. Although it is considered that there would be no significant effect alone, analysis carried out for the Appropriate Assessment of the Cornwall Local Plan identified that changes in traffic flow on roads within 200 m of the SAC can be expected as a result of in-combination development described in the Local Plan (of which this allocation forms part). However, it has been demonstrated that nitrogen deposition will not exceed critical loads and the total cumulative NOx concentrations will remain below the actual critical level where an adverse effect on vegetation may potentially occur. As such, it is considered there will be no LSE.</p>	<p>See table 5.2a.1</p>			

² Where infrastructure schemes are described as brought forward as part of this allocation they are included in the assessment. In addition, these Schemes have been assessed separately in the Connecting Cornwall Implementation Plan 2015 – 2019.

³ Natural England’s Regulation 33 report for the European Marine Site lists those supporting habitats whose preservation is essential for the integrity of the avocet and little egret populations within the SPA.

⁴ In accordance with Department of Transport’s Transport Analysis Guidance www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf, consideration is given to the potential for increases in emissions to result in LSE where an affected road falls within 200 m of a European site. Beyond 200 m, the contribution of vehicle emissions from the roadside to local pollution levels is not considered significant.

⁵ An affected road is one which, due to an increase in traffic flow, will require air quality calculations in order to rule out a significant effect. In accordance with Design Manual for Roads and Bridges, Volume 11 Environmental Assessment, Section 3, Part 1: Air Quality.

Table 5.2a.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
SLT-UE1	<p>Noise/Vibration Disturbance, Water Quality, Visual Disturbance at construction phase LSE can be mitigated through a CEMP. With the incorporation of construction best-practice measures implemented through a Construction Environmental Management Plan (CEMP)⁶ there are unlikely to be any construction-related pollution impacts (air/water quality/water flow) alone or in-combination. The allocation policy will need to include a requirement for a CEMP.</p> <p>Water Quality - Surface Water runoff</p> <p>Surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall⁷ with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts at the SAC/SPA, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. The allocation policy will need to include a requirement that Designs will need to be approved by the Council and in place prior to development being operational,</p> <p>Water Quality - Sewage Treatment</p> <p>South West Water (SWW) has assessed that “Flow from the development included in the annual spill volume from Riverview Sewage Pumping Station Combined Sewage Outfall (CSO) is predicted to increase by 123%; therefore measures are required to mitigate for the increase in spills” in-combination with other development, during operation. SWW conclude that with the implementation of an in-situ storage tank to receive flows from the development and then drain (with a controlled outflow) to Ernesettle Sewage Treatment Works (STW) there will be no CSO discharges into the Tamar and as such no LSE as a result of decreased water quality through this pathway⁸. The allocation policy will need to include a requirement that design will need to be approved by the Council and in place prior to the development being operational to ensure no likely significant effects arise at the SPA/SAC.</p>				<p>Tamar Estuaries and Plymouth Sound Estuaries have been identified as vulnerable to recreational disturbance (refer to Table 4.2)⁹.</p> <p>SLT-UE1 is to bring forward 1200 dwellings within the 12.3 km ZoI identified as significant for the SAC in terms of in-combination local resident visits (refer to Section 4).</p> <p>Therefore, although there is unlikely to be LSE through this pathway as a result of the site allocation alone, it is not possible to rule out LSE as a result of in-combination recreational disturbance.</p> <p>An Appropriate Assessment has been carried out (refer to Appendix 1). The AA (within Table 5.2a.2) concludes that recreational disturbance at the SAC and SPA could be adequately mitigated through the payment of a financial contribution towards the delivery of the Tamar Estuaries Management Plan, managed</p>

⁶ Refer to Appendix 2 for outline of CEMP contents.

⁷ Version 2, January 2010.

⁸ Described in the Habitats Regulations Assessment Screening Report for Broadmoor Farm, Saltash (refer to Appendix 1).

⁹ As a result of visitor and disturbance studies undertaken 2015 - 2016, Zols have been determined for the consideration of in-combination recreational disturbance for Penhale Dunes SAC (12.5 km), Fal and Helford SAC (10 km), Plymouth Sound and Estuaries SAC (10 km) and Tamar Estuaries Complex SPA (12 km). Cornwall Council will not accept residential development and student and tourist accommodation within these Zols, without appropriate mitigation. A strategic solution to mitigation is being developed which will include visitor management, developer contributions and green space requirements for new development. A Supplementary Planning Document (SPD) is currently being produced, based on the findings of a recreation impacts study, setting out the required mitigation for each relevant European site.

		<p>by the Tamar Estuaries Consultative Forum. A proportional contribution is to be secured as set out in SLT-UE1 and CLP Policy 22 (and the forthcoming associated SPD) and will be used to help fund a range of mitigation measures across the SAC/SPA. Details are provided in Appendix 1. It was concluded that with the implementation of the mitigation proposed, there will be no LSE.</p>
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Table 5.2a Saltash Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

SALTASH Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
<p>SLT_E1: Stoketon Cross Employment Site and minor infrastructure (refer to footnote 15).</p> <p>Site is situated on 8.5 ha of existing industrial and arable with areas of grassland with woodland fringe to the west of Saltash.</p> <p>Site is immediately adjacent to the A38 and B3271.</p>	<p>Tamar Estuaries Complex SPA is located to the north-east and south-west of SLT2. Its closest point is to the north at 1862m.</p> <p>Plymouth Sound Estuaries SAC is located at its closest point, 674 m north east of SLT2.</p> <p>Refer to Figure 3.1</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur.</p> <p>There will be no loss of areas of land/habitats outside the SPA boundary that are identified as being of particular importance to the qualifying species and as such no degradation of the SPA.</p>	<p>Noise/Vibration Disturbance, Water Quality, Visual Disturbance</p> <p>It is considered unlikely that significant effects will arise during construction or operation as a result of noise/vibration or visual disturbance at a distance > 650 m from the SPA/SAC alone or in-combination. . However, this issue is also considered at the Appropriate Assessment stage in Table 5.2A.1 for completeness. Sewage Treatment will also be considered as part of the AA.</p> <p>Air Quality.</p> <p>As described for SLT1, air quality impacts are unlikely to be significant alone. Air quality modelling undertaken for the Local Plan has demonstrated that the total cumulative NOx concentrations for the local plan period will remain below the actual critical level where an adverse effect on vegetation at the SAC may potentially occur and as such significant in-combination air quality impacts will also not materialise.</p>	<p>No pathway identified through the development of an employment site at this distance from vulnerable European sites.</p>			

Table 5.2a.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
SLT-E1	<p>Noise/Vibration Disturbance, Water Quality, Visual Disturbance LSE can be mitigated through a CEMP. With the incorporation of construction best-practice measures implemented through a Construction Environmental Management Plan (CEMP)¹⁰ there are unlikely to be any construction-related pollution impacts (air/water quality/water flow) alone or in-combination. The allocation policy will need to include a requirement for a CEMP. .</p> <p>Water Quality - Surface Water runoff</p> <p>Surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts at the SAC/SPA, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. Designs will need to be approved by the Council and in place prior to development being operational</p> <p>Water Quality - Sewage Treatment</p> <p>Sewage is piped across the Tamar Bridge for treatment in at Ernesettle, on the edge of Plymouth. The growth planned for Saltash, combined with the growth for Plymouth is likely to exceed treatment capacity at Ernesettle in the medium term; plus pipe capacity across the Tamar may also be exceeded. SWW is investigating the delivery of a new treatment works on the edge of Saltash, which will have a 3-4 year lead in time. SWW has indicated that a new facility would be a regulated investment; as a result no developer contributions are expected. To ensure no LSE, The allocation policy will need to include a requirement that no development will be permitted prior to confirmation that the allocation can be accommodated within the headroom of existing treatment works or prior to provision of appropriate upgrades/new facilities.</p>				N/A

¹⁰ Refer to Appendix 2 for outline of CEMP contents.

Table 5.2a Saltash Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

SALTASH Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
<p>SLT-E2 – SLT-E5: Safeguarded employment Sites.</p> <p>Sites SLT-E2 – SLT-E5 situated on existing industrial to the south of A38. SLT-E5 is to the north of the A38.</p> <p>There is a lack of space for additional growth and as such, any new development would replace an existing unit. In addition, SLTE2 – E4 are located south of the A38, which forma a significant physical barrier between the allocations and the European sites.</p>	<p>The closest of these three sites is situated 349 m from Tamar estuaries SPA and 278 m from Plymouth Sound & Estuaries SAC.</p> <p>Refer to Figure 3.1</p>	<p>No pathway identified through the safeguarding of existing employment sites (without new construction).</p>					

Appropriate Assessment not required.

5.2b Helston Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

HELSTON Site Allocation	Location in relation to Nature 2000 Site(s) in ZOI	Possible Impacts and Likely Significant Effects Arising from Site Allocation					Recreational Disturbance (for housing development)
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
<p>He-E2</p> <p>Tresprison Industrial Park expansion (0.8 ha).</p> <p>Located east and south of Helston on area of Improved grassland/arable immediately south of A394.</p>	<p>The Lizard SAC 4959 m; Fal and Helford SAC 3757 m; Lizard Point SAC 5080 m; Tregonning Hill SAC 7304 m; Falmouth Bay to St. Austell Bay pSPA 9272 m.</p> <p>Refer to Figure 3.4</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (sites situated on improved grassland/arable > 3500 m distant.</p>	<p>Noise/Vibration Disturbance, Visual Disturbance</p> <p>With the distance of > 3500 m from the nearest European site, it is considered unlikely that there would be any construction-related pollution impacts (air/water quality/water flow) or noise/vibration or visual disturbance either alone or in-combination.</p> <p>It is considered unlikely that significant effects will arise during operation as a result of noise/vibration or visual disturbance at a distance > 3500 m either alone or in-combination.</p> <p>Air Quality</p> <p>As assessed through the Cornwall Local Plan HRA, although the A390 is situated within 200 m of the Fal and Helford SAC, the A390 is not considered to be an 'affected road' and no LSE will arise as a result of changes to air quality alone or in-combination.</p> <p>Water Quality / Sewage Treatment</p> <p>As LSE on water quality cannot be ruled out at the screening stage this will be discussed in the Appropriate Assessment in Table 5.2b.1.</p>	<p>No pathway identified through the development of employment sites.</p>			
<p>He-E3</p> <p>Helston Business Park (7.4 ha).</p> <p>Located immediately south of Helston and adjacent to A394 on improved grassland/arable land.</p>	<p>The Lizard SAC 4682 m; Fal and Helford SAC 3825 m; Lizard Point SAC 4694 m; Tregonning Hill SAC 7001 m; Falmouth Bay to St. Austell Bay pSPA 9238 m.</p> <p>Refer to Figure 3.4.</p>						

Table 5.2b.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
He-E2 He-E3	<p>Water Quality – Surface water The Fal and Helford SAC is identified as being vulnerable to water-pollution related impacts. In addition, the Helford River is highly nutrient enriched and is failing in terms of the Water Framework Directive (WFD) criteria for dissolved inorganic nitrogen¹¹. Surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts at the SAC. To ensure no LSE as a result of reduced water quality due to run off during operation either alone or in-combination, the allocation policy will need to include a requirement for SUDS designs to be approved by the Council and in place prior to development being operational.</p> <p>Water quality - Sewage Treatment SWW has confirmed that the levels of development envisaged within the Local Plan can be accommodated within Helford STW up to 2020 when capacity will need to be increased by the provision of upgrades to the existing facility. To ensure that no in-combination water quality effects materialise, the allocation policy will need to include a requirement that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities.</p>				N/A

¹¹ Site Improvement Plan for the Fal and Helford SAC, Natural England 2014

Table 5.2b Helston Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

HELSTON Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>He-E1</p> <p>Water-ma-Trout Industrial Estate Safeguarded employment Sites.</p> <p>Located within existing industrial area to the north of Helston west of B3297.</p>	<p>The Lizard SAC 6270 m</p> <p>Fal and Helford SAC 4670 m</p> <p>Lizard Point SAC 6121 m</p> <p>Tregonning Hill SAC 6000 m</p> <p>Refer to Figure 3.4</p>	<p>No pathway identified through the safeguarding of existing employment sites (without new construction).</p>				

Appropriate Assessment not required.

5.2c CPIR Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

CPIR Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
<p>CPIR-UE1: Tolgus Urban Extension 280 dwellings and < 3000 sqm B1 employment space, minor infrastructure.</p> <p>Site Allocation situated on arable land between the A30 and A3047.</p>	<p>Godrevy Head to St. Agnes SAC: 5659 m.</p> <p>Refer to Figure 3.2</p>	<p>As a result of > 5000 m distance between Godrevy Head to St. Agnes SAC and development there will be no direct habitat loss. In addition there would be no fragmentation, degradation, or loss of supporting habitats at this distance.</p>	<p>No pathway identified to interest features.</p>	<p>It is considered unlikely that significant effects as a result of air quality impacts or water flow will arise during construction or operation at > 5000 m either alone or in-combination. Water quality is also unlikely to be affected during construction due to lack of direct hydrological connectivity (significant barriers and distance are present).</p> <p>However LSE from water quality / sewage treatment during the operational phase cannot be ruled out at the screening stage and this will be discussed in the Appropriate Assessment in Table 5.2c.1.</p> <p>Godrevy Head to St. Agnes SAC is not located < 200 m of a major road and therefore air quality impacts alone or in-combination are not considered likely.</p> <p>The allocation is not identified as within the catchment of a STW currently at capacity or contributing to decreased water quality. However LSE from water quality / sewage treatment cannot be ruled out at the screening stage and this will be discussed in the Appropriate Assessment in Table 5.2c.1.</p>		<p>No pathway identified to interest features.</p>	<p>Godrevy Head to St. Agnes SAC is vulnerable to recreational pressures due to the nature of the interest features - heathland and early gentian. However, a change in the existing management regime is considered to be the primary catalyst required to maintain a healthy population of early gentian, with reducing the impacts of atmospheric nitrogen being of most significance for the SAC's heathland habitats¹².</p> <p>It is considered likely that visits from occupants of housing coming forward from this allocation alone would not result in any additional significant pressures at the site due to the small number of occupants and that they would be likely to travel to closer and more accessible areas of the coast such as Portreath and Gwithian.</p> <p>The results of surveys brought forward to inform the Local Plan HRA indicate that local visits are not significant beyond 2 km and furthermore that pressures on vulnerable areas of the SAC do not arise as a result of these local visits. As a result, no LSE is identified for this allocation alone or in combination.</p>

¹² Site Improvement Plan Godrevy Head to St. Agnes SAC, Natural England 2014

Table 5.2c.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
CPIR-UE1	<p>Water Quality / Sewage Treatment SWW have confirmed that development can be accommodated in the medium-term with long-term upgrades potentially being to meet demand. To ensure that no in-combination water quality effects materialise in the long-term as a result of discharges, the allocation policy will need to ensure that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works consents and facilities or prior to provision of appropriate upgrades/new facilities.</p>				N/A

5.2c CPIR Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

CPIR Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
<p><i>CPIR-E1: Tolvaddon Energy Park</i></p> <p><i>Employment space (11 ha) situated to the north of the A30 on largely arable land.</i></p>	<p>Godrevy Head to St. Agnes SAC: 6907 m.</p> <p>Refer to Figure 3.2</p>	<p>As a result of > 6000 m distance between Godrevy Head to St. Agnes SAC and the development employment space on industrial or arable land, it is considered likely that there will be</p>	<p>No pathway identified to interest features.</p>	<p>It is considered unlikely that significant effects as a result of air/water quality or water flow/run-off impacts will arise during construction or operation either alone or in-combination. This is due to > 5000 m distance with no direct hydrological connectivity (significant barriers and distance are present).</p>	<p>No pathway identified to interest features.</p>	<p>No pathway identified through the development of employment sites.</p>	
<p><i>CPIR-E6: Trevenson Gateway</i></p> <p><i>1.5 ha of B1 employment space situated to the south of A30 on largely existing industrial land with some woodland fringe habitats.</i></p>	<p>Godrevy Head to St. Agnes SAC: 7628 m.</p> <p>Refer to Figure 3.2</p>	<p>no fragmentation, degradation, or loss of supporting habitats. There will be no direct habitat loss.</p>		<p>Godrevy Head to St. Agnes SAC is not located < 200 m of a major road and therefore air quality impacts in-combination are also not considered likely.</p> <p>Water Quality / Sewage Treatment</p> <p>The SAC is not identified as within the catchment of a STW currently at capacity or</p>			

<p><i>CPIR-E5: Dudnance Lane</i></p> <p><i>6.9 ha of B1/B2/B8 employment development situated to the south of the a30 on existing industrial land.</i></p>	<p>Godrevy Head to St. Agnes SAC: 7862 m.</p> <p>Refer to Figure 3.2</p>			<p>contributing to decreased water quality.</p> <p>However, LSE from water quality cannot be ruled out at the screening stage and this will be discussed in the Appropriate Assessment in Table 5.2c.2.</p>		
<p><i>CPIR-ED1: Tuckingmill</i></p> <p><i>1.7 ha of development for educational use situated on arable land immediately adjacent to significant existing urban area.</i></p>	<p>Godrevy Head to St. Agnes SAC: 8269 m.</p> <p>Refer to Figure 3.2</p>					

Table 5.2c.2 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
CPIR-E1 CPIR-E6 CPIR-E5 CPIR-ED1	<p>Water Quality / Sewage Treatment SWW have confirmed that development can be accommodated in the medium-term with long-term upgrades potentially being required at the existing facilities to meet demand. It should be noted that CPIR-E1 has been permitted (at the time of writing) within the STWs existing capacity.</p> <p>To ensure that no in-combination water quality effects materialise in the long-term as a result of discharges, the allocation policy will need to ensure that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities.</p>				N/A

5.2c CPIR Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

CPIR Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>CPIR-E7</p> <p>5.1 ha of small-scale business use on grassland surrounded by existing built land.</p> <p>CPIR-R1</p> <p>Expanded retail growth, predominately situated within existing built area.</p>	<p>The closest of these sites is situated:</p> <p>Godrevy Head to St. Agnes SAC: 6390 m.</p> <p>Carrine Common SAC: 9278 m.</p> <p>Refer to Figure 3.2</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (site situated on existing industrial land > 6000 m distant with limited space for additional growth).</p>	<p>No pathway identified to interest features.</p>	<p>It is considered unlikely that significant effects as a result of air or water quality or flow/run-off impacts will arise during construction or operation where there is no direct hydrological connectivity (significant barriers and distance are present) and the development is located > 6000 m distant.</p> <p>Godrevy Head to St. Agnes SAC is not located < 200 m of a major road and therefore air quality impacts in-combination are also not considered likely.</p> <p>Water Quality / Sewage Treatment</p> <p>The SACs are not identified as within the catchment of a STW currently at capacity or contributing to decreased water quality.</p> <p>However LSE from water quality cannot be ruled out at the screening stage and this will be discussed in the Appropriate Assessment in Table 5.2c.3.</p>	<p>No pathway identified to interest features.</p>	<p>No pathway identified through the development of employment sites.</p>

Table 5.2c.3 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
CPIR-E7 CPIR-R1	<p>Water Quality / Sewage Treatment SWW have confirmed that development can be accommodated in the medium-term with long-term upgrades potentially being required at the existing facilities to meet demand. To ensure that no in-combination water quality effects materialise in the long-term as a result of discharges, the allocation policy will need to include a requirement that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities.</p>				N/A

5.2c CPIR Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

CPIR Site Allocation	Location in relation to Nature 2000 Site(s) in ZOI	Possible Impacts and LSE (Habitat Loss/ Degradation/ Fragmentation, Noise and Vibration, Water Quality / Flow, Air Quality (Emissions – Deposition /Dust), Visual Disturbance, Recreational Disturbance)
CPIR-E2 – E4 Safeguarded Employment Sites situated on existing industrial land.	The closest of these three sites is situated: Godrevy Head to St. Agnes SAC: 4731 m. Carrine Common SAC: 8237 m. Penhale Dunes > 12000 m Refer to Figure 3.2	No pathway identified through the safeguarding of existing employment sites (without new construction).

Appropriate Assessment not required.

5.2d Bodmin Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

BODMIN Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
Bd-UE2: Halgavor Urban Extension approximately 770 dwellings (37 ha)	2939 m River Camel SAC. 3357 m Breney Common and Goss and Tregoss Moors SAC. 9958 m St. Austell Clay Pits SAC. Refer to Figure 3.3	<p>Site allocation is situated on arable land to the south and east of, and immediately adjacent to, significant existing urban area of Bodmin.</p> <p>The A30 is located to the west of the site. The site is bisected by the B3268.</p> <p>As a result of the arable nature of the development site, along with the distance between the closest European site, and also intervening habitat comprising of existing urban development, it is considered unlikely that there will be fragmentation, degradation, or loss of supporting habitats.</p> <p>There will be no direct habitat loss.</p>					
Bd-UE4 Callywith Urban Village 650 dwellings	878 m River Camel SAC. 5804 m Breney Common and Goss and Tregoss Moors SAC.	<p>Site allocations are located to the east and north of Bodmin's existing urban area. Located on arable land.</p> <p>As a result of the arable nature of the development site, along with the distance, and also intervening habitat comprising</p>					

¹³ Environment Agency. 2007. Appendix ASC 1 Environment Agency Stage 1 and 2 Assessment of New PIR Permissions under the Habitats Regulations citing APIS

Bd-M1 Castle Street (150 dwellings)	<p>1575 m River Camel SAC.</p> <p>5567 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>Refer to Figure 3.3</p>	<p>of existing urban development, it is considered unlikely that there will be fragmentation, degradation, or loss of supporting habitats.</p> <p>There will be no direct habitat loss.</p>	<p>The River Camel SAC is located within 200 m of the A39, A289 and A30, Breney Common is within 200 m of the A30 and St. Austell Clay Pits is within 200 m of the A391. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in traffic flow on these roads can be expected as a result of in-combination development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load. As such, in accordance with standard guidance¹⁴ there will be no LSE alone or as a result of in-combination air quality impacts during operation.</p> <p>Noise, Vibration Disturbance</p>	
Bd-UE3 St. Lawrence's Urban Extension 780 dwellings	<p>437 m River Camel SAC.</p> <p>4239 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>9448 m St. Austell Clay Pits SAC.</p> <p>Refer to Figure 3.3</p>	<p>Located primarily on arable land to the south of the River Camel SAC.</p> <p>As a result of the arable nature of the development site, along with the distance, and also intervening habitat comprising of existing urban development, it is considered unlikely that there will be fragmentation, degradation, or loss of supporting habitats.</p> <p>There will be no direct habitat loss.</p>	<p>It is considered unlikely that significant effects will arise as a result of noise/vibration or visual disturbance during construction or operation at this distance from River Camel SAC where infrastructure (railway / roads) are present between the allocation site and any potential supporting habitat for the SAC interest features</p>	

¹⁴ Environment Agency. 2007. Appendix ASC 1 Environment Agency Stage 1 and 2 Assessment of New PIR Permissions under the Habitats Regulations citing APIS

Table 5.2d.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
Bd-UE2 Bd-UE4 Bd-M1 Bd-UE3		<p>Water Quality</p> <p>LSE can be mitigated through A CEMP. It is considered unlikely, due to distance, with the implementation of a CEMP (to account for proximity of watercourses to UE2 and UE4 with potential hydrological connectivity to SAC), that there would be any construction-related water quality and water flow impacts at the River Camel SAC. The allocation policy will need to include a requirement for a CEMP.</p> <p>Sewage Treatment</p> <p>The River Camel SAC is vulnerable to water-quality related impacts, which have been identified as being largely contributed to by discharges from STW. However, infrastructure improvement measures were implemented at Nanstallon STW in 2014, including phosphate stripping, to address failing water quality standards for the River Camel SAC. SWW have confirmed that for all Bodmin allocations, discharge will be to Nanstallon where there is capacity within the plan period, except for Bd-UE4 where 30% will drain to Scarlets Well STW and 70% to Nanstallon. When Scarlets Well is at capacity then drainage will be diverted to Nanstallon, which is a system currently in operation¹⁵ and SWW have confirmed has capacity. No LSE are therefore envisaged as a result of STW discharges during operation.</p> <p>Surface Water Drainage</p> <p>Surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts of the River Camel SAC, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. To ensure no LSE, designs will need to be approved by the Council and in place prior to development being operational.</p>			N/A

¹⁵ Email dated 12.02.2015 Marcus Healan, Planning Delivery Team, Cornwall Council.

5.2d Bodmin Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

BODMIN Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition – /Dust)	Visual Disturbance
<p>Bd-E1 Beacon Technology Park (6 ha) Located within existing industrial area in the west of Bodmin. Bd-E6 Cooksland Extension (3 ha)</p>	<p>Closest allocation being: 947 m from River Camel SAC. 4659 m from Breney Common and Goss and Tregoss Moors SAC. Refer to Figure 3.3</p>	<p>No direct habitat loss will occur. No loss of supporting habitat or fragmentation will occur (site situated on existing industrial land > 900 m distant with limited space for additional growth).</p>	<p>Noise, Vibration Disturbance It is considered unlikely that significant effects will arise as a result of noise/vibration or visual disturbance during construction or operation. Air Quality It is also considered unlikely, due to distance, and lack of any direct hydrological connectivity, that there would be any construction-related air/water quality and water flow impacts. Breney Common SAC is located within 200 m of the A30 and the River Camel SAC is located within 200 m of the A39, A289 and A30. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of in-combination development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load. As such, there will be no LSE as a result of in-combination air quality impacts during operation. Surface Water Drainage / Water Quality LSE cannot be ruled out at the screening stage, and this will be discussed in the Appropriate Assessment in Table 5.2d.2.</p>	<p>No pathway identified through the development of employment sites.</p>		

Table 5.2d.2 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
Bd-E1 Bd-E6	<p>Surface Water Drainage</p> <p>Surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. To ensure no LSE, designs will need to be approved by the Council and in place prior to development being operational. The allocation policy will need to include a requirement for SUDS designs to be approved by the Council and in place prior to development being operational.</p> <p>Water Quality</p> <p>The River camel SAC is vulnerable to water-quality related impacts, which have been identified as being largely contributed to by discharges from STW. However, infrastructure improvement measures were implemented at Nanstallon STW in 2014, including phosphate stripping, to address failing water quality standards for protected sites at the River Camel. SWW have confirmed that for all Bodmin allocations, discharge will be to Nanstallon where there is capacity except for Bd-UE4 where 30% will drain to Scarlets Well STW and 70% to Nanstallen, where there is capacity. When Scarlets Well is at capacity then drainage will be diverted to Nanstallen, which is a system currently in operation¹⁶. No LSE are therefore envisaged as a result of STW discharges during operation.</p>				N/A

¹⁶ Email dated 12.02.2015 Marcus Healan, Planning Delivery Team, Cornwall Council.

5.2d Bodmin Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

BODMIN Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
Bd-E2, Bd-E3 Bd-E4, Bd-E5, (safeguarded employment) Situating centrally and to the east of Bodmin. Located on existing industrial / urban development and/or immediately adjacent to existing industrial or urban development	>1500 m from River Camel SAC. >3900 m from Breney Common and Goss and Tregoss Moors SAC. Refer to Figure 3.3	No pathway identified through the safeguarding of existing employment sites (without new construction).				

Appropriate Assessment not required

5.2e Newquay Allocations – Screening of Potential Impacts and Likely Significant Effects (LSE)

NEWQUAY Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>NQ-H1</p> <p>Newquay Growth Area approximately 280 dwellings and associated infrastructure (refer to footnote 15).</p> <p>Located on arable land to the east (immediately connected to existing urban development) of Newquay.</p>	<p>Penhale Dunes SAC: 7032 m</p> <p>Newlyn Downs SAC: 5175 m</p> <p>8548 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>Refer to Figure 3.5</p>	<p>As a result of > 5000 m distance between the closest European site and the allocations there will be no direct habitat loss. It is considered likely that there will be no fragmentation, degradation, or (due to largely arable or industrial location and SAC interest features), no loss of supporting habitats.</p>	<p>No pathway identified to interest features.</p>	<p>It is considered unlikely that significant effects will arise as a result of construction-related air quality impacts. In addition, it is unlikely there would be any construction or operation-related water quality or flow impacts due to lack of any direct hydrological connectivity (significant intervening distance and barriers are present between the allocation and European sites).</p> <p>Breney Common SAC is located within 200 m of the A30 and Newlyn Downs SAC is located within 200 m of the A30 and although it is unlikely that the development would result in significant changes to air quality alone, theoretically air quality impacts may arise as a result of in-combination development being brought forward in the Local Plan period. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load.</p> <p>The European sites within the Zol are not identified as within the catchment of a STW currently at capacity or at capacity within the plan period, or contributing to decreased water quality. As such, there</p>	<p>No pathway identified to interest features.</p>	<p>Newlyn Downs and Breney Common are not considered vulnerable to recreational disturbance.</p> <p>Penhale Dunes has however been identified as vulnerable. The site is designated for sand dune succession, colonies of petalwort, shore dock and early gentian and as such is susceptible to trampling and excessive disturbance (although a certain amount of disturbance events are required to ensure that various successional stages are maintained).</p> <p>There is easy access to large beaches at Newquay which are more likely to attract recreational users from the housing allocations for convenient regular recreation. Green infrastructure links through the new development will also provide more convenient recreational routes for dog walking/running. It is considered unlikely that there would be significant effects from these two housing allocations alone.</p> <p>However LSE from in-</p>
<p>NQ-H2</p> <p>Gusti Veor: Newquay Growth Area (35 ha)</p> <p>Located on centrally on arable and amenity grassland directly connected to</p>	<p>Penhale Dunes SAC: 6010 m</p> <p>Newlyn Downs SAC: 5896 m</p> <p>9288 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>Refer to Figure</p>					

existing urban development at Newquay.	3.5			will be No Likely Significant Effects as a result of quality/flow from discharges.		combination effects cannot be ruled out and will be discussed in the Appropriate Assessment in table 5.2e.1 below
NQ-E1 Treloggan Industrial estate. Existing industrial land located to the south east of Newquay	Penhale Dunes SAC: 4993 m Newlyn Downs SAC: 4797 m Refer to Figure 3.5					

Table 5.2e.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
NQ-H1 NQ-H2 NQ-E1	N/A				<p>With the projected housing in the 12.5 km Zol set for Penhale Dunes¹⁷ over the Local plan period, it is not possible to rule out LSE for this allocation in combination with other new housing being brought forward. Local residents within 12.5 km horse riding; walking and bike riding along with dog walking have been identified as activities resulting in LSE at this site. A strategic approach to mitigation has been identified to address the in-combination effects across the Local Plan period. This includes the provision of weekly dog warden visits to enforce against dog fouling; the placement of 10 dog fouling information notices, six dog waste bins, the placement of wooden demarcation bollards which prevent parking within the SAC and the improvement of the parking area to prevent parking on verges (the provision of wooden teeth etc.)¹⁸. With the implementation of the agreed final measures (as required through policy 22 of the LP and as presented within the forthcoming SPD), no LSE is considered likely.</p>

¹⁷ As a result of visitor and disturbance studies undertaken 2015 - 2016, Zols have been determined for the consideration of in-combination recreational disturbance for Penhale Dunes SAC (12.5 km), Fal and Helford SAC (10 km), Plymouth Sound and Estuaries SAC (10 km) and Tamar Estuaries Complex SPA (12 km). Cornwall Council will not accept residential development and student and tourist accommodation within these Zols, without appropriate mitigation. A strategic solution to mitigation is being developed which will include visitor management, developer contributions and green space requirements for new development. A Supplementary Planning Document (SPD) is currently being produced, based on the findings of a recreation impacts study, setting out the required mitigation for each relevant European site.

¹⁸ The costing for developer contribution is to be set out within the SPD referenced in Section 4.

5.2e Newquay Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

NEWQUAY Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					Recreational Disturbance (for housing development)
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
<p>NQ-M1</p> <p>Station Quarter 5.05 ha).</p> <p>Mixed use housing and business re-development located centrally within Newquay surrounded by significant existing infrastructure.</p>	<p>Penhale Dunes SAC < 12 km</p> <p>Newlyn Downs SAC: 6081 m</p> <p>Refer to Figure 3.5</p>	<p>As a result of > 5000 m distance between the closest European site and the closest allocation there will be no direct habitat loss. It is considered likely that there will be no fragmentation, degradation, or loss of supporting habitats.</p>	<p>No pathway identified to interest features.</p>	<p>It is considered unlikely that significant effects will arise as a result of construction-related air quality or water quality/flow impacts. In addition, it is unlikely there would be any operation-related air quality or water quality/flow impacts as a result of the allocations (alone) at > 5000 m. This is due to distance, and barriers to direct hydrological connectivity.</p> <p>Newlyn Downs SAC and Breney Common SAC are located within 200 m of the A30; theoretically air quality impacts may arise as a result of in-combination development being brought forward in the Local Plan. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load. The European sites described are not identified as within the catchment of a STW currently at capacity, or at capacity within the plan period, or contributing to decreased water quality. As such, there will be No Likely Significant Effects.</p>	<p>No pathway identified to interest features.</p>	<p>Newlyn Downs and Breney Common are not considered vulnerable to recreational disturbance.</p> <p>Penhale Dunes has however been identified as vulnerable. The site is designated for sand dune succession, colonies of petalwort, shore dock and early gentian and as such is susceptible to trampling and excessive disturbance (although a certain amount of disturbance events are required to ensure that various successional stages are maintained).</p> <p>There is easy access to large beaches at Newquay which are more likely to attract recreational users from the housing allocations for convenient regular recreation. Green infrastructure links through the new development will also provide more convenient recreational routes for dog walking/running. It is considered unlikely that there would be significant effects from these two housing allocations alone.</p> <p>However LSE cannot be ruled out in combination with other planned new housing development and will be discussed in the Appropriate Assessment in table 5.2e.2 below</p>	
<p>NQ-M2</p> <p>Hendra – Nansledan.</p> <p>Mixed use housing and business re-development located centrally within Newquay surrounded by significant existing infrastructure.</p>	<p>Penhale Dunes SAC < 12 km</p> <p>Newlyn Downs SAC: 6081 m</p> <p>9371 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>Refer to Figure 3.5</p>						

Table 5.2e.2 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
NQ-M1 NQ-M2	N/A				<p>With the projected housing in the 12.5 km Zol set for Penhale Dunes¹⁹ over the Local plan period, it is not possible to rule out LSE for this allocation in combination with other new housing being brought forward. Local residents within 12.5 km horse riding; walking and bike riding along with dog walking have been identified as activities resulting in LSE at this site. A strategic approach to mitigation has been identified to address the in-combination effect across the Local Plan period. This includes for the provision of weekly dog warden visits to enforce against dog fouling; the placement of 10 dog fouling information notices, six dog waste bins, the placement of wooden demarcation bollards which prevent parking within the SAC and the improvement of the parking area to prevent parking on verges (the provision of wooden teeth etc.)²⁰. With the implementation of the agreed final measures (as required through policy 22 of the LP and as presented within the forthcoming SPD), no LSE is considered likely.</p>

¹⁹ As a result of visitor and disturbance studies undertaken 2015 - 2016, Zols have been determined for the consideration of in-combination recreational disturbance for Penhale Dunes SAC (12.5 km), Fal and Helford SAC (10 km), Plymouth Sound and Estuaries SAC (10 km) and Tamar Estuaries Complex SPA (12 km). Cornwall Council will not accept residential development and student and tourist accommodation within these Zols, without appropriate mitigation. A strategic solution to mitigation is being developed which will include visitor management, developer contributions and green space requirements for new development. A Supplementary Planning Document (SPD) is currently being produced, based on the findings of a recreation impacts study, setting out the required mitigation for each relevant European site.

²⁰ The costing for developer contribution is to be set out within the SPD referenced in Section 4.

5.2f Penzance Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

PENZANCE Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>PZ-H1</p> <p>Longrock</p> <p>Approximately 150 dwellings.</p> <p>Located on grassland immediately adjacent to existing urban area and industrial Estate. Site is bounded by roads – A30 to the north, minor road to south and west.</p> <p>PZ-E4</p> <p>Long Rock East (3.2 ha B1a)</p> <p>Employment allocation located on grassland north of minor road</p>	<p>Marazion Marsh SPA: 39 m (13 m from PZ-E4)</p> <p>Lower Bostraze and Leswidden SAC: >10000 m</p> <p>Tregonning Hill SAC: 9668 m</p> <p>Lands End and Cape Bank SAC: 8885 m</p> <p>Refer to Figure 3.6</p>	<p>No direct habitat loss will occur.</p> <p>There will be no loss of supporting/buffering habitat or fragmentation as a result of the allocation. The site is situated on improved grassland and scrub immediately adjacent to existing housing and industrial areas north of the local Longrock road.</p>	<p>Noise / Visual Disturbance</p> <p>The SPA is currently well screened (and the dense scrub renders it largely inaccessible from the road side to domestic pets) as such, increased mortality through predation is considered unlikely. However as LSE resulting from noise or visual disturbance cannot be ruled out at the screening stage because of noise during construction and light / visual during operation, this will be discussed in the Appropriate Assessment in Table 5.2f.1.</p> <p>Air Quality</p> <p>Analysis carried out to inform the Local Plan concluded that whilst the A30 and A394 are likely to experience an increase in traffic flows as a result of the in-combination development being brought forward, the resultant increase in the critical load would be 1.3%. This would occur < 7 m of the roadside beyond which, the deposition rate would fall to > 1%. Although the SPA designation occurs in close proximity (<7m) to the A394 where the road crosses the Red River, the roadside vegetation in this area comprises woodland and scrub does not form part of the habitat complex used by the interest features of the SPA. It can therefore be concluded that there will be no LSE as a result of in-combination air quality impacts during operation.</p> <p>Water Quality / Surface Water Drainage / Sewage Treatment</p> <p>As LSE cannot be ruled out at the screening stage this will be discussed in the Appropriate Assessment in Table 5.2f.1.</p>			<p>No pathway from employment allocation PZ-E4.</p> <p>PZ-H1: Lower Bostraze and Leswidden SAC and Tregonning Hill SAC and are not identified as being vulnerable to recreational impacts.</p> <p>The interest features of Marazion Marsh SPA are vulnerable to disturbance predominately during the winter (over wintering bittern) but also late summer/early autumn (on-passage aquatic warbler). However, visitor surveys undertaken to inform the Local Plan have not identified an in-combination recreational impact. It is considered likely that an increase in visitors associated with the allocations within proximity to the SPA could be accommodated within the existing management structures. This is in accordance with the analysis carried</p>

separating allocation from Marazion Marshes SPA.				out to inform the Cornwall local Plan HRA.
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Table 5.2f.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
PZ-H1 PZ-E4	<p>Noise / Visual Disturbance</p> <p>Appendix 3 (of the main HRA Report) presents a preliminary noise assessment; a slight increase in noise at the SPA during construction may occur as a result of development in this location. However, it is considered that with the sensitive layout of the Scheme, and the use of timing to avoid sensitive periods, and the incorporation of hoarding (where project-level detail renders this necessary)²¹, impacts could be adequately mitigated.</p> <p>PZ-H1 incorporates public open space per dwelling; this will be located as far as possible in the south of the Scheme area, adjacent to the field boundary and local access road, to maximise the buffer between the allocation and the SPA. Vehicular access for PZ-H1 and PZ-E4 will also be designed to maximise the distance from the SPA. The allocations will retain/enhance the existing hedgerow and scrub buffers south of the proposed allocations. Junctions will not be created for access purposes unless subject to a separate assessment at the project-level and no LSE is demonstrated. A standard give-way into the sites will be employed otherwise.</p> <p>The policies need to provide for the maintenance and enhancement of the existing field boundaries and design of an appropriate lighting and landscaping strategy to maintain visual and light screening during operation and as such no LSE as a result of disturbance through these pathways is considered likely.</p> <p>Water Quality - Sewage Treatment</p> <p>All allocations within Penzance and Newlyn utilise the STWs at St Erth, SWW have confirmed that plans</p>				N/A

²¹ A project-level HRA will be undertaken for PZ-H1 and PZ-E4, which includes consideration of the timing of certain construction activities to avoid impacts at key periods (autumn and winter for warbler and bittern). Should noise screening be considered necessary (subject to project-level detail), a continuous screen, with no gaps or breaks, be a minimum of 2.2m high and have a minimum surface mass of 5kg/m² is considered likely to be sufficient to negate potential impacts.

are in place to upgrade this facility to increase its capacity to meet the demand set out in the Local Plan. The allocation policies need to ensure that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities.

Water Quality - Surface Water Drainage

Drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring with specific measures to prevent water quality and flow impacts, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. To ensure no LSE, the allocation policies need to require that SUDs designs will need to be approved by the Council and in place prior to development being operational.

Summary

Marazion Marshes SPA is located in very close proximity to these two allocation sites; however, the SPA is fragmented and located within an area of existing urban infrastructure. Subject to the project-level design of PZ-H1 and E4 as set out above, and with the incorporation of construction best practice, it is considered unlikely that LSE will occur alone or in-combination.

5.2f Penzance Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

PENZANCE Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>PZ-H2 – PZ-H4 and PZ-11 and PZ-M1</p> <p>Housing development to the north east of Penzance.</p> <p>Located primarily on arable land to the north of existing urban and industrial development within Penzance.</p>	<p>Closest allocation located:</p> <p><1791 m distant from Marazion Marsh SPA; Lower Bostraze and Leswidden SAC: 7619 m; Lands End and Cape Bank SAC: 8215m.</p> <p>Refer to Figure 3.6</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (sites are all situated largely on arable land immediately adjacent to existing urban/industrial areas > 1791 m distant from the closest European site).</p>	<p>Noise / Visual Disturbance</p> <p>The closest Site Allocation is 1791 m distant from Marazion Marsh SPA and 6313 m distant from Lower Bostraze and Leswidden SAC and > 6000 m from Lands End SAC. At this distance, with intervening roads and built industrial land present, it is considered unlikely that there will be significant effects to interest features as a result of construction or operation-related visual, noise and vibration disturbance.</p> <p>Water Quality</p> <p>It is also considered unlikely that there would be any air or water quality or flow impacts during construction or operation due to the absence of any direct hydrological connection (significant barriers are present).</p> <p>Air Quality</p> <p>Analysis carried out to inform the Local Plan concluded that whilst the A30 and A394 are likely to experience an increase in traffic flows as a result of the in-combination development being brought forward, the resultant increase in the critical load would be 1.3%. This would occur < 7 m of the roadside beyond which, the deposition rate would fall to > 1%. Although the SPA designation occurs in close proximity (<7m) to the A394 where the road crosses the Red River, the roadside vegetation in this area comprises woodland and scrub does not form part of the habitat complex used by the interest features of the SPA. It can therefore be concluded that there will be no LSE as a result of in-combination air quality impacts during operation.</p>	<p>No pathway from employment allocations PZ-M2, E2 and E3.</p> <p>All other housing allocations:</p> <p>Lower Bostraze and Leswidden SAC and Tregonning Hill SAC and are not identified as being vulnerable to recreational impacts.</p> <p>The interest features of Marazion Marsh SPA are vulnerable to disturbance predominately during the winter (over wintering bittern) but also late summer/early autumn (on-passage aquatic warbler). However, visitor surveys undertaken to inform the Local Plan have not identified an in-combination recreational impact. It is considered likely that an increase in visitors associated with the allocations within proximity to the SPA could be accommodated</p>		
<p>PZ-H5 - PZ-H10, PZ-H12, PZ-M3.</p> <p>Housing allocations located centrally predominately on arable land west of Penzance.</p>	<p>Closest allocation located:</p> <p>3539 m distant from Marazion Marsh SPA; Lower Bostraze and Leswidden SAC: 6313 m; Lands End and Cape Bank SAC: 6442m</p> <p>Refer to Figure</p>					

	3.6			
PZ-M2, PZ-E2, PZ-E3. Employment allocation sites located on arable land (M2 and E2) and existing build coastal habitat (E3) south west of Penzance.	Closest allocation located: 2921 m distant from Marazion Marsh SPA; Lower Bostraze and Leswidden SAC: 6609 m; Lands End and Cape Bank SAC: 7946m Refer to Figure 3.6			within the existing management structures. This is in accordance with the analysis carried out to inform the Cornwall local Plan HRA.

Appropriate Assessment not required

5.2f Penzance Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

PENZANCE Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
PZ-E1 Long Rock Industrial Estate (0.65 ha) Safeguarded employment allocation.	310 m distant from Marazion Marsh SPA; Lower Bostraze and Leswidden SAC: 7354 m; Lands End and Cape Bank SAC: 8733m Refer to Figure 3.6	No pathway identified through the safeguarding of existing employment sites (without new construction).				

Appropriate Assessment not required

5.2g Hayle Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

HAYLE Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>H-UE1</p> <p>Trevassack (1000 dwellings and employment space).</p> <p>Located to the south east of Hayle, immediately north of the A30, on predominately arable land.</p>	<p>Tregonning Hill SAC: 7287 m</p> <p>Marazion Marsh SPA: 5991 m</p> <p>Refer to Figure 3.8</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (sites are all > 4000 m distant from the closest European site).</p>	<p>Noise / Visual Disturbance</p> <p>It is considered unlikely that significant effects during construction or operation as a result of noise/vibration/visual disturbance will arise at > 4000 m as a result of these housing/employment developments on arable land (without direct hydrological connectivity).</p> <p>Air Quality</p> <p>Analysis carried out to inform the Local Plan concluded that whilst the A30 and A394 (in proximity to Marazion Marsh) are likely to experience an increase in traffic flows as a result of the in-combination development being brought forward, the resultant increase in the critical load would be 1.3%. This would occur < 7 m of the roadside beyond which, the deposition rate would fall to > 1%. Although the SPA designation occurs in close proximity (<7m) to the A394 where the road crosses the Red River, the roadside vegetation in this area comprises woodland and scrub does not form part of the habitat complex used by the interest features of the SPA. It can therefore be concluded that there will be no LSE as a result of in-combination air quality impacts during operation.</p>		<p>Tregonning Hill has not been identified as vulnerable to recreational disturbance.</p> <p>As described for the Penzance allocations above, no pathway alone or in-combination has been identified for increases in housing in proximity to Marazion Marsh SPA</p>	
<p>H-E2, H-E3, H-E4, H-ED1, H-EM1</p> <p>Employment allocation sites located on predominately arable land.</p>	<p>Closest allocation located:</p> <p>Tregonning Hill SAC: 7706</p> <p>Marazion Marsh SPA: 4008 m</p> <p>Lands End and Cape Bank SAC: 9782 m</p> <p>Refer to Figure 3.8</p>		<p>Water Quality / Surface Water</p> <p>It is considered that there will be no significant effects during construction or operation as a result of water quality/flow impacts at > 4000 m as a result of these housing/employment developments on arable land (without direct hydrological connectivity).</p> <p>Water Quality / Sewage Treatment</p>		<p>No pathway identified through the development of employment sites.</p>	
		<p>LSE cannot be ruled out and will be discussed in the Appropriate</p>				

			Assessment in table 5.2g.2 below	
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Table 5.2g.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
H-UE1 H-E2 H-E3 H-E4 H-ED1 H-EM1	<p>Water Quality – Sewage Treatment</p> <p>SWW have confirmed that there are no strategic issues with regard to supplying the proposed local plan growth in-combination, although localised reinforcement work is required to upgrade the treatment works; these works are within SWW’s 5 year business plan. To ensure no in-combination LSE as a result of STW discharges, no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities. The allocation policies need to ensure that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities</p>				N/A

5.2g Hayle Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

HAYLE Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)

<p>H-E1</p> <p>Marsh Lane Industrial Estate.</p> <p>Located to the east of Hayle, immediately east of A30 on existing industrial land.</p>	<p>Tregonning Hill SAC: 8174 m</p> <p>Marazion Marsh SPA 7706 m</p> <p>Refer to Figure 3.8</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (site situated on existing industrial land > 7500 m distant with no space for additional growth).</p>	<p>Noise / Visual Disturbance</p> <p>It is considered unlikely that significant effects during construction or operation as a result of noise/vibration/visual disturbance will arise at > 7500 m in the replacement of existing units / small scale extensions (where no direct hydrological connectivity is present).</p> <p>Air Quality</p> <p>It is considered unlikely that significant effects during construction or operation as a result of air quality will arise at > 7500 m in the replacement of existing units / small scale extensions (where no direct hydrological connectivity is present).</p> <p>Analysis carried out to inform the Local Plan concluded that whilst the A30 and A394 (in proximity to Marazion Marshes) are likely to experience an increase in traffic flows as a result of the in-combination development being brought forward, the resultant increase in the critical load would be 1.3%. This would occur < 7 m of the roadside beyond which, the deposition rate would fall to > 1%. Although the SPA designation occurs in close proximity (<7m) to the A394 where the road crosses the Red River, the roadside vegetation in this area comprises woodland and scrub does not form part of the habitat complex used by the interest features of the SPA. It can therefore be concluded that there will be no LSE as a result of in-combination air quality impacts during operation.</p> <p>Water Quality</p> <p>It is considered unlikely that significant effects during construction or operation as a result of water quality or water flow will arise at > 5000 m in the development of housing and employment sites (where no direct hydrological connectivity is present).</p> <p>Water Quality / Sewage Treatment</p> <p>LSE cannot be ruled out and will be discussed in the Appropriate Assessment in table 5.2g.2 below</p>	<p>Tregonning Hill has not been identified as vulnerable to recreational disturbance.</p> <p>As described for the Penzance allocations above, no pathway alone or in-combination has been identified for increases in housing in proximity to Marazion Marsh SPA</p>
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<p>H-D1</p> <p>Future Direction of Growth (16.7 ha)</p>	<p>Tregonning Hill SAC: 7366 m</p> <p>Marazion Marsh SPA 5530 m</p> <p>Refer to Figure 3.8</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (sites are all > 5000 m distant from the closest European site).</p>	<p>Noise / Visual Disturbance</p> <p>It is considered unlikely that significant effects during construction or operation as a result of noise/vibration/visual disturbance will arise at > 5000 m in the development of housing and employment sites (where no direct hydrological connectivity is present).</p> <p>Air Quality</p> <p>It is considered unlikely that significant effects during construction or operation as a result of air quality will arise at > 7500 m in the replacement of existing units / small scale extensions (where no direct hydrological connectivity is present).</p> <p>Analysis carried out to inform the Local Plan concluded that whilst the A30 and A394 (in proximity to Marazion Marshes) are likely to experience an increase in traffic flows as a result of the in-combination development being brought forward, the resultant increase in the critical load would be 1.3%. This would occur < 7 m of the roadside beyond which, the deposition rate would fall to > 1%. Although the SPA designation occurs in close proximity (<7m) to the A394 where the road crosses the Red River, the roadside vegetation in this area comprises woodland and scrub does not form part of the habitat complex used by the interest features of the SPA. It can therefore be concluded that there will be no LSE as a result of in-combination air quality impacts during operation.</p> <p>Water Quality</p> <p>It is considered unlikely that significant effects during construction or operation as a result of water quality or water flow will arise at > 5000 m in the development of housing and employment sites (where no direct hydrological connectivity is present).</p> <p>Water Quality / Sewage Treatment</p> <p>LSE cannot be ruled out and will be discussed in the Appropriate Assessment in table 5.2g.2 below</p>	
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Table 5.2g.2 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
H-E1 H-D1	<p>Water Quality / Sewage Treatment</p> <p>SWW have confirmed that there are no strategic issues with regard to supplying the proposed growth, although localised reinforcement work is required to upgrade the treatment works; these works are within SWW's five year business plan. To ensure no LSE as a result of in-combination effects from STW discharges, no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities. The allocation policies need to ensure that no development will be permitted prior to confirmation that the allocation can be accommodated within the existing treatment works or prior to provision of appropriate upgrades/new facilities</p>				N/A

5.2h St. Austell Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

ST. AUSTELL Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					Recreational Disturbance
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
<p>STA-M1 Pentewan Road (5.9 ha, 100 dwellings). Located on improved grassland to the south of St. Austell adjacent to Pentewan Road.</p>	<p>St. Austell Clay Pits SAC: 3342 m. 7974 m Breney Common and Goss and Tregoss Moors SAC. 2027 m Falmouth Bay to St.Austell Bay pSPA. Refer to Figure 3.7</p>	<p>No direct habitat loss will occur. No loss of potential supporting habitat will occur. The site is situated on grassland and not considered to be functionally linked at this distance and nature of interest features.</p>	<p>Noise / Visual Disturbance It is considered unlikely that significant effects during construction or operation as a result of noise/vibration/visual disturbance will arise at (> 3300 m from the SACs and 2000 m from the pSPA) in the development of housing and employment sites.</p> <p>Air Quality It is considered unlikely that significant effects during construction or operation as a result of air quality changes will arise at (> 3300 m from the SACs and 2000 m from the pSPA) in the development of housing and employment sites.</p> <p>Breney Common SAC are located within 200 m of the A30 and St. Austell within 200 m of the A394; theoretically air quality impacts may arise as a result of in-combination development being brought forward in the Local Plan. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load.</p> <p>Water Quality The European sites described are not identified as within the catchment of a STW currently at capacity or at capacity within the plan period, or contributing to decreased water quality. As such, there will be No Likely Significant Effects.</p> <p>Surface Water Drainage LSE cannot be ruled out and will be discussed in the Appropriate Assessment in table 5.2h.1 below</p>				<p>Vulnerability to recreational disturbance has not been identified for Breney Common SAC and Polruan to Polperro SAC or Falmouth Bay pSPA. Marsupella colonies within St. Austell SAC are inaccessible to the public and as such no pathway for recreational disturbance has been identified.</p>
<p>STA-M2 Edgcumbe (1.9 ha, 25 dwellings, B1a office space). Located on existing build land and grassland to the south west of St.Austell, immediately adjacent and south of A390</p>	<p>St. Austell Clay Pits SAC: 3320 m 7529 m Breney Common and Goss and Tregoss Moors SAC. 2807 m Falmouth Bay to St.Austell Bay pSPA Refer to Figure 3.7</p>						

<p>STA-R1 Small scale employment space Located on existing built / industrial land</p>	<p>St. Austell Clay Pits SAC: 2660 m. 7518 m Breney Common and Goss and Tregoss Moors SAC. Falmouth Bay to St.Austell Bay pSPA: 2486 m River Camel SAC 9881 m. Refer to Figure 3.7</p>	<p>No direct habitat loss will occur. No loss of potential supporting habitat will occur. The site is situated on grassland, rather than the habitat favoured by Marsupella: former quarry tips and recently disturbed ground.</p>		
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Table 5.2h.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
STA-M1 STA-M2 STA-R1	<p>Surface Water Drainage With potential hydrological connectivity to Fal and Helford pSPA, a CEMP will be required (see Appendix 2) during construction to ensure no LSE upon the potentially hydrologically connected site. During operation, surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. To ensure no LSE, designs will need to be approved by the Council and in place prior to development being operational and this should be required in the allocation policy.</p>				N/A

5.2h St. Austell Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

ST. AUSTELL Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>STA-E3 Par Moor.</p> <p>B1, B2 and B8 employment space, located on previously disturbed ground.</p>	<p>St. Austell Clay Pits SAC: 4229 m</p> <p>7248 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>Polruan to Polperro SAC: 6183 m</p> <p>Falmouth Bay to St.Austell Bay pSPA: 385 m</p> <p>Refer to Figure 3.7</p>	<p>No direct habitat loss will occur.</p> <p>No loss of potential supporting habitat will occur.</p> <p>The site is considered unlikely to be functionally linked habitat due to distance (St. Austell SAC) and nature of interest features (Polruan and Falmouth Bay).</p>	<p>Air Quality</p> <p>St. Austell is located within 200 m of the A394 and Breney Common within 200 of the A30; theoretically air quality impacts may arise as a result of in-combination development being brought forward in the Local Plan. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load.</p> <p>Water Quality - Sewage Treatment</p> <p>The European sites described are not identified as within the catchment of a STW currently at capacity or at capacity within the plan period, or contributing to decreased water quality. As such, there will be No Likely Significant Effects.</p> <p>Water Quality – Surface Water</p> <p>As LSE on water quality cannot be ruled out because of potential surface water drainage resulting in water quality and flow impacts, it will be discussed in the Appropriate Assessment in table 5.2h.2 below</p>			<p>No pathway identified through the development of employment sites.</p>

Table 5.2h.2 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
STA-E3	<p>Water Quality / Surface Water Drainage It is considered unlikely that significant effects as a result of disturbance or air quality changes or water quality/flow changes will arise during construction at a distance > 300 m with an intervening road present and with the implementation of a CEMP (see Appendix 2). During operation, surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts, hence it is considered unlikely that there will be LSE as a result of reduced water quality / flow due to run off during operation either alone or in-combination. To ensure no LSE, designs will need to be approved by the Council and in place prior to development being operational. The allocation policy will need to require a CEMP and approval of the SUDs scheme prior to commencement.</p>				N/A

5.2h St. Austell Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

ST. AUSTELL Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
<p>STA-E1</p> <p>Safeguarded employment allocations.</p> <p>Located centrally within St. Austell on existing built / industrial land</p>	<p>St. Austell Clay Pits SAC: 2316 m</p> <p>7207 m Breney Common and Goss and Tregoss Moors SAC.</p> <p>Polruan to Polperro SAC: 8124 m</p> <p>Falmouth Bay to St.Austell Bay pSPA: 1070 m</p> <p>Refer to Figure 3.7</p>	<p>No pathway identified through the safeguarding of existing employment sites (without new construction).</p>				

Appropriate Assessment not required

5.2i Falmouth Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

FALMOUTH Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation		
		Habitat Loss/ Degradation/ Fragmentation	Disturbance, air, water quality/flow changes	Recreational Disturbance
<p>FP-H1 College (210 dwellings)</p> <p>FP-M1 Kernick (100 dwellings)</p> <p>FP-H2 Falmouth North (300 dwellings)</p> <p>FP-H3 Kergilliack (200 dwellings).</p>	<p>Closest of these Site Allocations:</p> <p>Carrine Common SAC: 8688 m</p> <p>Fal and Helford SAC: 974 mFalmouth Bay to St.Austell Bay pSPA: 2644 m</p> <p>Refer to Figure 3.9</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (sites are all > 900 m distant from the closest European site and outside of the estuary corridor and open water area).</p>	<p>It is considered unlikely that significant effects as a result of air quality or water quality/flow impacts (during construction or operation) or visual/noise/vibration disturbance will arise at this distance with significant intervening urban and industrial areas present.</p>	<p>No recreational pathway identified at Carrine Common SAC or Falmouth Bay to St.Austell Bay pSPA.</p> <p>As described in Table 4.1, most of the interest features of Fal and Helford SAC are not vulnerable to recreational pressure from trampling: the main designated habitat of vulnerability to this impact is saltmarsh, which is present in restricted areas of the SAC. The interest features - sub tidal sand banks, intertidal mudflats, large shallow inlets and bays, reefs and estuaries are however susceptible to public access/disturbance resulting in abrasion from boating and anchoring and to disturbance from bait digging (albeit primarily commercial).</p> <p>The projected volume of growth (development within the 10 km Zol will total 6140 dwellings over the Local plan period, It is not possible to conclude no LSE as a result of these housing allocations in-combination with other housing development, and therefore Table 5.2i.1 below sets out an Appropriate Assessment</p>
<p>FP-St1, FP- St2, FP-St3, FP-St4, FP- St5, FP-ED1 Student housing and car park allocations.</p>	<p>Closest allocations located:</p> <p>Carrine Common SAC: 8707 m</p> <p>Fal and Helford SAC: 227 m</p> <p>Falmouth Bay to St.Austell Bay pSPA: 173 m</p> <p>Refer to Figure 3.9</p>	<p>No direct habitat loss will occur.</p> <p>No loss of supporting habitat or fragmentation will occur (sites are all > 200 m distant from the closest European site and outside of the estuary corridor and open water area).</p>	<p>As LSE cannot be ruled out this will be discussed in the Appropriate Assessment in table 5.2i.1 below</p>	

Table 5.2i.1 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
FP-H1 FP-M1 FP-H2 FP-H3	N/A				The nature of recreational use at the Fal and Helford SAC is not easily replicated. It is therefore considered unlikely that the provision of alternative recreational open space will provide effective mitigation.
FP-St1 FP-St2 FP-St3 FP-St4 FP-St5 FP-ED1	LSE can be mitigated through a CEMP and it is therefore considered unlikely that significant effects as a result of air or water quality impacts or noise/vibration/visual disturbance will arise at > 150 m within the already highly-urbanised environment these allocations are located within. Any potential construction-related impacts arising from minor development within this location would be managed through the implementation of a CEMP (refer to Appendix 2 for draft contents).				<p>However, given that the site has natural restrictions to access, it is likely that the SAC has sufficient capacity to absorb an increase in visitors provided that this is accompanied by adequate management (several measures to manage anchoring in the SAC are currently reflected in the Fal and Helford Management Scheme²² and in the Fal and Helford Site Improvement Plan (SIP)²³).</p> <p>A financial contribution towards the implementation of the management measures in accordance with policy 22 of the Local Plan and as outlined in the forthcoming SPD would likely provide the most appropriate mitigation for recreational disturbance as a result of these allocations in-combination with other housing development.</p>

²² The issuing of licences for mooring to avoid disturbance to eelgrass beds and the implementation of a voluntary exclusion zone in the Helford.

²³ To address the anchoring of recreational vessels, a best practice code of conduct is to be produced for each harbour based on a review of the 2012 recreational boating study (to be completed during 2014 – 2015). Management changes are to be implemented where considered appropriate, for example the installation of eco-moorings where recreational moorings overlap with sensitive habitats.

5.2i Falmouth Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

FALMOUTH Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
FP-E1 – FP-E4 Safeguarding Employment Sites	<p>Closest of these Site Allocations:</p> <p>Carrine Common SAC: 8388 m</p> <p>Fal and Helford SAC: 760 m</p> <p>Falmouth Bay to St.Austell Bay pSPA: 2420 m</p> <p>Refer to Figure 3.9</p>	No pathway identified through the safeguarding of existing employment sites (without new construction).					

Appropriate Assessment not required

5.2i Falmouth Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

FALMOUTH Site Allocation	Location in relation to Nature 2000 Site(s) in ZoI	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
FP-E6 and FP-E5	Carrine Common SAC: 9909 m Fal and Helford SAC: 0 m Falmouth Bay to St.Austell Bay pSPA: 0 m Refer to Figure 3.9	<p>These are safeguarded employment sites. However, a key aim for the Site Allocations is the expansion and intensification of marine related uses, including deep water access.</p> <p>As LSE cannot be ruled out due to the need for any new infrastructure to be managed through the issuing of existing MMO licensing and consents, Table 5.2i.2 below sets out an Appropriate Assessment</p>				

Table 5.2i.2 Appropriate Assessment

Allocation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
FP-E5 FP-E6	To avoid LSE such activities requiring new infrastructure will be managed through the issuing of existing MMO licensing and consents. The basis for which will be reviewed in line with the requirement for an updated baseline as specified within the Site Improvement Plan for the SAC ²⁴ and described in the recent recreational boating study ²⁵ .				

²⁴ The SIP states that 'Operations within Falmouth Harbour Commissioners (FHC) port limits are currently assessed according to habitat sensitivity information and as part of FHC's Environmental Management System. To date there has not been a full assessment of the potential damage of the activity due to lack of data on the location of sensitive habitats and ship anchoring'.

²⁵ Latham et al. (2012) Fal and Helford Recreational boating Study Chapter 1, Falmouth Harbour Commissioners. The report identified that the existing habitat baseline (*upon which management decisions are based*) was not representative of the situation at the time of survey. A strong, accurate baseline will provide an accurate representation of the area for management purposes.

5.2j Eco-Community Allocations– Screening of Potential Impacts and Likely Significant Effects (LSE)

ECO-COMMUNITIES Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation				
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
ECO-M1 West Carclaze	<p>St. Austell Clay Pits SAC: 0 m</p> <p>River Camel SAC: 5746 m</p> <p>Breney Common and Goss and Tregoss Moors SAC: 4119 m</p> <p>Refer to Figure 3.10</p>	Subject to separate Appropriate Assessment – refer to Appendix 4 of the Main HRA document.				
ECO-M2 Par Docks	<p>St. Austell Clay Pits SAC: 5214m</p> <p>Polruan to Polperro SAC: 4651m</p> <p>Breney Common and Goss and Tregoss Moors SAC: 7235 m</p> <p>Falmouth Bay to St.Austell Bay pSPA: 0 m</p> <p>Refer to Figure 3.10</p>	<p>The broad location indicated for the eco community encompasses the Mean High Water and intertidal mud and sand banks, which form part of the pSPA designation.</p> <p>As LSE cannot be ruled out this is discussed in the Appropriate Assessment in Table 5.2j.1 below</p>	<p>Air Quality</p> <p>St. Austell is located within 200 m of the A394 and Breney Common within 200 m of the A30; theoretically air quality impacts may arise as a result of in-combination development being brought forward in the Local Plan. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in traffic flow on these roads can be expected as a result of development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load.</p> <p>Water Quality - Sewage Treatment</p> <p>The European sites described are not identified as within the catchment of a STW currently at capacity or at capacity within the plan period, contributing to decreased water quality. As such, there will be No Likely Significant Effect</p> <p>Noise /Visual Disturbance / Water Quality / Air Quality</p> <p>As LSE cannot be ruled out (in relation to the pSPA) this is discussed in the Appropriate Assessment in Table 5.2j.1 below</p>	<p>Vulnerability to recreational disturbance has not been identified for Breney Common SAC and Polruan to Polperro SAC or Falmouth Bay pSPA.</p> <p>Marsupella colonies within St. Austell SAC are inaccessible to the public and as such no pathway for recreational disturbance has been identified.</p>		

Table 5.2j.1 Appropriate Assessment

Allocation	Habitat Loss/ Degradation/ Fragmentation	Noise & Vibration Disturbance	Water Quality Flow	Air Quality (Emissions Deposition/Dust)	Visual Disturbance	Recreation Disturbance (for housing development)
ECO-M2	<p>It is considered likely that the detailed design of the eco-community can be brought forward in a manner that avoids direct impacts to the pSPA or potential supporting habitats. Specifically, there will be no land-take of pSPA or functionally linked habitat</p>	<p>Noise / Visual Disturbance / Water Quality / Air Quality</p> <p>Limited preliminary design has been undertaken. Notwithstanding the need for a project-level HRA, there are a number of mitigation measures that will be implemented at the detailed design stage to ensure that LSE are avoided at the pSPA. Construction best-practice measures will be integrated into the design to avoid impacts during construction and appropriate drainage solutions will be exploited to avoid impacts during operation. It is considered unlikely (due to the preferred habitat of the interest features) that they would be present within the zone of influence of the development for disturbance. However, if it is considered (during the detailed design stage) that disturbance to pSPA interest features may occur due to significant works, these can be avoided by timing of construction activities to avoid sensitive periods. Due to the presence of existing infrastructure and built development, and the open water nature of the interest features, it is considered unlikely that operational disturbance impacts from noise, visual disturbance, water quality or air quality will occur as a result of the redevelopment of this area. The allocation policy will need to require a CEMP, no land of the pSPA, and approval of the SUDs scheme prior to commencement, and are set out in Table 6.1 in the main HRA document.</p>			N/A	

Appendix 1: Habitats Regulation Assessment

PZ-H14 Jennings St, Penzance
Bd-H1 Westheath Rd, Bodmin
SLT-H1 North Pill, Saltash

Habitats Regulation Assessment Screening and Appropriate Assessment for three additional Sites: Cornwall Site Allocations DPD – June 2018

1. Introduction

This report sets out the HRA screening, Appropriate Assessment and conclusions for three sites: Jennings Street in Penzance (PZ-H14); Westheath Road in Bodmin (PZ-H1), and North Pill in Saltash (SLT-H1), which are being proposed as modifications in relation to an interim note from the Inspectors conducting the Examination in Public of the Cornwall Site Allocations DPD (CSADPD). The report has been prepared in (informal) consultation with Natural England.

This report is an addendum to the Habitats Regulations Screening Report for the CSADPD Feb 2017 (within the submitted evidence base, document ref:D2); which it should be read alongside and as an addendum to, including its appendices and mapping.

2. HRA for Jennings Street Allocations, PZ-H14, Penzance

The following tables provide the relevant Habitats Regulation Assessment screening consideration in relation to site PZ-H14 and should be read alongside the existing Habitats Regulations Screening Report for the Cornwall Site Allocations DPD Feb 2017, within the submitted evidence base (document ref:D2).

Table 3.6.6 Site Allocation

Allocation Site Name, Number and Size (ha)	Description
PZ-H14 Jennings Street, PZ-H14 approx. 80 dwellings (0.56 ha)	A residential development that will deliver approximately 80 dwellings within the town centre on a brownfield regeneration site

Table 4.1.1 Relevant European Sites

Site Name, Designation, Size and Code	Qualifying Feature / Interest Feature		Site Vulnerabilities / Key Issues and Threats to Integrity
	Habitat	Species	
<p>Conservation Objectives</p> <p>Marazion Marsh SPA, UK9020289 54.58 ha</p> <p>CO (iv) described in footnote ¹.</p>	N/a	<p>Over-winter: Bittern (<i>Botaurus stellaris</i>) 2% of the GB population</p> <p>On-passage: Aquatic Warbler (<i>Acrocephalus paludicola</i>) 9% of the GB population</p>	<p>Succession: scrub invasion / succession is a key threat.</p> <p>Maintenance of appropriate water levels (according to the requirements of the plant and bird species present) is a key issue.</p> <p>Eutrophication through diffuse pollution, probably from agricultural sources is a key threat.</p> <p>Water quality is a key issue.</p> <p>Recreational disturbance in the form of kite surfing is considered to be a pressure at the site (during the winter period October-March).</p>

Table 5.2f.1 Screening for Potential Impacts and Likely Significant Effects (LSE) – Refer to Table 6.1.1 for Resultant Policy Considerations

PENZANCE Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation, without mitigation					Recreational Disturbance (for housing development)
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
<p>PZ-H14 Jennings Street Housing site which is a brownfield regeneration opportunity adjacent to the Town Centre.</p>	<p>PZ-H14 is 3000m distant from Marazion Marsh SPA Refer to Zol Map</p>	<p>No direct habitat loss will occur. No loss of supporting habitat or fragmentation will occur</p>	<p>Noise, Water Quality, Visual Disturbance The Site Allocation is 3000 m distant from Marazion Marsh SPA and 8500 m distant from Lower Bostraze and Leswidden SAC and approx. 11600 m from Lands End SAC. At this distance, with intervening roads and built industrial land present, it is considered unlikely that there will be significant effects to interest features as a result of construction or operation-related visual, noise and vibration disturbance. It is also considered unlikely that there would be any air or water quality or flow impacts during construction or operation due to the absence of any direct hydrological connection (significant barriers are present).</p> <p>Air Quality Analysis carried out to inform the Local Plan concluded that whilst the A30 and A394 are likely to experience an increase in traffic flows as a result of the in-combination development being brought forward, the resultant increase in the critical load would be 1.3%. This would occur < 7 m of the roadside beyond which, the deposition rate would fall to > 1%. Although the SPA designation occurs in close proximity (<7m) to the A394 where the road crosses the Red River, the roadside vegetation in this area comprises woodland and scrub and does not form part of the habitat complex used by the interest features of the SPA. It can therefore be concluded that there will be no LSE as a result of in-combination air quality impacts during operation.</p>			<p>Lower Bostraze and Leswidden SAC and Tregonning Hill SAC and are not identified as being vulnerable to recreational impacts. The interest features of Marazion Marsh SPA are vulnerable to disturbance predominately during the winter (over wintering bittern) but also late summer/early autumn (on-passage aquatic warbler). However, visitor surveys undertaken to inform the Local Plan have not identified an in-combination recreational impact. It is considered likely that an increase in visitors associated with the allocations within proximity to the SPA could be accommodated within the existing management structures. This is in accordance with the analysis carried out to inform the Cornwall local Plan HRA.</p>	

Table 6.1.1 Policy Considerations

No specific policy requirements proposed for PZ-H14 in line with the existing HRA (ref.D2) in Section 6.2 and Table 6.1. Policy Considerations

3 HRA for Westheath Street Allocations, Bd-H1, Bodmin

The followings tables provide the relevant Habitats Regulation Assessment screening consideration in relation site Bd-H1 and should be read alongside the existing Habitats Regulations Screening Report / Appropriate Assessment for the Cornwall Site Allocations DPD Feb 2017, within the submitted evidence base (document ref:D2).

Table 3.3.1 Site Allocation

Allocation Site Name, Number and Size (ha)	Description
Bd-H1 Westheath Road, approx. 50 dwellings (2.2 ha)	A residential development that will deliver approximately 50 dwellings adjacent to the existing built area at the south of Bodmin

Table 4.1.2 Relevant European Sites

Site Name, Designation, Size and Code	Qualifying Feature / Interest Feature		Site Vulnerabilities / Key Issues and Threats to Integrity
	Habitat	Species	
<p>Conservation Objectives (keyed as CO (i) / CO (ii) / CO (iii) CO (iv)²⁶</p> <p>Breney Common and Goss and Tregoss Moors SAC, UK 0030098 (816.01 ha)</p> <p>CO (i) described in footnote ¹.</p>	<p>Northern Atlantic wet heaths with cross-leaved heath (<i>Erica tetralix</i>);</p> <p>European dry heaths; and Transition mires and quaking bogs.</p>	<p>Marsh fritillary butterfly (<i>Eurodryas aurinia</i>).</p>	<p>Succession: scrub invasion is a key threat. Maintenance of habitat mosaic and structural diversity is important for overall functioning.</p> <p>Altered hydrology, in particular to areas of wet heath is a key threat. Pools and pool margins should be maintained for Marsh fritillary along with localised poaching and management of invasive species.</p> <p>Nitrogen deposition (air pollution) could result in composition changes over time and as such is a key threat.</p> <p>Recreational disturbance is not currently identified as a key issue. This is reflected in the Cornwall Local Plan HRA²⁷.</p>

²⁶ Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to (achieving Favourable Conservation Status of its Qualifying Features (SAC) / achieving the aims of the Wild Birds Directive (SPA)), by maintaining or restoring:

CO (i): The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species; and The distribution of qualifying species within the site.

CO (ii): The extent and distribution of qualifying natural habitats; The structure and function (including typical species) of qualifying natural habitats; and The supporting processes on which qualifying natural habitats rely.

CO (iii) The extent and distribution of the habitats and the habitats of qualifying species; The structure and function of the habitats of qualifying species; The supporting processes on which the habitats of qualifying species rely; The populations of qualifying species; and The distribution of qualifying species within the site.

CO (iv) The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; The supporting processes on which the habitats of the qualifying features rely; The population of each of the qualifying features; and, The distribution of the qualifying features within the site.

²⁷ Cornwall Local Plan HRA, Significant Changes HRA, February 2016 and subsequent amendments and additions to policy.

<p>River Camel SAC, UK0030056 (621.17 ha)</p> <p>CO (i) described in footnote ¹.</p>	<p>Primary: European dry heaths; Old sessile oak woods (<i>Ilex Blechnum</i>) in the British Isles; and Alluvial forests (<i>Alnus glutinosa</i>, <i>Fraxinus excelsior</i>) (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</p>	<p>Primary: Bullhead (<i>Cottus gobio</i>); Otter (<i>Lutra lutra</i>); and Secondary: Atlantic salmon (<i>Salmo salar</i>).</p>	<p>Maintenance of natural structure; flow regime; and conservation of water quality for fish spawning and access for migration are key issues. Changes in coastal levels, water flow, water abstraction, water pollution, and agricultural run-off and tourism impacts associated with the River Camel Trail are key sensitivities. Water quality is a key issue. The HRA for the South West Regional Spatial Strategy identifies this site as one where water supply and levels are factors required to maintain the site's integrity. Recreational disturbance is not currently identified as a key issue. This is reflected in the Cornwall Local Plan HRA.</p>
<p>St Austell Clay Pits SAC, UK0030282 (0.61 ha)</p> <p>CO (iv) described in footnote ¹.</p>	<p>N/a</p>	<p>Western rustwort (<i>Marsupella profunda</i>).</p>	<p>Maintenance of adjacent, open habitats free of over-shading vegetation is required to ensure existing Western rustwort population has opportunity to colonise new sites. Western rustwort is reliant on the availability and proximity of good habitat patches in appropriate condition. Succession; scrub invasion is a key threat (management of existing sites includes the manual control of scrub (willow and gorse), heathers and grasses. Recreational disturbance is not currently identified as a key issue. This is reflected in the Cornwall Local Plan HRA.</p>

Table 5.2d.1 Screening for Potential Impacts and Likely Significant Effects (LSE) – Refer to Table 6.1.2 for Resultant Policy Considerations

BODMIN Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					Recreational Disturbance (for housing development)
		Habitat Loss/Degradation/Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
Bd-H1 Westheath Rd 50 dwellings	Approx. 1390 m River Camel SAC. 4239 m Breney Common and Goss and Tregoss Moors SAC. 9448 m St. Austell Clay Pits SAC. Refer to Figure Zol Map	Located primarily on arable land to the south of the River Camel SAC. As a result of the arable nature of the development site, along with the distance, and also intervening habitat comprising of existing urban development, it is considered unlikely that there will be fragmentation, degradation, or loss of supporting habitats.	<p>Water Quality / Air Quality</p> <p>Due to distance and lack of direct hydrological connectivity (distance and significant barriers present), it is considered unlikely that LSE will arise during construction or operation at St. Austell Clay Pits SAC.</p> <p>It is also considered unlikely, due to distance (and lack of connectivity) that there will be any construction or operational impacts as a result of water quality/flow or construction-related air-quality impacts at Breney Common and Goss and Tregoss Moor SAC. Breney Common SAC is located within 200 m of the A30. However, analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of in-combination development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load. As such, in accordance with standard guidance²⁸ there will be no LSE alone or as a result of in-combination air quality impacts during operation.</p> <p>Noise, Vibration Disturbance</p> <p>It is considered unlikely that significant effects will arise as a result of noise/vibration or visual disturbance during construction or operation at this distance from River Camel SAC where infrastructure (railway / roads) are present between the allocation site and any potential supporting habitat for the SAC interest features)²⁹.</p> <p>Water Quality / Air Quality</p> <p>It is also considered unlikely, due to distance, with the implementation of a CEMP (to account for proximity of watercourses to UE2 and UE4 with potential hydrological connectivity to SAC), that there would be any construction-related air/water quality and water flow impacts at the River Camel SAC.</p> <p>The River Camel SAC is located within 200 m of the A39, A289 and A30, Breney Common is within 200 m of the A30 and St. Austell Clay Pits is within 200 m of the A391. However,</p>	No European sites identified as being vulnerable to recreational pressures within Zol.			

²⁸ Environment Agency. 2007. Appendix ASC 1 Environment Agency Stage 1 and 2 Assessment of New PIR Permissions under the Habitats Regulations citing APIS

²⁹ The most sensitive habitats (natal dens) being vulnerable to disturbance at less than 500 m distant.

		There will be no direct habitat loss.	<p>analysis carried out for the Cornwall Local Plan HRA demonstrates that whilst changes in flow on these roads can be expected as a result of in-combination development, the critical level NOx concentration will not be exceeded. In addition, the nitrogen deposition rate is calculated using the Local Plan development predictions < 1% of the Critical Load. As such, in accordance with standard guidance³⁰ there will be no LSE alone or as a result of in-combination air quality impacts during operation.</p> <p>Surface water drainage LSE from surface water drainage cannot be ruled out at the screening stage and will be discussed in the Appropriate Assessment in table.</p>	
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Table 5.2d.2 Appropriate Assessment

Allocation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance
Bd-H1	<p>Surface water drainage Surface water drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring. This will include specific measures to prevent surface water drainage resulting in water quality and flow impacts, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. To ensure no LSE, designs will need to be approved by the Council and in place prior to development being operational.</p> <p>Sewage treatment The River camel SAC is vulnerable to water-quality related impacts, which have been identified as being largely contributed to by discharges from STW. However, infrastructure improvement measures were implemented at Nanstallon STW in 2014, including phosphate stripping, to address failing water quality standards for protected sites at the River Camel. SWW have confirmed that for all Bodmin allocations, discharge will be to Nanstallon where there is capacity except for Bd-UE4 where 30% will drain to Scarlets Well STW and 70% to Nanstallen. When Scarlets Well is at capacity then drainage will be diverted to Nanstallen, which is a system currently in operation³¹. No LSE are therefore envisaged as a result of STW discharges during operation.</p>			

³⁰ Environment Agency. 2007. Appendix ASC 1 Environment Agency Stage 1 and 2 Assessment of New PIR Permissions under the Habitats Regulations citing APIS

³¹ Email dated 12.02.2015 Marcus Healan, Planning Delivery Team, Cornwall Council.

Table 6.1.2 Policy Considerations resulting from the Appropriate Assessments

Allocation	Mitigation Measure Related to Construction	Mitigation Measure Water Quality/Flow During Operation		Mitigation Measure Recreational Impact / Other
Bd-H1	A Construction Environment Management Plan will be required, which ensures that likely significant effects upon River Camel SAC are avoided or appropriately mitigated; this will need to be agreed with the Council prior to commencement on site.	When designing the SUDs scheme attention must be given to ensuring that likely significant effects upon the River Camel SAC including as a result of changes in water quality or flow are avoided or appropriately mitigated. The scheme design will need to demonstrate its effectiveness in this respect and be approved by the Council prior to development commencing.	Confirmation of capacity within the Local Sewage Treatment facility or provision of alternative facilities is required prior to commencement of the scheme, to avoid likely significant effects upon the River Camel SAC	

10 Natural England, 2016. Site Improvement Plans. [online] accessed September 2016.

4. HRA for North Pill Allocation, SLT-H1, Saltash

The following tables provide the relevant Habitats Regulation Assessment screening consideration in relation site SLT-H1 and should be read alongside the existing Habitats Regulations Screening Report for the Cornwall Site Allocations DPD Feb 2017, within the submitted evidence base (document ref:D2).

Table 3.6.6 Site Allocation

Allocation Site Name, Number and Size (ha)	Description
SLT-H1 North Pill, approx. 85 dwellings (5.9 ha)	A residential development that will deliver approximately 85 dwellings adjacent to the A38 on arable land at the east of Saltash

Table 4.1.3 Relevant European Sites

Site Name, Designation, Size and Code Conservation Objectives	Qualifying Feature / Interest Feature		Site Vulnerabilities / Key Issues and Threats to Integrity
	Habitat	Species	
Plymouth Sound and Estuaries SAC, UK9010141 (6402.03 ha) CO (i) described in footnote ¹ .	Primary: Sandbanks which are slightly covered by sea water all the time; Estuaries; Large shallow inlets and bays; Reefs; Atlantic salt meadows (Glauco-Puccinellietalia maritimae). Secondary: Mudflats and sand-flats not covered by seawater at low tide.	Primary: Shore dock (<i>Rumex rupestris</i>) Secondary: Allis shad (<i>Alosa alosa</i>)	Recreation; port development; maintenance dredging are all identified as key issues. Shore dock specifically, requires habitat created through coastal erosion and slumping. Maintenance of hydrological balance and in particular 'good water quality' is a key issue (unpolluted and absence of nutrient enrichment and maintenance of freshwater input/balance of saline input). The loss of natural coastal processes and dynamics is a key threat (coastal squeeze). The site is considered vulnerable to recreational disturbance, in particular, bait digging and crab tiling. In addition, private anchoring on seagrass may be an issue. Identified in the Local Plan HRA as requiring a strategic approach to mitigation for in-combination effects as a result of recreational disturbance. In-combination visits from residents occupying housing within 12 km are considered to result in significant effects.

<p>Tamar Estuaries Complex, SPA, UK9010141 (1955 ha) CO (iv) described in footnote ¹.</p>	<p>N/a</p>	<p>Over-winter: Avocet (Recurvirostra avosetta) (Western Europe/Western Mediterranean - breeding) - 15.8% of the GB population On-passage Little Egret: (Egretta garzetta) at least 9.3% of the GB population</p>	<p>Recreation; port development; maintenance dredging are all identified as key issues. Shore dock specifically, requires habitat created through coastal erosion and slumping. Maintenance of hydrological balance and in particular 'good water quality' is a key issue (unpolluted and absence of nutrient enrichment and maintenance of freshwater input/balance of saline input). The loss of natural coastal processes and dynamics is a key threat (coastal squeeze). Identified in the Local Plan HRA as requiring a strategic approach to mitigation for in-combination effects as a result of recreational disturbance. In-combination visits from residents occupying housing within 12 km are considered to result in significant effects.</p>
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Table 5.2a.1 Screening of Potential Impacts and Likely Significant Effects (LSE) – Refer to Table 6.1.1 for Resultant Policy Considerations

SALTASH Site Allocation	Location in relation to Nature 2000 Site(s) in Zol	Possible Impacts and Likely Significant Effects Arising from Site Allocation					Recreational Disturbance (for housing development)
		Habitat Loss/ Degradation/ Fragmentation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	
<p>SLT-H1 North Pill Urban Extension (85 dwellings). Site is situated on largely arable land with woodland fringe at the south immediately to the north of Saltash. Site is bounded by the A38-road, and Salt Mil road which separates the allocation from the SPA/SAC.</p>	<p>Tamar Estuaries Complex SPA is located directly to the east of SLT-H1. Its closest point is to the south east approx. 55m distant from SLT-UE1. Plymouth Sound Estuaries SAC is located at its closest point, approx. 55 m east of SLT-H1 Refer to Zol Map</p>	<p>No direct loss of SPA/SAC habitat will occur. The landscape within which SLT-H1 is situated is immediately connected to Saltash and is bounded by the A38 and Salt Mill Roads. Due to its location, although in close proximity, SLT-H1 is not considered likely to be of particular importance to the qualifying features of the</p>	<p>Noise/Vibration Disturbance, Water Quality, Visual Disturbance The SPA /SAC is located in close proximity; although the SPA/SAC (in this area) is located within an area of existing urban infrastructure. However, LSE from water, noise or visual disturbance cannot be ruled out at the screening stage and will be discussed in the Appropriate Assessment in Table 5.2A.2 .</p> <p>Air Quality The SPA/SAC is located within 200 m³³ of the A38 (an affected road)³⁴. Although it is considered that there would be no significant effect alone, analysis carried out for the Cornwall Local Plan HRA identified that changes in flow on roads within 200 m of the SAC can be expected as a result of in-combination development described in the Local Plan (for which this allocation forms part). However, it has been demonstrated that nitrogen deposition will not exceed critical loads and the total cumulative NOx concentrations will remain below the actual critical level where an adverse effect on vegetation may potentially occur. As such, it is considered there will be no LSE.</p>			<p>See table 5.2a.2</p>	

³³ In accordance with Department of Transport’s Transport Analysis Guidance www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf, consideration is given to the potential for increases in emissions to result in LSE where an affected road falls within 200 m of a European site. Beyond 200 m, the contribution of vehicle emissions from the roadside to local pollution levels is not considered significant.

³⁴ An affected road is one which, due to an increase in traffic flow, will require air quality calculations in order to rule out a significant effect. In accordance with Design Manual for Roads and Bridges, Volume 11 Environmental Assessment, Section 3, Part 1: Air Quality.

		SPA. No loss of supporting habitat or fragmentation will therefore occur ³² .		
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Table 5.2a.2 Appropriate Assessment

Allocation	Noise and Vibration Disturbance	Water Quality / Flow	Air Quality (Emissions – Deposition /Dust)	Visual Disturbance	Recreational Disturbance (for housing development)
SLT-H1	<p>Noise/Vibration Disturbance, Water Quality, Visual Disturbance</p> <p>Subject to the project-level design of SLT-H1, and with the incorporation of construction best practice, it is considered unlikely that LSE will occur alone or in-combination in relation to noise disturbance, water quality and visual distance.</p> <p>It is considered that with the sensitive layout of the Scheme, and the use of timing to avoid sensitive periods, and the incorporation of hoarding (where project-level detail renders this necessary)³⁵, impacts could be adequately mitigated.</p> <p>Dwellings will be located away from the southern boundary area, adjacent to the field boundary and local access road, to maximise the buffer between the allocation and the</p>				<p>Tamar Estuaries and Plymouth Sound Estuaries have been identified as vulnerable to recreational disturbance (refer to Table 4.2)³⁶.</p> <p>SLT-H1 is to bring forward approx. 85 dwellings within the 10 km ZoI identified as significant for the SPA/SAC in terms of in-combination local resident visits (refer to Section 4 of the HRA).</p> <p>Therefore, although there is unlikely to be</p>

³² Natural England's Regulation 33 report for the European Marine Site lists those supporting habitats whose preservation is essential for the integrity of the avocet and little egret populations within the SPA.

³⁶ A project-level HRA will be undertaken for SLT-H1, which includes consideration of the timing of certain construction activities to avoid impacts at key periods (autumn and winter for Avocet and Little Egret). Should noise screening be considered necessary (subject to project-level detail), a continuous screen, with no gaps or breaks, be a minimum of 2.2m high and have a minimum surface mass of 5kg/m² is considered likely to be sufficient to negate potential impacts.

³⁶ As a result of visitor and disturbance studies undertaken 2015 - 2016, Zols have been determined for the consideration of in-combination recreational disturbance for Penhale Dunes SAC (12.5 km), Fal and Helford SAC (10 km), Plymouth Sound and Estuaries SAC (10 km) and Tamar Estuaries Complex SPA (12 km). Cornwall Council will not accept residential development and student and tourist accommodation within these Zols, without appropriate mitigation. A strategic solution to mitigation is being developed which will include visitor management, developer contributions and green space requirements for new development. A Supplementary Planning Document (SPD) is currently being produced, based on the findings of a recreation impacts study, setting out the required mitigation for each relevant European site.

	<p>SPA/SAC. Vehicular access for SLT-H1 will also be designed to maximise the distance from the SPA/SAC. A standard give-way into the sites will be employed otherwise. The allocation will retain/enhance the existing hedgerow, tree and scrub buffers south of the proposed allocation. In addition, the development will incorporate measures within the CEMP to prevent construction-related, pollution (air/water quality/ water flow) impacts from occurring alone or in combination (refer to Appendix 2, ref: D2.2). Drainage is to be designed in accordance with the Sustainable Urban Drainage principles and standards set out in the Drainage Guidance for Cornwall with appropriate discharge consents and monitoring with specific measures to prevent water quality and flow impacts, hence it is considered unlikely that there will be LSE as a result of reduced water quality due to run off during operation either alone or in-combination. To ensure no LSE, designs will need to be approved by the Council</p> <p>Sewage is piped across the Tamar Bridge for treatment in at Ernesettle, on the edge of Plymouth. The growth planned for Saltash, combined with the growth for Plymouth is likely to exceed treatment capacity at Ernesettle in the medium term; plus pipe capacity across the Tamar may also be exceeded. SWW is investigating the delivery of a new treatment works on the edge of Saltash, which will have a 3-4 year lead in time. SWW has indicated that a new facility would be a regulated investment; as a result no developer contributions are expected. To ensure no LSE, no development will be permitted prior to confirmation that the allocation can be accommodated within the headroom of existing treatment works or prior to provision of appropriate upgrades/new facilities.</p>	<p>LSE through this pathway as a result of the site allocation alone, it is not possible to rule out LSE as a result of in-combination recreational disturbance.</p> <p>An appropriate off-site contribution will be required to mitigate against adverse in-combination recreational impacts on the Tamar Estuaries Complex SPA. This will need to be agreed and secured prior to approval of the development. The level of contribution and details of the specific measures are set out in the European Sites Mitigation Strategy Supplementary Planning Document.</p> <p>It was concluded that with the implementation of the mitigation proposed, there will be no LSE.</p>
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Table 6.1.3 Policy Considerations resulting from the Appropriate Assessment

Allocation	Mitigation Measure Related to Construction	Mitigation Measure Water Quality/Flow During Operation		Mitigation Measure Recreational Impact / Other
SLT-H1	A Construction Environment Management Plan will be required, which ensures that likely significant effects upon Tamar Estuaries Complex SPA are avoided or appropriately mitigated; this will need to be agreed with the Council prior to commencement on site.	When designing the SUDs scheme attention must be given to ensuring that likely significant effects upon Tamar Estuaries Complex SPA including as a result of changes in water quality or flow are avoided or appropriately mitigated. The scheme design will need to demonstrate its effectiveness in this respect and be approved by the Council prior to development commencing.	Confirmation of capacity within the Riverview Treatment facility or provision of alternative facilities is required prior to commencement of the scheme, to avoid likely significant effects upon the Tamar Estuaries Complex SPA.	An appropriate off-site contribution will be required to mitigate against adverse in-combination recreational impacts on the Tamar Estuaries Complex SPA. This will need to be agreed and secured prior to approval of the development. The level of contribution and details of the specific measures are set out in the European Sites Mitigation Strategy Supplementary Planning Document.

5. Conclusions

The HRA of the three Site Allocations, Jennings Street in Penzance (PZ-H14); Westheath Road in Bodmin (Bd-H1), and North Pill in Saltash (SLT-H1), has assessed the potential for Likely Significant Effects on European sites. Where appropriate, the findings have included consideration of the potential for in-combination effects from other plans and projects and have proposed avoidance and mitigation measures to address identified effects. Project-level HRA will be undertaken on individual projects where appropriate.

As concluded in the above Tables it is considered that Likely Significant Effects can be screened out for the Penzance site allocation and Appropriate Assessment has demonstrated that impacts arising from the Bodmin and Saltash sites can be avoided with the implementation of mitigation and environmental control measures. Section 6 including paragraphs 6.1.1 to 6.2.2 within the Habitats Regulations Screening Report for the Cornwall Site Allocations DPD Feb 2017, within the submitted evidence base (document ref:D2) all apply and should be referred to.