APPENDIX 14.3:

INFORMATION TO INFORM A HABITAT REGULATIONS ASSESSMENT

Three Elms, Hereford: North East Quarter

Technical Appendix 14.3: Information to Inform a Habitat Regulations Assessment

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On behalf of:
Church Commissioners for England

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Contents

Annexes

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Section 1
Introduction

1.1 This document has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of the Church Commissioners for England (hereafter referred to as 'the Applicant'), in order to give due consideration to the potential for likely significant effects upon the River Wye Special Area of Conservation (SAC) arising from a proposed development known as North East Quarter, Three Elms, Hereford (hereafter referred to as 'the Application Site'). The development will deliver the first phase of an urban expansion in line with Herefordshire Core Strategy Policy HD5 (Western Urban Expansion).

1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff, and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).

Site Context

1.3 The Application Site is centred approximately at Ordnance Survey Grid Reference (OSGR) SO 48851 41869. The Local Planning Authority (LPA) is Herefordshire Council (the competent authority). The Application Site measures approximately 24.8 hectares (ha) and is located to the north-west of Hereford, Herefordshire. It comprises predominantly arable fields, centred around the village of Huntington.

1.4 Previous ecological survey work undertaken by EDP in 2016 and 2018 (report reference: edp2946_r003) and 2021 (report reference: edp2946_r005) identified that the majority of the Application Site comprises arable land bordered by hedgerows and trees. The Yazor Brook flows along the southern boundary of the Application Site. There are also small areas of poor semi-improved grassland, scattered trees and scrub.

1.5 In terms of protected species, surveys confirmed the presence of populations of foraging/commuting bats, [redacted] and a typical assemblage of farmland breeding and wintering birds. Both otter (*Lutra lutra*) and water vole (*Arvicola amphibius*) are present along Yazor Brook and a high diversity of aquatic invertebrates along with European eel (*Anguila anguila*) and brown trout (*Salmo trutta*) were recorded.

1.6 No statutory designations were identified as being present within the Application Site although, as described above, the River Wye SAC and Site of Special Scientific Interest (SSSI) is located approximately 2.5km south of the Application Site. The Yazor Brook which is locally designated as a Site of Importance for Nature Conservation (SINC) flows along the boundary of the Application Site and is a tributary of the River Wye, joining the River Wye approximately 2.8km south-east of the Application Site. The river is designated as a Special

Areas of Conservation (SAC) from Hay-on-wye (approximately 25km west of the Application Site) to its confluence with the Severn Estuary approximately 48km south of the Application Site.

Background and Development Proposals

1.7 The proposals relate to an outline planning application for residential development of the Application Site. The Application Site forms part of a larger area identified for a major mixed use urban expansion of Hereford (referred to as the Western Urban Expansion) in the Core Strategy, October 2015 (Policy HD5).

1.8 In brief, proposals concern the provision of up to 350 dwellings and a new linear park to the north of the Yazor Brook. New site access points are proposed to Three Elms Road to the east and Roman Road to the north. A 'park and choose' site is proposed in the northern part of the Application Site, adjacent to Roman Road. An Illustrative Masterplan is provided at **Annex EDP 1**.

1.9 It is noted that the Application Site makes up approximately 25% of the site area of a larger residential-led scheme at Three Elms, for which an outline planning application was submitted in September 2016 for up to 1,200 dwellings, 10ha of employment land, a primary school, neighbourhood community hub, and associated open space ('the wider Three Elms Site).

1.10 This outline planning application (reference P162920/F) was accompanied by an Environmental Statement (ES) ('the 2016 ES') which was subsequently supplemented by an ES Further Information Report in August 2020 ('the 2020 ES FIR') and an Information to Support a Habitat Regulations Assessment Report. This application currently remains undetermined.

1.11 Whilst the Application Site forms part of the wider Three Elms Site, the proposed application for its development will comprise a separate outline planning application and accompanying ES, to be considered on its own merits and capable of delivery as a standalone scheme. The Application Site has, however, been designed to be compatible and consistent with the wider Three Elms Site.

Habitat Regulations Assessment Scope

1.12 In accordance with Part 6 of the Conservation of Habitats and Species Regulations 2017 (as amended), a Habitat Regulations Assessment (HRA) is required where a plan or project may give rise to significant effects upon any European site designated to conserve natural habitats and species that are rare, endangered, vulnerable or endemic within the European Community. This includes SACs designated for their habitats and/or species of European importance, and Special Protection Areas (SPAs) classified for rare, vulnerable and regularly occurring migratory bird species. Such requirements also apply to those sites

going through the formal designation process, including candidate SACs (cSACs) and Sites of Community Importance (SCIs). Additionally, Government policy, as set out within the National Planning Policy Framework (NPPF)[1], also affords the same level of protection to internationally important wetlands (Ramsar sites), potential SPAs (pSPAs), possible SACs (pSACs) and proposed Ramsar Sites, requiring such sites to also be treated as European sites for planning purposes.

1.13 An HRA comprises several stages of assessment, commencing with a formal screening stage for any likely significant effects (either alone or in combination with other plans or projects) upon the European site or its qualifying features (HRA stage 1). Where likely significant effects cannot be excluded, then such effects require assessment in greater detail through an Appropriate Assessment (AA) to determine whether any adverse effects on the integrity of the European site can be ruled out (HRA stage 2). Providing it can be demonstrated that with appropriate mitigation measures, the plan or project would not give rise to an adverse effect on the integrity of a European site, the plan or project can proceed. Where this cannot be demonstrated, however, or where uncertainty remains, a further stage requires consideration as to whether alternative solutions can be identified (HRA stage 3). Should this not be possible, then the final stage of the HRA requires consideration of any imperative reasons of over-riding public interest and whether all necessary compensatory measures can be secured before determining whether a plan or project can lawfully go ahead (HRA stage 4).

1.14 The Conservation of Habitats and Species Regulations 2017 (as amended) states that:

"A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives".

1.15 The development lies within the Wye River catchment and as such may have an impact on the ecological integrity of the River Wye SAC. This assessment has, therefore, been prepared to summarise pertinent baseline information and planning policy with respect to the proposed development and potential for likely significant effects arising upon the River Wye SAC specifically. In so doing, this assessment seeks to provide the necessary information to Herefordshire Council, as the competent authority, to inform the HRA process, and establish an appropriate mitigation strategy/mechanism to ensure development of the Application Site does not preclude the achievement of conservation objectives for this designated site.

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

Consultation

1.16 To inform this HRA, Natural England (NE) were consulted via their Discretionary Advice Service (DAS) in March 2022 and confirmed that the proposal will require a HRA. However, they also suggested that provided the River Wye SAC is not exceeding its phosphate budget, which is currently understood to be the case, the development will have no adverse effects on the integrity of the River Wye SAC (See **Annex EDP 2**).

Section 2
Background to Pertinent International/European Designations

River Wye SAC

2.1 The River Wye SAC covers an area of 2,147ha. The designation also includes the River Lugg, which is a tributary of the River Wye located approximately 4.2km east of the Application Site. The River Lugg is separated (terrestrially) from the Application Site by the city of Hereford and being located within a separate downstream catchment, therefore it is also hydrologically separated from the Application Site. The River Wye SAC is designated due to the following primary reasons[2]:

- Annex I Habitat – Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation;
- Annex II Species – The Welsh River Wye is the best-known site in Wales for White-clawed crayfish (*Austropotamobius pallipes*);
- Annex II Species – Sea lamprey (*Petromyzon marinus*) found in the main stem of the River Wye below Llyswen;
- Annex II Species – Brook lamprey (*Lampetra planeri*) population is widely distributed within the catchment;
- Annex II Species – River lamprey (*Lampetra fulviatilis*) population is widely distributed in the catchment;
- Annex II Species – The River Wye provides suitable habitat and conditions for spawning population of Twaite Shad (*Alosa fallax*);
- Annex II Species – The River Wye provides suitable habitat and conditions for spawning Atlantic salmon (*Salmo salar*);
- Annex II Species – The diversity of habitat types in the Wye provides suitable conditions for Bullhead (*Cottus gobio*); and
- Annex II Species – The Wye supports the densest and most well-established population of otter in Wales.

[2] JNCC (2014). Available at: https://sac.jncc.gov.uk/site/UK0012642. [Access on 15 July 2020]

2.2 In addition, the SAC also supports the following qualifying features which are not a primary reason for site selection:

- Annex I Habitat– Transition mires and quaking bogs; and
- Annex II Species– Allis shad (*Alosa alosa*).

2.3 The River Wye and several of its tributaries represent a large, linear ecosystem which acts as an important wildlife corridor, an essential migration route, and a key breeding area for many nationally and internationally important species. The River Wye SSSI boundary is broadly the same as the boundary of the SAC. Along the length of the River Wye are areas of associated habitat, such as flood plain and tributaries which are also designated as SSSIs.

2.4 Conservation Objectives for the SAC were published by Natural England in 2018[3] and are as follows:

"Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- *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 habitats of qualifying species rely;*
- *The populations of qualifying species; and*
- *The distribution of qualifying species within the site."*

2.5 The current condition of the component River Wye SSSI is 'unfavourable - recovering' when last assessed in 2010[4], with the issues affecting the River Wye stated as including: physical modification; siltation from agricultural land; over-abstraction; prevalence of invasive species; and nutrient enrichment. More specifically, reference to the River Wye

[3] River Wye SAC Conservation objectives. Available from http://publications.naturalengland.org.uk/publication/6096799802589184 (Accessed July 2020)

[4] Natural England (2010). Available at: https://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1022169&SiteCode=S1006327&SiteName=&countyCode=&responsiblePerson=. (Accessed on 14 January 2020)

SSSI Favourable Condition Tables[5] indicates that 12.69% of the SSSI is considered to be in favourable condition and 87.31% is considered to be in unfavourable condition.

2.6 Further details on the conservation objectives for the SAC are provided in the River Wye Conservation Objectives Supplementary Advice, published by Natural England in 2019[6]. The supplementary advice provides a range of measures in relation to each qualifying feature of the SAC. This report primarily focusses on the potential impacts of nutrient inputs on the favourable conservation status of the SAC. As such, the following conservation objectives taken from the Supplementary Advice[6] are relevant;

"The conservation objectives set by Natural England for the River Wye SAC include targets for in-river water column phosphate concentrations. These have been developed to protect the animal and plant communities within the river from the adverse effects of nutrient enrichment, and are based on a critical, national review of the evidence base (Mainstone, 2011). This work is set out within Natural England Research Report 034: An evidence base for setting nutrient targets to protect river habitat which can be accessed on-line at http://publications.naturalengland.org.uk/category/7005. If concentrations exceed these targets there is a significant risk that undesirable changes will occur with associated negative effects on the interest features of the River Wye SAC.

[...]) there is now agreement that the phosphate targets currently set out in the conservation objectives for the River Wye SAC should be used for the long-term management of the site (e.g. in the evaluation of the ecological risks associated with housing growth)."

2.7 The phosphate targets (to be expressed as annual averages) that have been set by Natural England within their supplementary advice to protect the River Wye SAC are as follows:

"River Wye from English/Welsh boundary to the River Lugg confluence - 0.03mg/l soluble reactive phosphorus (SRP) (i.e. the standard to achieve in the River Wye immediately upstream of the confluence with the River Lugg is 0.03mg/l SRP).

[...] The River Wye (between Hay-on-Wye and the River Lugg confluence) is currently meeting the phosphate target and therefore fulfilling the conservation objectives set out by Natural England. However, it is nearing the target and so there is a risk to future compliance that needs addressing."

2.8 To reduce phosphate inputs into the River Wye SAC, the Environment Agency, Natural England and Herefordshire Council produced a Nutrient Management Plan (NMP) which

[5] River Wye Condition Table. Available from https://designatedsites.naturalengland.org.uk/ReportConditionSummary.aspx?SiteCode=S1006327&ReportTitle=River Wye SSSI. (Accessed July 2020)

[6] River Wye SAC Conservation objectives. Available from http://publications.naturalengland.org.uk/publication/6096799802589184 (Accessed July 2020)

was published in 2014[7]. The NMP is designed to enable the desired economic growth in Herefordshire whilst achieving and maintaining Favourable Condition Status for the River Wye SAC. The NMP was informed by the River Wye SAC Nutrient Management Plan Evidence base and options appraisal report[8]. This appraisal identified that sewage treatment works discharges are the main contributor to the baseline sources of phosphate and nitrogen, with agricultural run-off also being a significant contributor.

[7] (2014) River Wye Sac Nutrient Management Plan: Action Plan Version 1 November 2014. Available from https://www.herefordshire.gov.uk/download/downloads/id/1652/nutrient_management_plan_action_plan_november_2014.pdf/ (Accessed July 2020)

[8] Atkins (2014) River Wye SAC Nutrient Management Plan Evidence base and options appraisal report. Available from https://www.herefordshire.gov.uk/download/downloads/id/1655/nutrient_management_plan_evidence_base_and_options_appraisal_may_2014.pdf (Accessed July 2020)

Section 3
Habitats Regulation Assessment - Screening (HRA Stage 1)

3.1 The HRA undertaken of Herefordshire's Draft Core Strategy (adopted on 16 October 2015) was completed by Land Use Consultants (LUS) in 2014[9] with a subsequent addendum in 2015[10]. This HRA considered those likely significant effects to arise upon the River Wye SAC as a result of proposals for future development across the County (with projected housing delivery across the County including the quantum of units proposed for the Development Site). A brief summary of the conclusions of this HRA is provided within **Table EDP 3.1**, alongside identification of likely significant effects to arise with respect to the Development Site itself.

3.2 In brief, likely significant adverse effects specific to the River Wye SAC can be attributed to:

- Physical loss/damage (i.e. land take, damage by construction traffic etc.);
- Non-physical disturbance (e.g. noise, vibration and light pollution);
- Air Pollution (e.g. increased traffic);
- Recreation (e.g. trampling/degradation of habitats);
- Changes to the hydrological regime (e.g. impacts to water quantity through abstraction and discharge); and
- Changes in water quality (Toxic and non-toxic contamination).

3.3 As detailed within **Table EDP 3.1** it is considered that no likely significant effects (LSE) upon the qualifying features of the River Wye are likely to arise from the development proposals as a result of physical loss/damage, non-physical disturbance, air pollution, recreation and changes to the hydrological regime.

3.4 However, following the Cooperation Mobilisation for the Environment v Verenigin Leefmilieu (Dutch Nitrogen) CASE 293/17 (Known as the 'Dutch Nitrogen Case') Natural England have determined that using Nutrient Management Plans alone to mitigate development impacts from changes in water quality is no longer possible because the

[9] Luc (2014). Pre-submission Publication of the Herefordshire Local Plan - Core Strategy. Habitat Regulations Assessment Report. Available at: https://www.herefordshire.gov.uk/download/downloads/id/1546/addendum_to_hra_for_herefordshire_local_plan_core_strategy_-_september_2014.pdf. [Accessed on 14 January 202]

[10] LUC (2015). Herefordshire Local Plan Core Strategy: Main Modifications Sustainability Appraisal and Habitats Regulations Assessment Addendum. Available at: https://www.herefordshire.gov.uk/download/downloads/id/1547/local_plan_core_strategy_main_modifications_-_sustainability_appraisal_and_habitats_regulations_assessment_addendum_april_2015.pdf [Accessed on 14 January 2020]

measures to reduce nutrients have to be certain i.e. secured and fully funded. Although the Herefordshire NMP does provide broad measures and objectives to reduce phosphates within the River Wye catchment, particularly in relation to agricultural inputs, no further consideration of the NMP is given within this document.

3.5 Furthermore, the 2018 People Over Wind, Peter Sweetman v Coillte Teoranta (C-323/17) (known as the People Over Wind Case) ruling confirmed that proposed mitigation measures cannot be taken into account for the purposes of screening under the UK Habitats Regulations.

3.6 As a precaution due to these case law examples and the future status of the River Wye in terms of meeting its phosphate thresholds, potential for LSE from changes in water quality have been taken forward to Stage 2: Appropriate Assessment.

Table EDP 3.1: Summary of a Shadow Habitat Regulations (Screening) Assessment for the Application Site

Effect	Description	WHSAP HRA Conclusion – Screening Assessment	Project Specific HRA Conclusion	Likely Significant Effect (LSE)?
River Wye SAC				
Physical Loss/Damage to Habitat	Physical loss of habitat through land take or damage by construction equipment etc.	No allocations lie within 20m of the River Wye SAC such that no likely significant effects through habitat loss/deterioration have been identified for allocation H3.3.	The Application Site is sufficiently distant from the SAC (c.4.2km), such that no direct impacts arising from physical habitat loss/damage will occur.	No
Non-physical Disturbance	Disturbance to qualifying protected/notable species arising from an increase in noise, lighting and vibration during construction and operation of the Application Site.	No allocations lie within 20m of the River Wye SAC, such that no likely significant effects through habitat loss/deterioration have been identified for allocation H3.3.	The development is sufficiently distant from the SAC, such that no impacts arising from elevated noise/lighting/vibration will arise.	No
Air Pollution	Increased traffic from new development resulting in an increase in deposition of nitrogen compounds (NOx) and subsequent acidification/ eutrophication of fresh water.	The HRA considered significant effects to be unlikely, particularly where main roads are located greater than 200m from the SAC. An HRA assessment of allocation polices did not consider the River Wye to be sensitive to N deposition such that the potential for LSE was screened out.	With reference to the Air Pollution Information System (APIS), a freshwater system is predominantly phosphorus-limited. The River Wye SAC is not considered sensitive to nitrogen oxide (NOx) deposition. The air quality assessment (Chapter 8 of the ES) has not identified any risk to ecology designations. With reference to best practice guidance[11], air quality impacts are not considered significant where a change in	No

[11] Department for Transport (2007). Design Manual for Roads and Bridges. Volume 11, Section 3, Part 1.

Effect	Description	WHSAP HRA Conclusion – Screening Assessment	Project Specific HRA Conclusion	Likely Significant Effect (LSE)?
			daily traffic flow equated to less than 1,000 AADT and a change in HGV flow equated to less than 200 AADT. Traffic flow generated by the development is not predicted to exceed these thresholds in proximity to the SAC.	
Recreation	Trampling, degradation and disturbance of habitats as a result of increased visitors to the SAC.	The potential for LSE upon the River Wye arising from recreational pressures were screened out of an assessment undertaken by the HRA.	Inherent in the masterplan design for proposed development is the provision of circa 13ha of open green space, providing alternative opportunities for recreation to new residents.	No
Hydrological Regime	Changes in water quantity and the hydrological regime including abstraction and/or increase in surface water runoff from new development.	Existing levels of abstraction for Public Water Supplies (PWS) are not considered to exceed guideline levels on the River Wye SAC. The Application Site, however, falls outside of these identified catchments and is thus unlikely to give rise to significant effects.	No abstraction of water resources is proposed to facilitate development.	No

Effect	Description	WHSAP HRA Conclusion – Screening Assessment	Project Specific HRA Conclusion	Likely Significant Effect (LSE)?
Water Quality	Water pollution resulting from increase in volume of sewage effluent, particularly phosphate, discharged into rivers from new housing development. This is in addition to pollution following increased contaminated surface water runoff during the construction phase of the proposed development. Water pollution resulting from increase in contaminated surface water runoff and/or other diffuse pollution sources during construction.	Consolation with Natural England has provided their position of potential impacts on the River Wye SAC. The response is stated below. *'The River Lugg part of the River Wye SAC is currently exceeding its targets for phosphates. Housing proposals would add more phosphate to the river, including via Waste water Treatment Works, and would therefore 'fail' the Habitats Regulations Assessment. One way that housing proposals in the Lugg can proceed is by being 'nutrient neutral'. Herefordshire Council has developed a calculator to assist developers in working this out.* *However, as your proposal drains to the Wye (not the Lugg), it is able to proceed in more of a business as usual way. The River Wye part of the SAC is currently compliant with its phosphate targets, and is therefore not subject to any additional measures such as 'nutrient neutrality'. There is therefore no requirement to use Herefordshire Council's phosphate*	The schemes sensitive drainage strategy includes the following inherent mitigation: - Attenuation of site run-off and integration of sustainable drainage systems (see Chapter 13: Water Resource and Flood Risk for further details); - The offsetting of built development from the Yazor Brook through the inclusion of significant habitat buffers measuring between circa 15m and 200m wide. To obtain maximum nutrient retention a buffer width of 10-25 metres is needed, alongside high stem density vegetation (Vought, et al., 1994); - The inclusion of public footpaths within the scheme to direct new residents away from sensitive riparian habitats; and - The full retention of Yazor Brook riparian habitats including existing mature tree and woodland combined with new attenuation features.	No, though taken forward to Stage 2 as a precaution owing to uncertainty regarding what constitutes mitigation.

Effect	Description	WHSAP HRA Conclusion – Screening Assessment	Project Specific HRA Conclusion	Likely Significant Effect (LSE)?
		calculator or to offset additional nutrients generated by your proposal."	Furthermore, industry standard pollution prevention measures will be employed during construction to prevent the risk of pollution/sedimentation events. The change in land use on site from arable to residential development and green space will not significantly impact the level of phosphorous leaving the Site. Population growth associated with development of up to 350 residential units will result in increased P loading from the receiving Eign Waste Water Treatment Works (WwWT) to the SAC. The Development will be delivered in accordance with local planning policy to reduce grey water inputs into the sewage system, restricting water use to 110 litres/person/day. Wastewater will further be collected and treated at Eign WwTW, which has been confirmed to have capacity and discharges into the Rive Wye downstream of Hereford, where the river is not currently exceeding its phosphate levels.	

Effect	Description	WHSAP HRA Conclusion – Screening Assessment	Project Specific HRA Conclusion	Likely Significant Effect (LSE)?
			Natural England have confirmed that as *"The River Wye part of the SAC is currently compliant with its phosphate targets, and is therefore not subject to any additional measures such as 'nutrient neutrality'. There is therefore no requirement to use Herefordshire Council's phosphate calculator or to offset additional nutrients generated by your proposal"*. Correspondence with NE is provided in **Annex EDP 2.**	

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Section 4
Appropriate Assessment (HRA Stage 2)

4.1 The HRA Screening exercise has identified that no likely significant effects (LSE) upon the qualifying features of the River Wye are likely to arise from the development proposals as a result of physical loss/damage, non-physical disturbance, air pollution, recreation, and changes to the hydrological regime.

4.2 This is also considered likely to be the case with respect to changes in water quality. However, owing to case law pertaining to using mitigation to screen out likely significant effects (People Over Wind Case) and the need for scientific certainty (Dutch Nitrogen Case), this potential impact pathway has been taken forward to Stage 2 Appropriate Assessment as a precaution.

4.3 The potential for LSE to occur as a result of changes in water quality arising from increased effluent discharge and contaminated surface water runoff during the construction and operation phase of proposed development, is therefore assessed below alongside the proposed mitigation.

Potential Adverse Effects Requiring Consideration

Water Quality: Diffuse Pollution During the Construction Phase

4.4 To avoid the potential for significant adverse effects to arise upon qualifying features of the River Wye SAC as a result of increased surface water runoff from development during the construction phase, pollution control measures will be employed during construction of the proposed development with reference to Environment Agency standards[12] relating to *Pollution Prevention Guidelines* (PPGs) published by the Environment Agency, namely *PPG1 General guide to the prevention of pollution*, *PPG5 Works and maintenance in or near water*, *PPG6 Pollution prevention guidance for working at construction and demolition sites* and *PPG21 Pollution incident response planning*.

4.5 Any fuel spills will be reported to the site manager and acted on immediately to ensure these do not reach a watercourse/ground water. A procedure for checking and corrective action, including regular inspections and monitoring should be in place for the duration of construction.

4.6 In addition, no waste arising from ground works will be stored within 10m of the Yazor Brook. This includes any waste material, earth or debris which could potentially enter

[12] As part of the Government's 'Smarter Guidance Project', all pollution prevention guidance notes and publications previously maintained by the Environment Agency were withdrawn in December 2015 to simplify and streamline guidance provided. Pollution Prevention Guidelines (PPGs) are currently archived on the National Archives website but remain downloadable and represent the most up to date good practice guidance notes.

drainage features adjacent to the Application Site. No plant will be parked within 10m of the Yazor Brook when not in use and refuelling will take place within a protected bund at a designated point well away from the Brook. Any fuel spills will be reported to the site manager and acted on immediately to ensure these do not reach the watercourse. A procedure for checking and corrective action, including regular inspections and monitoring should be in place for the duration of construction.

4.7 Pollution prevention materials such as straw bales, 'Terran' and booms will be kept on-site at all times for the duration of proposed works for deployment in the event of a spill and to prevent/reduce runoff to aquatic habitats should proposed works result in excessive mobilisation of contaminated materials.

4.8 Further details pertaining to the protection of ecological features during the construction phase of the Application Site will be provided within a Construction and Environmental Management Plan (CEMP), to be secured by a suitably worded planning condition. Subject to implementation of those pollution prevention measures to be detailed within the CEMP, it is considered that no adverse effects on the integrity of the River Wye SAC will arise with respect to diffuse pollution during the construction phase of development.

Water Quality: Diffuse Pollution During the Operation Phase

4.9 Chapter 13: Water Resource and Flood Risk of the Environmental Statement has identified diffuse pollutant risks to the receiving downstream sewer systems from vehicle parking areas and highways. This risk is minimised by the 15-200m green landscape buffer afforded to the brook and delivery of circa 13ha of green open space including new habitats that will filter and attenuate run-off. However, in the absence of mitigation the proposed development could result in an increase in contaminated surface water run-off into the Yazor Brook as a consequence of the change in land use from greenfield to urban. Such effects will be largely offset by the cessation of agricultural activities which currently contributes to phosphorus loading.

4.10 As the development will be implemented in accordance with planning policy, no significant adverse effects are likely to occur. Of pertinence is Policy SD3 (Sustainable Water Management and Water resources) which states:

...
"Measures for sustainable water management will be required to be an integral element of new development in order to reduce flood risk; to avoid an adverse impact on water quantity; to protect and enhance groundwater resources and to provide opportunities to enhance biodiversity, health and recreation. This will be achieved by ensuring that:

5. *development includes appropriate sustainable drainage systems (SuDS) to manage surface water appropriate to the hydrological setting of the site. Development should not result in an increase in runoff and should aim to achieve a reduction in the existing runoff rate and volumes, where possible;*

6. *water conservation and efficiency measures are included in all new developments, specifically:*

    - *residential development should achieve Housing -Optional Technical Standards - Water efficiency standards At the time of adoption the published water efficiency standards were 110 litres/person/day; or*

    - *non-residential developments in excess of 1,000 sq.m gross floorspace to achieve the equivalent of BREEAM 3 credits for water consumption as a minimum;*

7. *the separation of foul and surface water on new developments is maximised;*

8. *development proposals do not lead to deterioration of EU Water Framework Directive water body status;*

9. *development should not cause an unacceptable risk to the availability or quality of water resources; and*

10. *In particular, proposals do not adversely affect water quality, either directly through unacceptable pollution of surface water or groundwater*

Development proposals should help to conserve and enhance watercourses and riverside habitats, where necessary through management and mitigation measures for the improvement and/or enhancement of water quality and habitat of the aquatic environment. Proposals which are specifically aimed at the sustainable management of the water environment will in particular be encouraged, including where they are required to support business needs such as for agriculture. Innovative measures such as water harvesting, winter water storage and active land use management will also be supported. In all instances it should be demonstrated that there will be no significant adverse landscape, biodiversity or visual impact."

4.11 To avoid likely significant effects upon water quality arising from the proposed development, it is proposed to discharge all surface water runoff from the site via detention basins and a SuDS management train to the Yazor Brook. The indicative drainage strategy layout is shown on the illustrated masterplan provided as **Annex EDP 1**.

4.12 The proposed SuDs layout has been designed in accordance with Table 26.2 of The SuDS Manual CIRIA C753 with the pollution hazard level of the proposals considered to be 'Medium'. Table 26.3 of The SuDS Manual states the various mitigation indices for discharges to surface waters with the total SuDS mitigation index for each pollutant being a combination of the mitigation indices of each element. The first SuDS element of the train will always be more effective than the subsequent elements, given that the concentration of pollutants in the runoff entering these is lower. The flood risk assessment indicates that a SuDS management train that combines swales and basins would provide sufficient treatment to mitigate the pollution associated with main access roads to the Application Site. Therefore, it is considered that the use of oil interceptors will not be

required within the Application Site; and given that these will not be adoptable under the new standards which came into effect in April 2020, the use of a SuDS management train is a more practical solution.

4.13 As it is shown that the mitigation indices of the treatment techniques are greater than the hazard indices, it is established that there should be no reduction in the overall water quality (including increased phosphate levels) in Yazor Brook downstream of the proposed development and subsequently no deterioration in the water quality of the River Wye as a result of proposed development.

4.14 Subject to implementation of the above it is considered that no adverse effects on the integrity of the River Wye SAC will arise with respect to diffuse pollution during the operation phase of development.

Water Quality: Increase in Sewage Effluent During the Operation Phase

4.15 The proposed scheme would increase the net number of residents within the River Wye catchment resulting in an increase in the volume of wastewater being treated at Eign Waste Water Treatment Works (WWTW) which discharges into the River Wye SAC. Wastewater typically includes elevated levels of phosphates derived from cleaning products and as such there is the potential for LSE.

4.16 It has been confirmed in March 2022 by Welsh Water that the Eign Treatment works has sufficient capacity to accommodate the effluent from the development within its discharge limits. NE have also confirmed in March 2022 that the River Wye SAC is not currently exceeding its phosphate targets and that Herefordshire Council are monitoring the number of permitted houses and phosphate limits (**Annex EDP 2**).

4.17 The 350 dwellings proposed is anticipated to result in an increased phosphate loading. It is anticipated, based on consultation with NE and Welsh Water in March 2022, that this can be accommodated without exceeding the River Wye SAC phosphate budget and adversely affecting the integrity of its designated features.

4.18 However, should these phosphate thresholds be exceeded in future prior to planning consent, Herefordshire's Council have developed an Interim Phosphate Delivery Plan[13] to establish the legal and planning processes required for securing mitigation for development. Stage 3 of the IP Delivery Plan has concluded that an appropriate mechanism for delivery of mitigation to offset increased nutrient loading from development is via unilateral undertaking/Section 106 agreements to HC to fund nutrient reduction schemes including habitat creation across the county, with such financial contributions to be proportional to the net increase in phosphorus inputs generated by the proposed development.

[13] Ricardo (2021). Interim Phosphate Delivery Plan Stage 3. Available at: https://www.herefordshire.gov.uk/downloads/file/22720/interim-phosphate-delivery-plan-stage-3. [Accessed on 07 January 2021]

4.19 If the River Wye SAC's phosphate levels downstream are exceeded prior to consent, subject to provision of financial contributions for input into a county strategic mitigation scheme prior to occupation of the development (at which point effects associated with increase phosphorus loading would arise) no LSE would occur. Should the River Wye SAC fail after outline planning permission has been granted but before reserved matters is submitted, then mitigation would likely need to be considered at this stage.

Table EDP 4.1: Summary of Proposed Mitigation

Aspect	Issues	Proposed Mitigation	Significant Effect?
Water Quality	Water pollution resulting from increase in contaminated surface water runoff during the construction phase.	The construction will be undertaken in accordance with a Construction and Environmental Management Plan (CEMP) secured by a suitably worded pre-commencement condition attached to planning consent. The CEMP will specify pollution control measures to be employed during construction of the proposed development with reference to Environment Agency standards[14] relating to *Pollution Prevention Guidelines* (PPGs) to ensure that detrimental impacts to adjacent wetland habitats and the River Wye SAC as a result of surface run-off, spillage and pollution arising throughout the construction phase of development are avoided.	No
	Water pollution resulting from increase in contaminated surface water runoff during the operation phase.	The proposed development scheme includes a Sustainable Drainage System (SuDS), comprising of swales, filter drains and attenuation basins, to control and manage water run-off within the Application Site, whilst also providing water quality treatment of run-off prior to discharge. No changes in the volume or quality of run-off leaving the Application Site are predicted to occur. Development of the Application Site will result in a cessation of agricultural management, combined with provision of significant areas of informal and formal open green space (c.13ha) enhanced through wildlife grassland seeding and additional shrub and woodland planting. Such measures will offset impacts associated with contaminated surface runoff off whilst further increasing the capacity of the Application Site to attenuate surface water runoff.	No
	Water pollution resulting from increase in volume of sewage effluent discharged into river from new housing development.	No mitigation required currently as Eign WwTW has sufficient headroom to accommodate development and River Wye SAC is within phosphate budget. Further mitigation is only required to achieve nutrient neutrality or betterment, if the River Wye SAC starts to fail its water quality targets prior to consent. Such	No

[14] As part of the Government's 'Smarter Guidance Project', all pollution prevention guidance notes and publications previously maintained by the Environment Agency were withdrawn in December 2015 to simplify and streamline guidance provided. Pollution Prevention Guidelines (PPGs) are currently archived on the National Archives website but remain downloadable and represent the most up to date good practice guidance notes.

Aspect	Issues	Proposed Mitigation	Significant Effect?
		mitigation could be achieved, if required, through financial contributions towards strategic HC lead habitat creation/management measures designed to offset the impacts of increased phosphate loading from new residential development and would be secured via unilateral undertaking or Section 106 agreement.	

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Section 5
Summary and Conclusions

5.1 In consideration of the nature and scale of proposed development and the potential for likely significant effects upon qualifying features of the River Wye SAC a Habitats Regulations Assessment will be required in accordance with the Conservation of Habitat and Species Regulations 2017 (as amended) prior to determination of the outline planning application.

5.2 Given the distance and the spatial separation of the Application Site from the designation, combined with the nature and size of development and specific sensitivities of the designation, no likely significant effects upon the qualifying features of the River Wye SAC are anticipated to arise from the proposed development as a result of physical loss/damage, non-physical disturbance, air pollution, recreation or changes to the hydrological regime.

5.3 In the absence of mitigation, on a precautionary basis there remains, however, the potential for development to result in deterioration in water quality of the River Wye SAC associated with increased phosphate loading to the catchment from surface water runoff and foul water disposal. As such, mitigation for these potential impacts has been considered.

5.4 In respect of potential impacts arising from surface water runoff, inherent within the detailed design for development is the implementation of a sustainable drainage strategy comprising swales and attenuation basins to collect, attenuate and treat contaminated surface runoff from the Application Site, whilst further precautionary measures to avoid pollution of aquatic resources during the construction phase can be provided within a CEMP, the provision of which can be secured by a suitably worded planning condition. This is in addition to the retention and creation of habitats on-site including grassland, trees and structural scrub planting, which will further maintain/enhance the capacity of the Application Site to drain/retain surface water whilst reducing soil erosion. As such, it is considered that no adverse effects on the integrity of the River Wye SAC will arise with respect to diffuse pollution (surface water runoff) during the construction and operation phase of development.

5.5 With regards to water pollution resulting from an increase in volume of sewage effluent discharged into the river from new housing development, until such a time that the River Wye is not meeting its phosphate targets, there is not considered to be potential for likely significant adverse effects to arise. The Eign Waste Water Treatment Works currently has capacity to accommodate the developments foul water within its discharge limits. This position has been confirmed by Natural England and Welsh Water, respectively, and no further mitigation nor the use of the Herefordshire Council's phosphate calculator is required. Should the River Wye SAC start to fail its phosphate thresholds prior to full planning consent, then appropriate mitigation, likely in the form of financial contribution to

strategic habitat creation to offset phosphate loading in the catchment, currently being identified by Herefordshire Council, would need to be secured by Section 106 agreement or unilateral undertaking to achieve nutrient neutrality.

5.6 Overall, therefore, and subject to implementation of development in accordance with the above, it is considered that the proposed development of the Application Site will not adversely affect the integrity of the River Wye SAC. As such, the scheme is capable of complying with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended).

Annex EDP 1
Illustrative Masterplan

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Annex EDP 2
Natural England Correspondence

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Sarah Chamberlain

From: SM-NE-Consultations (NE) <consultations@naturalengland.org.uk>
Sent: 03 March 2022 17:09
To: Rob Forbes
Subject: FW: DAS Consultation Request - Three Elms - North Quarter, Hereford

Importance: High

Dear Rob

Thank you for your request for DAS advice. I have had a first look at your form and I can see that you are asking for advice to inform a Habitats Regulations Assessment (HRA). Your proposal is in the catchment of the River Wye and surface and foul water would drain to this river. The River Wye is a Special Area of Conservation (SAC).

Proposals that would increase surface and foul water flows to the River Wye SAC will need a Habitat Regulations Assessment. Herefordshire Council is the competent authority for this matter, and as such they will be responsible for undertaking the HRA as a part of the planning application assessment process. They will need to base their assessment on information that you provide as a part of your planning application. Natural England's role is an advisory one. The council will consult us if they need to – usually when they have screened the proposal in as having a potential effect, and have undertaken a further 'appropriate assessment'.

The River Lugg part of the River Wye SAC is currently exceeding its targets for phosphates. Housing proposals would add more phosphate to the river, including via Waste water Treatment Works, and would therefore 'fail' the Habitats Regulations Assessment. One way that housing proposals in the Lugg can proceed is by being 'nutrient neutral'. Herefordshire Council has developed a calculator to assist developers in working this out.

However, as your proposal drains to the Wye (not the Lugg), it is able to proceed in more of a business as usual way. The River Wye part of the SAC is currently compliant with its phosphate targets, and is therefore not subject to any additional measures such as 'nutrient neutrality'. There is therefore no requirement to use Herefordshire Council's phosphate calculator or to offset additional nutrients generated by your proposal.

Your proposal will still need a HRA, which the council will undertake and then consult NE on. Herefordshire Council is keeping a record of how many houses it is permitting on the Wye, in order to check that environmental limits are not reached. This information will form part of their HRA. Provided that they are not up against those limits yet, then I would expect the council could conclude that this proposal has no adverse effects on the integrity of the River Wye SAC. This means that it would 'pass' the HRA.

I hope that this is helpful. Please let me know if this is enough information, or if you want to proceed with more advice under our Discretionary Advice Service.

Kind regards

Rob Sargent

Team Leader – West Mids
Natural England

www.gov.uk/natural-england

<mailto:consultations@naturalengland.org.uk>

www.gov.uk/natural-england

During the current coronavirus situation, Natural England staff are primarily working remotely to provide our services and support our customers and stakeholders. Please continue to send any documents by email or contact us by phone to let us know how we can help you. See the latest news on the coronavirus at http://www.gov.uk/coronavirus and Natural England's regularly updated operational update at https://www.gov.uk/government/news/operational-update-covid-19.

From: Rob Forbes [redacted]
Sent: 03 March 2022 09:34
To: SM-NE-Consultations (NE) <consultations@naturalengland.org.uk>
Subject: RE: DAS Consultation Request - Three Elms - North Quarter, Hereford

> You don't often get email from [redacted] Learn why this is important

Dear NE

We are still awaiting a response on this.

Thanks

Rob

Rob Forbes
Associate Director

[redacted]
W www.edp-uk.co.uk

From: SM-NE-Consultations (NE) <consultations@naturalengland.org.uk>
Sent: 16 February 2022 12:49
To: Rob Forbes [redacted]
Subject: FW: DAS Consultation Request - Three Elms - North Quarter, Hereford

Dear Rob

I can confirm that we have received your DAS application. It is currently with our Area Team awaiting allocation. The response deadline date your application is 2 March 2022.

The reference number for your application is 383385.

Regards

Natural England
Consultation Service
Hornbeam House
Crewe Business Park, Electra Way,
Crewe, Cheshire, CW1 6GJ

Email: consultations@naturalengland.org.uk
www.gov.uk/natural-england

Natural England offers two chargeable services - the Discretionary Advice Service, which provides pre-application and post-consent advice on planning/licensing proposals to developers and consultants, and the Pre-submission Screening Service for European Protected Species mitigation licence applications. These services help applicants take appropriate account of environmental considerations at an early stage of project development, reduce uncertainty, the risk of delay and added cost at a later stage, whilst securing good results for the natural environment.

For further information on the Discretionary Advice Service see here
For further information on the Pre-submission Screening Service see here

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From: Rob Forbes [redacted]
Sent: 16 February 2022 12:28
To: SM-NE-Consultations (NE) <consultations@naturalengland.org.uk>
Cc: Jonathan Alldis [redacted] Tara Johnston <tara.johnston@lichfields.uk>
Subject: RE: DAS Consultation Request - Three Elms - North Quarter, Hereford

> You don't often get email from [redacted] Learn why this is important

Dear Natural England

I was just emailing to check that you have received this request and how quickly it might be possible to set up a meeting. A planning application is due to be submitted imminently and we would welcome the opportunity to incorporate any feedback you may have into the submission material.

Many thanks

Rob

Rob Forbes
Associate Director

[redacted]
w www.edp-uk.co.uk

From: Rob Forbes
Sent: 09 February 2022 14:58
To: consultations@naturalengland.org.uk
Cc: Jonathan Alldis [redacted] Tara Johnston <tara.johnston@lichfields.uk>
Subject: DAS Consultation Request - Three Elms - North Quarter, Hereford

Dear Natural England

Please find attached a DAS request for discussions in relation to the River Wye SAC and phosphate loading with respect to HRA matters pertaining to an imminent outline application for an allocated residential site in the catchment. We would welcome the opportunity to meet and discuss NE and Herefordshire Councils current position (e.g. Interim Phosphate Delivery Plan) as soon as possible.

Attached is the proposed masterplan, GI parameter plan, BNG report and phosphate loading calculations. We can also provide the ecology baseline if useful though this is a large document so please advise whether you can accept a link to download this.

Should you require any further information then please let me know.

Many thanks

Rob

Rob Forbes *BSc (Hons), MSc, MCIEEM*
Associate Director

The Environmental Dimension Partnership Ltd
Tithe Barn, Barnsley Park Estate,
Barnsley, Cirencester,
Gloucestershire GL7 5EG

[redacted]
w www.edp-uk.co.uk

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