South Norfolk and Broadland District Council

Habitat Regulations Assessment (HRA)
Screening and Appropriate Assessment (AA)
Template

Please note: Undertaking the HRA process is the responsibility of South Norfolk and Broadland District Council as the Competent Authority for the purpose of the Habitats Regulations. However, it is the responsibility of the Applicant to provide the Competent Authority with the information that they require for this purpose.

HRA Drafting Date:	19th July 2023, updated 16th August 2023
HRA Completion Date:	
Application Reference:	20180708
Application Address	Land To The North Of Sprowston And Old Catton BTN Wroxham Road & St Faiths Road, Norfolk.
Application Description:	Reserved Matters Applications for Phase One Strategic Infrastructure relating to Beeston Park Strategic mixed use development – outline planning permission reference 20161058
Proximity to SPA/SAC	The Broads SAC, located 2.1km to the north-east; Broadland SPA and Ramsar, located 2.1km to the north-east; River Wensum SAC, located 4.0km to the south-west; Norfolk Valley Fens SAC, located 9.6km to the north-west; Breydon Water SPA and Ramsar, located 20.2km to the south-east; Paston Great Barn SAC, located 21.3km to the north-east; Winterton-Horsey Dunes SAC, located 22.4km to the north-east; Great Yarmouth North Denes SPA, located 22.9km to the north-east; Greater Wash SPA (Marine Components) and Southern North Sea SAC (Marine Components), located 22.9km to the north-east.
Lead Planning Officer:	Chris Raine

Please note that all references in this assessment to the 'Habitats Regulations' refer to The Conservation of Habitats and Species Regulations 2017 (as amended).

Stage 1 – Details of the Plan or Project	
Does this application relate to residential development only?	No. The wider site is a strategic site mixed use development consisting of in part residential development. However it should be noted that this specific application only relates to an "infrastructure only" reserved matters application for phase 1 of the development.
European site potentially impacted by planning application, plan or project:	Broadland Ramsar Broadland Special Protection Area (SPA) The Broads Special Area of Conservation (SAC) River Wensum (SAC)
Is the planning application directly connected with or necessary to the management of the site [If yes, Applicant should have provided evidence and justification]]	No.
Are there any other projects or plans that together with the planning application being assessed could affect the site? [Applicant to provide the information sufficient to allow an 'in combination' effect to be assessed]	Yes, regard has been given to development allocated under the North East Norwich Growth Triangle (NENGT) Area Action Plan (AAP), taking account of the HRA of this plan, including the delivery of 7,000 homes by 2026, rising to at least 10,000 thereafter.

Stage 2 – HRA Screening Assessment
*Screening under Regulation 63(1)(a) of the Habitats Regulations – **Significance test**: the Applicant is to provide evidence so that a judgement can be made as to whether there could be any potential significant impacts of the development on the integrity of the SPA/SAC/Ramsar.*
Potential for a likely significant effect has been identified in relation to the Broads SAC and Broadland SPA and Ramsar as a result of recreational pressure/disturbance from in-combination development and changes in water quality. This partly accords with the findings of the HRA for the outline application, which concluded the only potential significant effect was recreational impacts in relation to these designations albeit the additional issue of nutrient neutrality having not been identified at the time now also needs to be addressed. Notwithstanding this is an infrastructure only application, the applicant has provided a strategy for dealing with the impacts of designated sites from the wider strategic development that has outline

planning permission based on what has been provided (development types and quantum of development) and it is this on which the following it the following Appropriate Assessment is provided.

Does the evidence submitted suggest the proposal will lead to a likely significant effect, without mitigation measures, on European Site integrity?

Yes, an Appropriate Assessment is therefore required in relation to the above.

[If yes, continue to Stage 3]

Stage 3 – Appropriate Assessment

Appropriate Assessment under Regulation 63(1) – ***Integrity test****: if there are any potential significant impacts, the applicant must provide evidence showing avoidance and/or mitigation measures to allow an Assessment to be made. The Applicant must also provide details which demonstrate any long-term management, maintenance, and funding of any solution.*

Recreational Disturbance

The Shadow HRA Report by Aspect Ecology *provides a detailed assessment of Recreational Disturbance to the Broads SAC and Broadlands SPA and Ramsar in section 4.42 to 4.4.14 of the report.*

In summary this concludes it is unlikely that the proposed development would make a significant contribution to recreational pressure at the Broads SAC or Broadland SPA and Ramsar, whilst bird species within areas of functionally linked habitat are unlikely to be subject to recreational disturbance associated with the development.

However, a small number of residents could make occasional use of the SAC/SPA/Ramsar for recreation which, in-combination with existing recreational use, could result in disturbance to some bird species at vulnerable times of year. As such, this is addressed by mitigation as set out below.

Mitigation/Avoidance Measures Whilst not as a direct consequence of this particular infrastructure related reserved matters application for the reasons set out above, it is evident that future occupants of the development from all subsequent reserved matters applications (RM/s) for residential development could result in visitors to the designated sites.

Given a small potential impact has been identified within the NENGT HRA on The Broads SAC and Broadlands SPA and Ramsar as a result of recreational pressure, consideration is given to mitigation and avoidance measures.

As set out in the Aspect Ecology Shadow HRA report section 4.5 which provides detailed commentary on open space and habitat provision to be made on site, as well as in other locations nearby that will form alternative natural greenspace and this is fully in accordance with the HRA AA that supported application 20161058.

In addition to the mitigation measures already secured within the s106 and planning conditions set out above further mitigation will be provided

in the form of a "per dwelling" financial contribution that will be paid via legal agreement (either UU or S106) to be determined at the time of determining the relevant development phase RM/s using the agreed GIRAMS methodology (*https://www.southnorfolkandbroadland.gov.uk/downloads/file/4390/norfolk-gi-rams-strategy-march-2021*)

Water Quality

It is evident that future occupants of the development from all subsequent reserved matters applications (RM/s) for residential development would result in overnight accommodation such that the issue of nutrient neutrality needs to be addressed. Accordingly, a Nutrient Neutrality Assessment and Mitigation Strategy (NNAMS) has been completed to establish the level of nitrates and phosphate loading from the development, including a 20% buffer across a short term, medium term and completed development timeline) to be mitigated and this has been appended to this document and is referred to throughout.

In summary the 3 components of the strategy are set out below.

Short term strategy.
Development of up to 410 homes in phase 1 of the development.
Fallowing of all land outside of phase 1
Off site Septic Tank upgrades
Deep Bore Soakaways on site for drainage
Tankering of initial units to a WWTW outside of a NN catchment area
Onsite WWTW to be constructed with discharge to Dobbs Beck within initial EA permit level

Medium Term Strategy
Development of up to 1308 homes in phases 1 and 3 of the development
Fallowing of phase 2 land
Septic tanks as per short term strategy
Bioretention SUDS in phase 3 land alongside phase 1 Deep Bore Soakaways
On site WWTW to final EA permit level

Long Term
For occupation of more than 1308 homes, up to 3520 homes.
No fallowing as site fully developed in accordance with land uses
Septic tanks as per short/medium term strategy
Deep Bore soakaways in phase 1, biorentention SUDS in phases 2 and 3
Onsite WWTW to final EA permit level
Off site constructed wetland on land in applicant control north of Dobbs Beck.

It should be noted that this is an updated document to take account of discussions between the applicant, Natural England and the Local Planning Authority, including clarifying issues surrounding the classification of existing and proposed land uses, a detailed breakdown of impact on each of the Yare and Bure catchments and further details regarding the use of SuDS and details relating to the on-site waste water treatment works and location of its outfall amongst other things. Consideration of this has led to further discussions with Natural England who have raised further questions on the submission, primarily relating to understanding the nutrient load for each phase, but also in relation to some elements of the mitigation package and the overall presentation of the data. With this in mind the HRA AA has been updated with the following to address these areas:

The figures/values provided in the tables included in Appendix B of the report by Water Environment follow all of those within the "Norfolk Calculator" NNBC with the exception of the following:

It is not possible to include SuDS reductions under C609 (TN) and C808 (TP) CIRIA guidance in the NNBC and as such the NNAMs calculations include these. NNBC uses banking coefficients which are not in line with latest guidance, SuDS reductions have not been included in the NNBC. SuDS have been included in the Water Environment NNAMS calculations as part of the mitigation strategy, in particularly in the form of Deep bore soakaways for phase 1 (as per the agreed drainage strategy) and biorentention SUDS for phases 2 and 3 of the development. The requirements for these SUDs reductions are secured through the s106 agreement between the applicant and BDC and will also be required for conditional approval for future RM applications.

Leaching rates are only to 2 decimal places in the NNBC, which impacts the nutrient loading from existing agriculture land use, particularly given the significant size of the site. The applicant has therefore used the figures from the NE calculator, which is not rounded to 2 decimal places and this approach is agreed in this instance by BDC. It should be noted that this change has been undertaken to support the robustness of the calculations.

The NNBC does not allow for offsetting the impacts from septic tanks or an offsite wetland as part of the mitigation strategy as these form part of the mitigation solution, rather than the calculation of mitigation required and therefore the inclusion of these elements forms part of the short, medium and long term strategies set out in the NNAMS.

In reviewing the Water Environment calculations set out in the updated NNAMS, they tally with the NNBC insofar as they identify the correct catchment locations and areas (both the Yare and the Bure as this large site includes areas in both) across the 3 phases of development proposed and short, medium and long term strategies, existing and proposed land uses (excluding areas which will not change from the existing, including those dealt with under NMA app no. 20211172. Figures for average annual rainfall (mm), Nitrate Vulnerable One, Soil types all tally with the NNBC.

In terms of foul water, the calculations identify that all wastewater generated by the development will be discharged within the Bure catchment which aligns with the identified strategy of using an On-site Waste Water Treatment Works WWTW which will be located in and discharge within this catchment. The minimum technical requirements for the WWTW are set out in the NNAMs, with the exact specification and design of the WWTW to be determined at subsequent reserved matters stage. This is also to be the subject of a permit controllable by the Environment Agency which will ensure that the minimum efficiency required by the NNAMS is achieved by the Environmental Permit for the discharge from the WWTW, with this requirement also embedded within the s106 between BDC and the applicant. It is proposed that this WWTW will be constructed/managed/maintained by Severn Trent Connect who are suitably placed/qualified to do so under the Water Industry Act 1991 as a NAV. A detailed letter of support from STC forms an appendix to the NNAMs supporting its figures and conclusions. The NNAMs calculations factor in the permit limits for TN and TP but operating at 90% of the license limit. This approach on effectiveness being consistent with both the NE and NNBC calculators and is therefore considered robust.

Noting that there needs to be a minimum quantum of properties to provide sufficient loading to the onsite WWTW an interim WWTW/s will be required. This will be delivered alongside, and will form part of the phased construction of the WWTW and will be permitted as part of the application to the Environment Agency by Severn Trent Connect. The interim WWTW also needs a minimum quantum of development serving it to make it function (approx. 20 homes), until this loading is in place and the permits are

granted for the WWTW tankering will be used. The tankering has no bearing on TN or TP from waste water to the catchments due to it being stored on-site and then taken out of catchment to a location not impacted by NN, as set out in the NNAMS. This will be controlled/enforced by including it within the S106 to be attached to this RM approval (20180708).

Both the interim and final WWTW/s will be pumped via a rising main into an outfall firstly at Dobbs Beck to the north and then once built in to a newly created adjacent constructed wetland of up to 3.9ha. The impact of going into Dobbs Beck is noted in the NNAMs calculations and reflected in the mitigation package provided. The land required for this wetland and Dobbs Beck itself is under the control of the applicant (Trustees of the Beeston Estates) and the provided 3.9ha area is designed as a maximum potential area for the wetland based upon the calculations undertaken by Water Environment and Water Design Engineers, the wetland specialist engaged to design and construct the wetland and contained in the Appendix with the NNAMs (see wetland Basis of Design),.

The 3.9Ha wetland set out in the mitigation strategy has been designed in accordance with industry standards as set out in the Basis of Design and is therefore considered appropriately robust at this stage. It shows that a substantial nutrient removal surplus is created and therefore the wetland will ensure the development as a minimum achieves neutrality, with a significant surplus likely to be achieved. The minimum requirement for Nutrient removal from the wetland is set out in the NNAMs and will be secured as part of the s106 agreement between the applicant and BDC. The s106 will require the wetland to have been built and operational, in accordance with EA requirements to a design that removes the required levels of nutrients before more than 1308 homes can be occupied. The wetland itself will require planning permission in its own right, as well as permitting from the EA. The requirements for these permits and permission to be in place prior to the construction of more than 1308 dwellings are proposed to be embedded within the s106 agreement, as are the requirements for the funding of and carrying out of management and maintenance of the wetland in perpetuity (a minimum of 80 years as per guidance).

With regard to surface water drainage, the Water Environment calculations factor in the use of deep bore soakaways which have been agreed for phase 1 with the Environment Agency as part of RM application 20180708 (50% reduction in TN and 99% of TP) for this phase. The Water Environment calculations then propose the use of SuDS/Bioretention for the remainder of the site, both for the medium and long term strategy calculations. The reductions within the calculations assume to use of C609 (TN) and C808 (TP) CIRIA guidance in accordance with industry best practice. All reductions are set out in the NNAMS and are agreed to be robust.

When having regard to the calculations as set out above, it is evident that in all 3 cases (short, mid and long term) that further mitigation notwithstanding the use of the on-site WWTW and SuDS/bioretention is required to achieve nutrient neutrality in respect of TP.

With regard to the short term strategy (up to 410 dwellings within phase 1), this would also require the replacement of septic tanks at 10 properties under the control of the applicant (Trustees of the Beeston Estate). The addresses of these properties are known and their replacement can be controlled via S106 legal agreement attached to the current reserved matters 20180708. The agreement can make provision for controlling that any replacement PTP will be to at least an equivalent standard, accepting the “shelf life” of PTPs . The values attributed to these are taken the performance results set out in the appendix C with the NN strategy by Water Environment (Graf One2Clean system). All reductions are set out in the NNAMS and are agreed to be robust and deliverable.

As highlighted previously tankering would be used in the first instance, and then an interim WWTW/s onsite will be used and agreed as part of the license from the Environment Agency. The interim WWTW/s will drain into Dobbs Beck and then a newly created adjacent wetland of upto 3.9ha to be delivered as a component of the long term strategy. The land required for this is under the control of the applicant (Trustees of the Beeston Estates) and the 3.9ha is designed as a maximum area required based upon the calculations undertaken by Water Environment and contained in the Appendix with the NN strategy.

With regard to the mid term (1308 dwellings inclusive of the 410 units in the short term phase), this highlights the positive impacts of the 10 septic tanks being replaced as sufficient to deal with TP impacts identified within the Water Environment NNAMS Calculations, alongside the fallowing of phase 2 land and the use of bioretention SUDS in phase 3 once the WWTW is operational to its required permit level set out in the NNAMS.

With regard to long term (3520 dwellings inclusive of the 1308 units identified above), the positive impacts of the 10 septic tanks to be replaced are noted as is the creation of a new 3.9ha wetland adjacent to Dobbs Beck. This is to be created on land under the control of the applicant (Trustees of Beeston Estate) and the final design would be agreed via a subsequent planning application. The S106 attached to the reserved matters application 20180708 will ensure its delivery and long term management and maintenance in perpetuity. The value attributable to this feature is based upon the calculations included in Appendix B by Water Design Engineers within the NNAMS by Water Environment, supported by a Basis of Design for the wetland produced by Water Design Engineers. The final design of the wetland, together with permitting requirements and details of the management and maintenance of the wetland will be required by the s106 agreement prior to the construction and occupation of more than 1308 dwellings (ie the completed medium term strategy).

Having reviewed the information submitted to date by the applicant/agent and having regard to the comments raised by the Natural England on the submissions, the Council is satisfied that the revised/updated amounts calculated to be mitigated are acceptable
Following implementation of the measures set out above, it is concluded that any potential effects on the Broads SAC and Broadlands SPA and Ramsar as a result of the proposed development in-combination with other plans and proposals will be avoided.

Full details relating to the above are set out in the attached documents:

- Nutrient Neutrality Assessment and Mitigation Strategy Document Ref 22061-NUT-RP-01 C04 by Water Environment
- Cover letter by Water Environment
- Letter of support Waste Water Strategy (Severn Trent Connect)- Correspondence from the agent/applicant entitled Response to Questions raised by Natural England.

Stage 4 – Summary of the Appropriate Assessment [To be carried out by the Competent Authority (the local planning authority) in liaison with Natural England]

Broadland District Council