

## Neighbourhood Planning Team

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**From:** McLaughlin, Sally <Sally.McLaughlin@naturalengland.org.uk>  
**Sent:** 05 March 2025 14:50  
**To:** Latham, James; Neighbourhood Planning Team  
**Cc:** McLaughlin, Sally  
**Subject:** FW: Neighbourhood Plans in Herefordshire and Natural England's May 2024 Advice - Regulation 18 Hereford Local Plan  
**Attachments:** Statement of common ground Jan 23 NN evidence.pdf; 466520 - Natural England Response Herefordshire Local Plan Regulation 18 sent.pdf  
**Importance:** High

Some people who received this message don't often get email from sally.mclaughlin@naturalengland.org.uk. [Learn why this is important](#)

Dear James and team,

Please see email below for your information

Kind regards

Sally

Sally McLaughlin  
Senior Officer  
Sustainable Development - West Midlands Team  
Natural England  
Parkside Court, Hall Park Way  
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**From:** McLaughlin, Sally  
**Sent:** 03 March 2025 13:52  
**To:** Collins-Thomas, Kelly <kelly.collins-thomas@herefordshire.gov.uk>; Riddle, Siobhan <siobhan.riddle@herefordshire.gov.uk>  
**Cc:** Redgwell, Joanna <Joanna.Redgwell@naturalengland.org.uk>; Underdown, Rebecca <Rebecca.Underdown@naturalengland.org.uk>; Burton, Phil <Philip.Burton@naturalengland.org.uk>  
**Subject:** Neighbourhood Plans in Herefordshire and Natural England's May 2024 Advice - Regulation 18 Hereford Local Plan  
**Importance:** High

Dear Kelly, Siobhan,

In May 2024 Natural England responded to Herefordshire Councils Regulation 18 Local Plan consultation, subsequently Emma Johnson, Hayley Fleming and myself met with Liz Duberley and then provided the requested summary of Regulation 18 advice as per my original email below.

A further meeting with yourselves was then arranged on a number of occasions but has not yet taken place, following repeated cancellations by Herefordshire Council. I understand that these cancellations may have been as a result of changes in the Ecology team at the time.

We have now begun to receive neighbourhood plan consultations from your authority which raise many of the same soundness concerns as the Regulation 18 Plan, with regards to issues including but not limited to Nutrient Neutrality as set out below. We also understand that you now have a new Ecologist in post and would like to request that a meeting takes place to discuss the concerns initially raised in the attached Regulation 18 response and the collective implications for the soundness of the neighbourhood plans that are now coming forward for consultation.

Please do let me know which dates and times would work for you.

Kind regards

Sally

Sally McLaughlin

Senior Officer

Sustainable Development - West Midlands Team

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Telford, TF3 4LR

[www.gov.uk/natural-england](http://www.gov.uk/natural-england)



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**From:** McLaughlin, Sally <[Sally.McLaughlin@naturalengland.org.uk](mailto:Sally.McLaughlin@naturalengland.org.uk)>

**Sent:** 12 June 2024 12:07

**To:** [kelly.collins-thomas@herefordshire.gov.uk](mailto:kelly.collins-thomas@herefordshire.gov.uk); [Siobhan.Riddle@herefordshire.gov.uk](mailto:Siobhan.Riddle@herefordshire.gov.uk)

**Cc:** Fleming, Hayley <[Hayley.Fleming@naturalengland.org.uk](mailto:Hayley.Fleming@naturalengland.org.uk)>

**Subject:** Summary of Natural England's Advice - Regulation 18 Hereford Local Plan

Hi Kelly, Siobhan,

Emma Johnson, Hayley Fleming and I met with Liz Duberley recently regarding Natural England's response to the Herefordshire Local Plan Regulation 18 (as attached). We agreed to provide a summary of our advice relating to the key issues to be resolved before the next plan consultation and to provide additional links to evidence bases and examples of approaches taken to resolve similar issues in other areas of England.

### **Summary of Natural England's Advice:**

*"Natural England advises that the plan is currently **at risk of being unsound and/or not legally compliant** due to impacts on air quality and water quality in relation to internationally designated nature conservation sites, and recreational impacts on Malvern Hills SSSI."*

### **Air quality**

There is a need for a detailed evidence base to be completed. This will need to involve neighbouring LPAs in respect of plans and projects which in combination may have significant effects on European Sites in the area. Further road traffic analysis including Annual Average Daily Traffic (AADT) modelling data and / or air

quality modelling will be required to inform this assessment and ensure that no adverse effect on integrity occurs as a result of air pollution.

Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)

<http://publications.naturalengland.org.uk/publication/4720542048845824>

JNCC - Guidance on Decision-making Thresholds for Air Pollution: Main Report and Technical Report 2021

<https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447>

CIEEM Advisory Note: Ecological Assessment of Air Quality Impacts <https://cieem.net/resource/advisory-note-ecological-assessment-of-air-quality-impacts/>

IAQM Guidance

<https://iaqm.co.uk/guidance/>

Guidance- Air quality-Provides guidance on how planning can take account of the impact of new development on air quality.

<https://www.gov.uk/guidance/air-quality--3>

Clean Air Strategy 2019

<https://www.gov.uk/government/publications/clean-air-strategy-2019>

Apis

<http://www.apis.ac.uk/>

[Ecosystem Services and air pollution impacts](#)

Simple Calculation of Atmospheric Impact Limits

<http://www.scail.ceh.ac.uk/>

## **Water quality**

Natural England have not been provided with evidence to support the following position:

*This "Local Plan has been prepared on the presumption that" nutrient neutrality (NN) imposes "restrictions" on development and on the basis that "restrictions will be lifted at an early stage in the plan period".*

Natural England guidance [Nutrient Neutrality Principles - TIN186 \(naturalengland.org.uk\)](#) states that "Development plans can be considered 'nutrient neutral' where they can demonstrate that they will cause no overall increase in nutrient pollution affecting specified Habitats Sites".

**We advise that a nutrient budget is calculated for the Local Plan or, ideally, across the whole catchment, and that a strategy is devised for delivering nutrient neutrality mitigation where required. This would also cover the 'in combination' requirement of HRA.**

FYI - The Canterbury example <https://www.canterbury.gov.uk/sites/default/files/2024-04/Draft%20Canterbury%20District%20Nutrient%20Mitigation%20Strategy%202024.pdf>

Please also see attached Norwich example of a statement of common ground.

For the River Wye, the plan needs to demonstrate that growth proposed in the plan and related plans can be accommodated without causing targets to be exceeded.

*"Where other LPA's in the Wye catchment have plans that are sufficiently advanced, they will need to be considered in combination in the HRA."*

For the River Lugg, the plan needs to demonstrate that there is enough mitigation available.

Both the HRA and plan policy wording should be amended to reflect all the points above.

## **Recreational Impacts on the Malvern Hills SSSI**

The Herefordshire local Plan should recognise the issues outlined below and the cross boundary work that has taken place so far. Policy wording should be amended to enable contributions towards mitigation as set out below.

*“The SSSI is currently being harmed by significant recreation pressure probably driven by the reasons outlined above. The Wildlife and Countryside Act 1982 (as amended) supports its protection strongly, as does the National Planning Policy Framework. Evidence of impact upon the sites ecological pathways has emerged via visitor surveys conducted in 2021 by the South Worcestershire Development Plan.*

- [Malvern Hills recreational impacts report FINAL.pdf \(swdevelopmentplan.org\)](https://www.swdevelopmentplan.org/component/fileman/file/Documents/SWDPR%20Reg%2019%20Docs/Malverns%20Mitigation%20Strategy%20160822.pdf?routed=1&container=fileman-files)
- <https://www.swdevelopmentplan.org/component/fileman/file/Documents/SWDPR%20Reg%2019%20Docs/Malverns%20Mitigation%20Strategy%20160822.pdf?routed=1&container=fileman-files>

*It should also be noted that significant development has since occurred in Ledbury for example since this survey and it will be expected that the impact from Herefordshire visitors will have increased significantly since. See Policy EE1.9 for further comment.*

*We advise Herefordshire Council to work collaboratively with the South Worcestershire authorities and particularly the Malvern Hills District Council to have a collective approach to this issues including the delivery of strategic mitigation, which should be set out in Local Plan policy.”*

If you require any additional information, please don't hesitate to contact me.

Kind regards

Sally

Sally McLaughlin

Lead Advisor

Planning for a Better Environment - West Midlands Team

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Date: May 20th 2024  
Our ref: 466520  
Your ref: Herefordshire draft  
Local Plan 2021-2041 - Reg  
18



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## BY EMAIL ONLY

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Dear Stephanie,

### Herefordshire Draft Local Plan – (Regulation 18) consultation

Thank you for your consultation on the above dated 25<sup>th</sup> March 2024 which was received by Natural England on the same date.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England welcomes the opportunity to comment at this stage of the Herefordshire Local Plan and particularly supports the inclusion of policies on green infrastructure, biodiversity net gain and supporting a greener future. We have reviewed the consultation documents and provide comments that relate to the soundness of the Local Plan and that are most relevant to our interest in the Natural Environment.

Natural England has adopted a robust precautionary approach within this plan response. Whilst we welcome the content of the Local Plan, Natural England advises that the plan is currently **at risk of being unsound and/or not legally compliant** due to impacts on air quality and water quality in relation to internationally designated nature conservation sites, and recreational impacts on Malvern Hills SSSI. Further detail is provided below.

The 'Strategic Policies' section of this response sets out the changes that we would consider necessary to make the plan sound. Natural England have also provided advice within this submission relating to further improvements that could strengthen the plans strategic objectives, policies and place shaping policies and site options and related mitigation.

### Do you consider that the "Herefordshire draft Local Plan 2021-2041 - Regulation 18" is Sound and Legally Compliant?

#### Air quality

Having reviewed the Plan and supporting documents, Natural England considers there to be a risk that the plan will not be sound or legally compliant at the Regulation 19 stage for the reasons we have outlined immediately below relating to air quality.

The Local Plan's Habitat Regulations Assessment (HRA) Appropriate Assessment (AA) concludes that there is no Annual Average Daily Traffic (AADT) modelling data and therefore, taking a precautionary approach, there is a need for a detailed evidence base to be completed. Natural England agrees that adverse effects on integrity in relation to air quality cannot therefore be ruled out at the following internationally designated sites:

- River Wye Special Area of Conservation (SAC),
- River Clun SAC,
- Wye Valley Woodlands SAC
- Wye Valley and Forest of Dean Bat Sites SAC
- River Usk SAC,
- Usk Bat Sites SAC
- Cwm Clydach Woodlands SAC
- Walmore Common SPA and Ramsar site.

As set out in our previous response (provided in Annex 1) “There will need to be an assessment of ‘in combination’ effects from air quality on designated sites. This will need to involve neighbouring LPAs in respect of plans and projects which in combination may have significant effects on European Sites in the area”. Natural England’s advises that further road traffic analysis and / or air quality modelling will be required to inform this assessment and ensure that no adverse effect on integrity occurs as a result of air pollution.

NPPF paragraph 174e states:

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

Natural England notes that reference is made to APIS methodology in the Sustainability Appraisal and provides further guidance to inform further assessment of air quality in our response to objective 9.

### **Water quality**

The Appropriate Assessment concludes that adverse effects on integrity (AEOI) can be ruled out for the River Wye Special Area of Conservation (SAC) and River Clun SAC. However, Natural England has concerns about the evidence base used to reach this conclusion. **We therefore disagree with the conclusion of no AEOI on these designated sites.**

In addition, the conclusion of no AEOI is based on the HRA AA which states that “*Suitable mitigation is provided in the Plan through Policy EE1 and Policy RURA5*”. However, no such mitigation has been proposed in the plan. Natural England advises that in order to demonstrate that the plan is deliverable, further consideration should be given to securing nutrient neutrality mitigation both ‘strategically’ and at project / site level. Schemes do not need to be fully detailed but there needs to be adequate confidence that proposed mitigation is capable of being delivered in order to rely on it in the HRA.

This “*Local Plan has been prepared on the presumption that*” nutrient neutrality (NN) imposes “*restrictions*” on development and on the basis that “*restrictions will be lifted at an early stage in the plan period*”. We have not been provided with evidence to support this position. In order for nutrient neutrality to not be required in the catchment, either the river needs to be meeting its targets, or there would need to be a strategic plan in place that set out, with certainty, how the River Lugg part of the River Wye SAC will meet its water quality targets. Herefordshire Council has not provided any evidence to demonstrate that this will be the case.

Natural England guidance [Nutrient Neutrality Principles - TIN186 \(naturalengland.org.uk\)](https://naturalengland.org.uk/nutrient-neutrality-principles-tin186) states that “Development plans can be considered ‘nutrient neutral’ where they can demonstrate that they will cause no overall increase in nutrient pollution affecting specified Habitats Sites”. We advise that a nutrient budget is calculated for the Local Plan or, ideally, across the whole catchment, and



that a strategy is devised for delivering nutrient neutrality mitigation where required. Where other LPA's in the Wye catchment have plans that are sufficiently advanced, they will need to be considered in combination in the HRA. A joined-up approach is therefore advisable in order to pass the HRA and to deliver growth and mitigation in a planned way. This should include for example South Worcestershire, which has a small part of the Lugg catchment in the Malvern Hills District, and upstream LPA's in Wales. Within this, further information is required on the capacity of WwTW to accommodate growth without causing adverse effects on integrity.

The River Lugg part of the SAC is already exceeding its targets for phosphate, and nutrient neutrality is required. Nutrient neutrality is a means of ensuring that a development plan or project does not add to existing nutrient burdens within catchments, so there is no net increase in nutrients as a result of the plan or project. The Plan should also include a nutrient neutrality policy that includes a requirement for project level HRA, in the river Lugg part of the catchment.

In addition, Natural England is concerned that this plans approach to NN may have influenced the spatial allocations in the plan leading to potentially disproportionate levels of development being proposed in areas outside of the Wye catchment. Natural England would like to clarify that the presence of Nutrient Neutrality (NN) advice does not preclude development from progressing within the catchment, nor from developments being allocated within the local plan.

### **Recreational Impacts on the Malvern Hills SSSI**

The Malvern Hills represents a most beautiful unique visitor experience with sweeping 360 degree views across the Severn Vale, the Cotswold escarpment and Severn Estuary; while the landscapes of Herefordshire open up toward the Black Mountains, the Shropshire Hills and Staffordshire. The west side in particular is characterised by an unplanned medieval landscape compared to the east side. The SSSI is currently being harmed by significant recreation pressure probably driven by the reasons outlined above. The Wildlife and Countryside Act 1982 (as amended) supports its protection strongly, as does the National Planning Policy Framework.

Evidence of impact upon the sites ecological pathways has emerged via visitor surveys conducted in 2021 by the South Worcestershire Development Plan.

- [Malvern Hills recreational impacts report FINAL.pdf \(swdevelopmentplan.org\)](https://www.swdevelopmentplan.org/component/fileman/file/Documents/SWDPR%20Reg%2019%20Docs/Malverns%20Mitigation%20Strategy%20160822.pdf?routed=1&container=fileman-files)
- <https://www.swdevelopmentplan.org/component/fileman/file/Documents/SWDPR%20Reg%2019%20Docs/Malverns%20Mitigation%20Strategy%20160822.pdf?routed=1&container=fileman-files>

It should also be noted that significant development has since occurred in Ledbury for example since this survey and it will be expected that the impact from Herefordshire visitors will have increased significantly since. See Policy EE1.9 for further comment.

We advise Herefordshire Council to work collaboratively with the South Worcestershire authorities and particularly the Malvern Hills District Council to have a collective approach to this issues including the delivery of strategic mitigation, which should be set out in Local Plan policy.

### **Do you consider that the Herefordshire Local Plan is compliant with Duty to Co-operate?**

The Sustainability Appraisal notes that *“Development in Herefordshire will not be delivered in isolation from those areas around it. Given the interconnection between Herefordshire and the surrounding areas there is potential for cross-boundary and in-combination effects where development is proposed through development plans in neighbouring authorities”* p 64.

In terms of working with neighbouring authorities, land management and catchment partnerships, the plan does not currently present an evidence base that demonstrates that a collaborative approach has been adopted and that the Duty to Co-operate has been fully complied with.

The Sustainability Appraisal concurs *“that additional evidence is currently being compiled by the County Council. These studies include the following:*

- *A Green Infrastructure Strategy.*
- *Open Space Study.*
- *A Landscape Character Assessment.*
- *A Water Cycle Study.*
- *Heritage Impact Assessments.*
- *Strategic Flood Risk Assessment (SFRA) Level 2.*
- *Economic Viability Assessment.” p36 and 37.*

Natural England notes that Nutrient Neutrality is not referenced in this list evidence currently being compiled and neither is the restoration of the River Wye/Lugg. We strongly advise a cross border approach that plans for nutrient neutrality and contributions of planning towards river restoration in a strategic way.

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Natural England has the following comments on the draft Local Plan:

### **A vision for Herefordshire at 2041**

Natural England welcome the plans long-term vision for Herefordshire based on the three pillars of sustainability; Environment, Community and Economy, with the protection and enhancement of the natural environment and local distinctiveness clearly recognised. This vision and related objectives should form the basis for nature recovery and enhancement supported by the policies and proposals in the plan. The vision could also incorporate more on the local ecology, such as the beautiful rivers and traditional orchards, which underpin local distinctiveness. The vision could also incorporate more on the local ecology, such as the beautiful rivers and traditional orchards; its tranquillity, its dark skies. It is a county that has an ancient unplanned medieval landscape character which still exists across significant parts of the county today; including ancient holloway's, intricate small field parcels close to settlements; ancient species rich hedgerows; veteran trees and vistas of rurality. It is these unaccounted for features that help drive the growing tourism and discovering within Herefordshire that will help underpin its economy in the future.

### **Objectives**

#### **Strategic Objective 1 & 2:**

We welcome these objectives relating to carbon reduction and climate change particularly the commitment “to accelerate a reduction of emissions and aspire to become carbon neutral by 2030/31”. We note the establishment of the Climate and Nature Partnership Board and key focus areas within the related ‘Climate and Nature Plan’ of action. We would suggest that air quality, water quality and flooding are added to the six key focus areas. Collectively these focus areas are key to mitigating the impacts of and strengthening resilience to the impacts of climate change on both communities and nature.

The Sustainability Assessment notes that *“The scale of new growth proposed through the Local Plan, combined with the extent of flood risk in Herefordshire, means there is a risk of exacerbating existing flood risk and exposing more assets to the risk of flooding, particularly in the face of climate change.” P318*

#### **Strategic Objective 3:**



Natural England notes in the section entitled “Nutrient levels in the River Wye Special Area of Conservation” that “The Local Plan has been prepared on the presumption that the restrictions will be lifted at an early stage in the plan period” p14. Natural England’s comments on Water Quality and Neutral Neutrality are set out in the related policies section of this letter below.

Natural England welcomes the objective to significantly improve water quality and ensure that all watercourses in the county are classified as ‘good’ quality’, and we continue to work with your authority toward this aim. We would also suggest a catchment wide approach that takes wider land use into consideration. Natural England would also like to see reference to using nature-based solutions to improving water quality and quantity included in the plan, including but not limited to; natural floodplain management in agricultural landscapes and Suds in residential and commercial settings.

Natural England notes that this objective is advanced by Policy EE1 and our further comments are set out against that policy below.

#### **Strategic Objective 4:**

Whilst Natural England generally welcome this objective, we would like to see the Nature Recovery Network specifically mentioned. The following additional wording is suggested:

***“To protect the Wye Valley and Malvern Hills National Landscapes whilst, **improving landscape connectivity for people and wildlife and contributing to the establishment of the nature recovery network.**”***

With regards to other protected sites, we would suggest an additional reworded bullet relating to other protected sites to replace at the same time, valuing the county’s whole ecology and landscape as follows ***“To safeguard and enhance ecological biodiversity and geodiversity through the protection of sites and/or features of international, national and local importance”.***

#### **Strategic Objective 5:**

Natural England would again like to see stronger reference to the Nature Recovery Network which is one of the specific aims of the Environment Act 2021 and will underpin the approach to the enhancement of nature. We would therefore suggest amending the wording of objective 5 alongside an additional bullet point including the provision of green infrastructure wording as follows:

***“To maximise the enhancement and recovery of Herefordshire’s **biodiversity** as natural capital contributing the nature recovery network.”***

***“To provide high quality accessible green and blue infrastructure **for the benefit of people and nature** while significantly increasing tree cover in Hereford and the market towns”***

#### **Strategic Objective 8:**

**To minimise and carefully manage the use of natural resources, including minerals, land, and water and to encourage the reduction, reuse and recycling of waste, to achieve a circular economy.** Natural England would like to see reference within this objective to the protection of soil and best and most versatile (BMV) agricultural land included within this objective particularly as Herefordshire has some of the most productive agricultural land in the country.

#### **Strategic Objective 9**

***“To significantly improve air quality”***

Natural England would like to see this objective strengthened in response to the findings of the HRA and Sustainability Appraisal as follows; ***To significantly improve air quality through sustainable alternatives to travel and land management practices.***

The Sustainability Appraisal concludes that “A significant negative effect is therefore identified in relation to SA objective 9 (travel). Spreading development around the county could potentially help to avoid further build-up at congestion hot-spots and limit increases in emissions. However... the option could also lead to greater usage in private vehicles. p108

The sustainability appraisal also notes that “agriculture, transport, housing, and the industrial and commercial sectors are the largest contributors to the county’s carbon footprint, and therefore opportunities to radically reduce emissions in these areas should be prioritised”. pg 25

The Sustainability Appraisal concludes that “The overall scale of housing and employment development proposed through the Local Plan poses a risk of exacerbating air pollution in Herefordshire, particularly as much of the county is rural and levels of car use are high” p311

Air quality is a major threat to habitats and species. Many ecological sites are exceeding their critical loads and levels for ammonia, nitrogen deposition and acid deposition. The strengthening of the policies and the rationale behind site allocations within this plan will ensure that new development does not contribute to the further deterioration of habitats and species due to air pollution. Natural England’s comments on site allocations consider these area specific risks alongside other priorities for the natural environment notwithstanding that there is a need for a detailed evidence base to be completed.

Natural England’s approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001)

<http://publications.naturalengland.org.uk/publication/4720542048845824>

JNCC - Guidance on Decision-making Thresholds for Air Pollution: Main Report and Technical Report 2021

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Guidance- Air quality-Provides guidance on how planning can take account of the impact of new development on air quality.

<https://www.gov.uk/guidance/air-quality--3>

Clean Air Strategy 2019

<https://www.gov.uk/government/publications/clean-air-strategy-2019>

Apis

<http://www.apis.ac.uk/>

[Ecosystem Services and air pollution impacts](#)

Simple Calculation of Atmospheric Impact Limits

<http://www.scail.ceh.ac.uk/>

## **Community Objectives**

Nature England supports the recognition in this set of objectives that well connected neighbourhoods are based on locating development in areas that currently have the best access to existing services and facilities and which have the greatest potential to support sustainable and inclusive growth. This is particularly important in a largely rural County with 59% travel to work by car.

We therefore welcome that *“The allocation of settlements to the different levels of the hierarchy has also been subject to an analysis of the distance of key facilities and services to existing and potential future development areas, with a preference for locations with greater access to these” and that “This has been done in accordance with the Healthy Homes Principles, one of which requires all new homes to ‘be built within places that prioritise and provide access to sustainable transport and walkable services’”.* p 22

### Strategic Objective 14

Natural England advises strengthening the integration of the Community and Environmental objectives by rewording strategic objective 14 “To support good health and wellbeing, **through easy access to interconnected quality** open space, including **amenity and** sports facilities, **allotments and community hubs alongside** active travel options”.

### Strategic Objective 21

Natural England suggests that this agricultural objective should consider the potential impacts of agriculture on the countryside as a whole by rewording this objective as follows: “To support a strong rural economy including **sustainable and** appropriate farm diversification and modernisation **that** strengthens the agricultural sector and its role in the rural economy **alongside supporting nature recovery in the rural landscape.”**

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## Strategic Policies

### Policy CC1: A carbon neutral Herefordshire

Natural England welcomes the comprehensive set of policies which set out the Plan’s approach to Climate Change. We suggest that the introduction to this chapter should include greater recognition that biodiversity loss and climate change are interlinked. We also suggest that reference should be made to Natural England’s Green Infrastructure Framework which refers to climate change in its set of principles i.e. GI makes places more resilient and adaptive to climate change and helps to meet zero carbon and air quality targets. GI itself should be designed to adapt to climate change to ensure long term resilience.

(<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Principles/GIPrinciples.aspx> )

#### Policy CC1.4 - Renewable Energy

Natural England generally welcomes this policy and advises that it should also make reference to the protection of local landscapes, biodiversity, geodiversity, nature recovery, soils and other natural resources. With regards to solar based energy proposals the plan should include the need to consider Best and Most Versatile Agricultural Land and soils and for wind-based energy proposals we suggest that impacts on protected species particularly birds (including migration routes) and bats should be considered.

Natural England welcomes the inclusion of nature-based measures to mitigate the impact of climate change. For example, green roofs, walls and street trees can modify microclimates, most notably by reducing ambient temperatures in summer and reducing urban heat islands. Detailed guidance on how green infrastructure can contribute to tackling climate change appears in the Green Infrastructure Design guide. ([Natural England Green Infrastructure Planning and Design Guide 2023](#))

#### Policy CC1.14 & CC1.15 - Water Efficiency and Sustainable Water Management

Natural England notes the water quantity targets both overall and for specific designated sites. Natural England advises that this policy should also reference protecting water quality and suggest that the CIRIA SuDS Manual should be referenced. Natural England needs to understand the

minimum quantity targets per person per day in terms of how these targets will be enforced and how they align with the nutrient neutrality calculator.

## **Policy CC14 - Flood Risk**

The Sustainability Assessment concludes that “The scale of new growth proposed through the Local Plan, combined with the extent of flood risk in Herefordshire, means there is a risk of exacerbating existing flood risk and exposing more assets to the risk of flooding, particularly in the face of climate change.” p318.

Natural England therefore welcomes this policy which includes promoting the use of sustainable drainage systems (SuDS). We agree that a multi-functional approach to SuDS should be encouraged and that opportunities should be taken to incorporate features that enhance and maintain biodiversity as part of a coherent green and blue infrastructure approach. GI reduces flood risk, improves water quality and natural filtration, helps maintain the natural water cycle and sustainable drainage at local and catchment scales, reducing pressures on the water environment and infrastructure, bringing amenity, biodiversity, economic and other benefits.

## **Policy EE1: Protecting and enhancing the quality of the natural environment**

Natural England welcomes this policy, which recognise Herefordshire’s environmental interdependencies between landscape, ecology, archaeology, and the built heritage. Detailed comments on the separate points within the policy are provided below.

### **EE1.4 - Local Nature Recovery Strategy**

*“Protect, conserve and enhance landscape features, habitats and ecological connectivity, extending Herefordshire’s natural capital, green and blue infrastructure, and nature recovery networks;”*

Natural England welcomes the inclusion of this point in the policy. We suggest that in the accompanying text gives further explanation of how the Local Nature Recovery Strategies (LNRS) is included as the LNRS for Herefordshire develops.

The Nature Recovery Network is a major commitment in the UK Government’s 25-Year Environment Plan and intends to improve, expand and connect habitats to address wildlife decline and provide wider environmental benefits for people.

LNRS will be required under the Environment Act and will inform future Local Plans. Statutory guidance on alignment between Local Plans and LNRS is anticipated as part of the Governments work on planning reform.

In advance of the preparation of Local Nature Recovery Strategies (LNRS) we advise that plans consider opportunities for nature recovery in line with the NPPF (see para 179 (a) & (b) and the statutory guidance for responsible authorities [Local nature recovery strategy: what to include - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/local-nature-recovery-strategy-what-to-include). The plan could identify areas for habitat management, enhancement, restoration or creation (e.g. areas proposed in biodiversity strategies, opportunity mapping or to support and strengthen ecological networks) and set out how development could contribute to nature recovery and areas to be safeguarded.

### **EE1.6 & EE1.7 Water Quality and Nutrient Neutrality**

Whilst Natural England welcomes this policy’s commitment to ensure that all development proposals must improve water quality and restore and enhance riparian habitats. Natural England has concerns about part six of the policy which specifically refers to nutrient neutrality.

The local plan must include a ‘safeguarding’ policy requiring all development to demonstrate that it will not cause an adverse effect on the SAC, i.e. via demonstrating NN where needed. It should be noted that NN is a methodology to avoid nutrient impacts upon habitats sites; not a legal

requirement, hence wording should focus on avoiding an adverse effect on sites via nutrient enrichment, rather than ‘achieving nutrient neutrality’ although in many cases the two are similar.

We welcome the inclusion of point 7, intended to ensure development proposals have no adverse effect on the integrity of Habitats sites. This overall policy should reflect a hierarchy of protection related to designated sites reflecting their international, national or local sites status and including specific reference to Sites of special scientific Interest (SSSIs) and National Nature Reserves. For Policy EE1.7 it would be clearer to refer to **Habitat Sites** rather than national sites to reflect the term used in the NPPF when describing areas previously known as European sites.

However, Natural England has significant concerns around the Local Plan evidence base, particularly the evidence to show that the total quantum of development in the Local Plan, in combination with other plans and projects, can be accommodated in the rivers without adverse effects on their integrity.

The advice given in our previous response to the Herefordshire Local Plan – 2021-2041 Spatial Options Consultation of 28 February 2022 still stands and is repeated here and provided in full in Annex 1:

*“we understand that the Local Authority keeps a list of permissions that have been granted within the River Wye catchment, thus monitoring the environmental headroom left available in the River Wye. As part of the evidence base for the Local Plan, we recommend that the Local Authority calculates the available environmental headroom and hence the site allocations that can be accommodated within the new Local Plan. In doing so you will need to take into account permissions granted, outstanding allocations and plans and projects further up the Wye including in Wales, alongside information on discharges including any planned upgrades to WwTW. Ultimately you must be able to show that development in the catchment of the River Wye will not cause water quality targets to be exceeded, as this would be likely to be considered an ‘adverse effect on integrity’ under the Habitat Regulations”.*

*“Any site allocations proposed in the River Lugg catchment will need to demonstrate that they can be made ‘nutrient neutral’. If an increase in the rivers phosphate loads is considered likely then the implications of the proposals, along with any measures that may be implemented to alleviate that risk, should also be considered through an appropriate assessment. We recommend that the Local Authority consider a nutrient neutrality policy within the Local Plan to capture any future development proposed within the Lugg catchment.”*

We advise that a nutrient budget is calculated for the Local Plan and a strategy is devised for delivering nutrient neutral mitigation for all sites. Mitigation can come forward via several different options including private provision or through wider strategic schemes. Where these are relied upon it is advised that credits are secured/reserved to ensure that there is adequate supply available for the Local Plan growth. Bespoke solutions at Neighbourhood plan or development level can be used, however, it needs to be demonstrated that the Local Plan can be delivered.

Natural England’s [Nutrient Neutrality Principles - TIN186 \(naturalengland.org.uk\)](https://naturalengland.org.uk) guidance provides further details on the key principles that underpin nutrient neutrality, the mitigation measures employed for it to meet the requirements of the Habitat Regulations and the application of nutrient neutrality within England.

There are positive opportunities that nutrient neutrality can bring, especially when combined with green infrastructure, net gain and climate change adaptation. The Plan should consider how to deliver these multiple benefits in a positive, cohesive manner, with environmental improvement at the centre of the thought process.

Natural England officers would be happy to meet with the Herefordshire policy and development management planners to discuss the Wye / Lugg policy and the HRA process further if this would be helpful.



## Policy EE1.8 – Biodiversity and nature recovery

Natural England welcomes this policy and the comprehensive guidance it includes in both the policy wording and the accompanying text. Natural England also welcome the target of 20% Biodiversity Net Gain (BNG) on strategic sites allocated in the Local and Neighbourhood Development Plans and we welcome the supporting evidence provided for this (page 35).

Alongside a minimum of 10% for all other residential and commercial development sites. We advise that any target should be achievable, and evidence based. Evidence should justify the percentage net gain proposed and demonstrate that development is deliverable at this level.

Natural England advise that reference should also be made to relevant strategies including the Local Nature Recovery Strategy, as it will guide BNG sites where they can be most effective for ecological connectivity. We are also pleased to note that this policy has been linked to policy EE1.4 Green and Blue Infrastructure as BNG will be an important tool in the provision of high quality green and blue infrastructure.

Natural England would like to understand how the work led by Herefordshire Wildlife Trust to refresh the Herefordshire Biodiversity Action Plan, the Grassland Inventory, the Herefordshire Millenium Habitat Map has been used to inform site allocations within the plan and will be made accessible to inform development that contribute to Nature Recovery.

As well as this policy there should be a clear strategy for BNG delivery within allocated sites for development both in the neighbourhood plans and the local plan.

## **Policy EE1.9. Have special regard for the Malvern Hills and Wye Valley National Landscapes in the county valuing their distinctive ecology, character, tranquillity, and landscape character;**

Natural England welcomes policy point 9 which requires proposals to have special regard to the Malvern Hills and Wye Valley National Landscapes. We support the plans reference to “The Management Plan and associated guidance documents for each National Landscape should be considered as part of development proposals” and that “The development proposals must also consider the setting of the adjacent counties designated sites; the Shropshire Hills National Landscape and the Bannau Brucheniog (Brecon Beacons) National Park.” We would suggest amending this wording to reflect a wider remit in terms of working with those neighbouring LPA's and partnerships to collect data and ascertain impacts.

Natural England has concerns that the HRA has screened out recreational pressure, for the River Wye and Wye Valley Woodlands SAC. Natural England would like to discuss this conclusion with the LPA.

- The Malvern Hills are designated as a Site of Special Scientific Interest (SSSI). There is clear evidence of the impact of significant recreational pressures on the SSSI interest features – especially along the ridge. Visitor surveys have been undertaken by the Sth Worcestershire LPA's in 2021 ([Lake, S. et al. - 2021 - Recreation impacts on the Malvern Hills SSSI to in.pdf \(footprint-ecology.org\)](#) which consequently informed a subsequent Strategic Management, Monitoring and Mitigation Strategy - SAMMM ([Malverns Mitigation Strategy 160822.pdf \(swdevelopmentplan.org\)](#)). The South Worcestershire Development Plan review includes reference to this and sets out a proposed mitigation in its Local Plan policy. We recommend that Herefordshire Council should look to replicate this approach while collaborating as a strategic partnership with all those LPA's affected by proposed developments occurring within the Zone of Influence (25km). This should enable parity in viability, equality and coordination across the partnership. To partly illustrate, it would require identifying appropriate levels/thresholds of in perpetuity financial contributions (based on single dwelling tariffs) that would support site protection, management, monitoring and mitigation. This would likely be equal for all.

- The mitigation scheme as commissioned by the South Worcestershire Development Plan is an emerging piece of work. We therefore recommend that Herefordshire Council liaises with the South Worcestershire Development grouping of LPA's, especially the Malvern Hills District Council, the Malvern Hills national landscape board, the Malvern Hills AONB and Malvern Hills Trust for the latest information. There may also be a need for the provision of alternative greenspace to deflect some of the regular visitors to the site - where that is appropriate. We recommend further research in establishing how effective this would be as an additional mitigation strategy.
- NE are keen to support any discussions, approaches and queries that may unfold. NE will also be able to share existing effective LPA collaborations in solving similar challenges at other sites from across the country; with the latter offering swift timescales in resolving this issue while enabling tried and tested delivery partnerships to develop.

### **EE1.11 Identify, protect and strengthen the local treescape and hedgerow network**

Natural England welcomes the recognition of trees and hedgerows as connected urban and rural networks and advises that these policies should be strengthened, or an additional policy added to specifically reference ancient woodland, Veteran Trees and Orchards which take hundreds of years to establish and are defined as an irreplaceable habitats.

Reference should be made to the Standing advice for ancient woodlands produced jointly by Natural England and the Forestry Commission: [Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/614441/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions.pdf).

### **EE1.12. Contribute to help increase canopy cover in urban and rural settlements;**

Natural England welcomes this policy and advises that reference should also be made to the urban tree cover standards in NE's GI Framework, which state:

- Urban Tree Canopy Cover is increased by agreed %.
- Major residential and commercial development is designed to meet these targets.
- New and existing trees are incorporated into new developments and new streets are tree lined.

Natural England very much welcomes the inclusion of this policy. It is important that this is the right tree in the right place - [Right tree, right place, for the right reasons - Forestry Commission \(blog.gov.uk\)](https://www.blog.gov.uk/2019/04/24/right-tree-right-place-for-the-right-reasons-forestry-commission/). Tree planting may not be appropriate for some biodiversity sites including SLINC's mentioned, as tree planting may not be compatible with its value, or on geodiversity sites for the same reason. We recommend making use of NE's GI Framework, particularly the urban greening factor and urban tree canopy standards.

### **Policy EE1.15 – “Protecting soil and best and most versatile agricultural land”.**

Natural England welcomes this policy and advises adding 'soil protection' to the policy wording above that also includes best and most versatile agricultural land. Policies for the protection of Best and Most Versatile (BMV) agricultural land are in line with The National Planning Policy (NPPF) guidance in paragraph 175 and the government's 25 Year Environment Plan. Any development on BMV land should have a soil handling plan and sustainable soil management strategy based on detailed soils surveys.

The Local Plan should give appropriate weight to the roles performed by the area's soils. These should be valued as a finite multi-functional resource which underpin our wellbeing and prosperity. Decisions about development should take full account of the impact on soils, their intrinsic character and the sustainability of the many ecosystem services they deliver, for example:

- Safeguard the long term capability of best and most versatile agricultural land (Grades 1, 2 and 3a in the Agricultural Land Classification) as a resource for the future.



- To avoid development that would disturb or damage other soils of high environmental value (e.g. wetland and other specific soils contributing to ecological connectivity, carbon stores such as peatlands etc) and, where development is proposed.
- Ensure soil resources are conserved and managed in a sustainable way.

We would advise that the plan refers to sources of Agricultural Land Classification and Best and Most Versatile mapping and data which will include but not limited to: the [MAGIC \(defra.gov.uk\)](https://defra.gov.uk/magic) website and Natural England. For example [Agricultural Land Classification map West Midlands Region - ALC004 \(naturalengland.org.uk\)](https://naturalengland.org.uk/agricultural-land-classification-map-west-midlands-region-alc004) and [Likelihood of Best and Most Versatile \(BMV\)](https://bmvi.gov.uk/likelihood-of-best-and-most-versatile)

[Agricultural Land - Strategic scale map West Midlands Region - ALC016 \(naturalengland.org.uk\)](https://naturalengland.org.uk/agricultural-land-strategic-scale-map-west-midlands-region-alc016).

The plan should recognise that development (soil sealing) has a major and usually irreversible adverse impact on soils. Mitigation should aim to minimise soil disturbance and to retain as many ecosystem services as possible through careful soil management during the construction process. We advise that policy should support developments that enhance soils, avoid soil sealing and provide mitigation to avoid soil disturbance.

We advise that Plan policies refer to the [Code of practice for the sustainable use of soils on construction sites - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites) and that major development should have a soils management plan.

**Policy EE1.14 Promote, maintain and increase the intrinsically dark landscapes and dark skies of the county. Schemes should avoid superfluous outdoor lighting to help reduce light pollution and protect dark skies and the night-time environment.**

Natural England welcomes this policy and would advise strengthening it to protect Herefordshire's unique and intrinsically dark landscapes. CPRE (2016) Night Blight: Mapping England's light pollution and dark skies [Night Blight.pdf \(cpre.org.uk\)](https://cpre.org.uk/night-blight) concluded that based on average light levels across the county, Herefordshire is England's darkest county. Wales also has a significant proportion of dark skies some of which adjoin Herefordshire and collectively are amongst the darkest across the UK.

Dark skies are important for landscape, heritage, wildlife, recreation and enjoyment, tourism, health and well-being. The Wildlife and Countryside Act 1981 is the principal mechanism for the protection of wildlife in Great Britain. Under the Act, it is illegal to disturb certain species, including bats, and artificial light can constitute an offence. While some species are particularly sensitive to artificial light, all wildlife and their habitats can be disrupted by artificial light.

The NPPF (2023) states in paragraph 185 that planning policies and decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: "limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation."

The Institution of Lighting Professionals and the Bat Conservation Trust recently updated Guidance note 08/23 Bats and artificial lighting in the UK to help guide lighting assessments of bat species.

View lighting guidance and find out more about international designations via the International Dark Sky Association's the website: <http://www.darksky.org/> Learn about national Dark Sky Discovery Sites: <https://www.darkskydiscovery.org.uk/>

Natural England also notes that the HRA recommends that additional wording should be added to Policy ROSS2, Policy HERE1, Policy HERE2, Policy HERE7; Policy PE1; Policy PE4; and Policy HERE6 to ensure that no artificial lighting will be introduced that could have an adverse impact on qualifying fish species within the River Wye SAC.

## **Policy EE1.16 Green and Blue Infrastructure Network**

Natural England is supportive of this policy and considers that it sets out a clear approach to the delivery of GI in the Plan area. We have also made a number of comments regarding GI throughout our response to ensure that the multi-functional benefits of the provision of good quality GI can be fully realised.

Local Planning Authorities can apply the National GI Standards locally that will help deliver good GI networks for people and nature and you may consider doing this within the local plan. These include Accessible Greenspace, Urban Nature Recovery, Urban Greening Factor, Urban Tree Canopy Cover, as well as strategic Sustainable Urban Drainage (SuDS). These standards can provide the output measures so that developers have certainty over what green infrastructure is needed on site. They can be included as site specific and area-based requirements in site allocation policies. To help the GI standards to be delivered local authorities should set green infrastructure targets. These should include delivery levels over time. For instance, the % of people having good quality publicly accessible greenspaces within 15 minutes' walk from home by 2030.

### **EE1 additional comment**

Natural England note that HRA recommends an addition as follows: It is recommended that the wording of Policy EE1 is further strengthened to include additional wording that ensures the protection of functionally linked land that qualifying birds of the Severn Estuary SPA and Ramsar site and Walmore Common SPA and Ramsar site rely on. This could include the following wording: "Any plan or development which is considered to have a likely significant effect upon a European and/or Ramsar site will be subject to an Appropriate Assessment under the Habitats Regulations Assessment in order to ascertain whether an adverse effect on the site integrity can be excluded. This should consider any avoidance, mitigation or compensatory measures."

## **Policy EE2: Protecting and enhancing the quality of the historic environment and its setting**

Natural England suggests that reference should be made within this policy of the [Natural England Green Infrastructure Planning and Design Guide 2023](#) which provides evidence based practical guidance on how to plan and design good green infrastructure. It complements the National Model Design Code and National Design Guide and can be used to help planners and designers develop local design guides and codes with multifunctional green infrastructure at the heart. This will help to inspire the creation of healthier, nature-rich, climate resilient and thriving places to live, learn, work and play. We suggest that the GI design guide should be included in the list of supporting evidence.

Natural England welcomes this policy providing ease of access for all, connected footpaths and cycle routes, we would also suggest there is a strong link to Green Infrastructure, for example cycle and pedestrian routes should incorporate verges or boundaries of natural habitat and street trees to connect to other habitats and green spaces.

### **EE3. 2. Create an informed sense of place and enhance local distinctiveness reflective of its context.**

### **EE3.5 Deliver safe communities, by designing out crime through considered design, maximising opportunities for natural surveillance, appropriate materials and placement of schemes;**

Natural England advises that these points within the policy also include reference to the importance of contact with nature and the health benefits of GI. Green and blue spaces in terms of providing opportunities for more active and healthy lives.

We suggest you may want to refer to [Natural England's Accessible Greenspace Standards](#) to determine open space needs based on size, proximity capacity and quality. The Environmental Improvement Plan has highlighted an initial focus on access to green and blue spaces within 15 minutes' walk from home.

The natural environment affords the best 'natural' play opportunities for children while offering multifunctional nature-based solutions to climate change etc. These can be blended into wildlife rich green infrastructure and green open spaces that can act as destination play sites for local children (See best practice at [Play England](#) and [Play Wales](#) ) that have proven health and wellbeing value.

Evidence for nature play and health:

[Play, naturally: a review of children's natural play](#)

[Nature for health and wellbeing | The Wildlife Trusts](#)

[Good practice in social prescribing for mental health: the role of nature-based interventions - NECR228 \(naturalengland.org.uk\)](#)

### **Neighbourhood Development Plans**

Natural England notes that "Herefordshire has more Neighbourhood Development Plans (NDPs) in place or in development than any other planning authority in England. The Sustainability Appraisal concludes that; "92 neighbourhood plans have been formally 'made' and ...that there will continue to be an element of 'windfall' development and sites promoted via Neighbourhood Development Plans.

Natural England advises that all future site-specific proposals including those in neighbourhood plans will need to provide sufficient evidence that proposals are reasonable and deliverable and that their potential impact on the natural environment has been appropriately assessed.

### **Place Shaping Policies**

Whilst the Sustainability Appraisal (SA) concludes that "This Local Plan identifies sufficient sites and locations to meet the growth requirements of the plan period." And that the remaining new homes will be delivered through non-strategic sites allocated in either a Neighbourhood Development Plan or further Development Plan Documents, existing commitments and windfall developments. Natural England notes that "with options for further growth for many settlements diminishing, a new settlement may be required in the longer term beyond 2041" p 23. Natural England wishes to highlight that the criteria to be considered when putting forward a possible new settlement site do not currently include ecological value or potential mitigation and enhancement and we advise that the criteria are therefore reviewed.

Natural England notes the SA reference to "Site-based data limitations, that have affected the assessment of identified development sites. Specifically, as explained in Chapter 5, "a number of data gaps have meant that certain sites could not be assessed against certain criteria." p 37. The SA also states that "there are some further sites which were considered to be reasonable options in SA terms, and so have been appraised, but which are not identified as either preferred or alternative sites in the Local Plan (these are referred to as 'discounted sites') p 32.

### **Natural England has the following site-specific comments:**

For all sites, Natural England advises that the hydrological catchment is taken into consideration, with regards to the potential impact of the developments proposed on the adjoining watercourses and wider catchment, including but not limited to surface water runoff (including during construction), existing and required capacity of WwTW and water supply and flooding issues. For example, the proposed Hereford City sites and the Land to the East of Ross on Wye are adjacent to and/or within the catchment of the River Wye SAC/SSSI. Each site will require site specific investigation, and the council should understand the impact of all the sites put forward individually and in combination.

Natural England welcomes and agrees with the HRA "requirement for project-level/site specific HRA and targeted ecological surveys".

**HERE3: Hereford Enterprise Zone Extension**

**HERE4: Land East of the Cattle Market**

**HERE5: Sustainable urban expansion at Homer North**

The reference to the need for water quality protections measures on the above sites is noted including but not limited to Suds and CEMP. The HRA concludes that proposals have 'the potential to result in effects including physical damage and loss of habitat functionally linked only; non-physical disturbance functionally linked only, air pollution; water quality; and, recreational pressure, all of which will require further discussion with Natural England.

#### **HERE6: Sustainable urban expansion at Three Elms**

Natural England notes the reference to the retention of the green Yazor Brook corridor, and proposals including but not limited, aquifer and water source considerations and Sustainable urban Drainage systems (SuDS).

#### **HERE7: Sustainable urban expansion at Lower Bullingham**

Natural England notes the aspiration to avoid adverse effects on the landscape character on this largely agricultural site that requires further additions to road infrastructure.

It is noted that a "new country park" is proposed as part of this allocation and Natural England would be keen to work with your Authority to explore this further and ensure that spaces and interlinkages being created in these areas and beyond can support the greater carrying capacity of people that these additional housing allocations will bring. Designing strategic-scale accessible natural green space should consider; location, size and connectivity. Creation of wetland/ natural floodplain could be considered as GI, BNG, SuDS (attenuation/inundation) on land which is liable to flooding.

#### **BROM2: Land at Hardwick Bank & BROM3: Land west of Linton Trading Estate**

Natural England notes that the HRA concludes that the proposed Bromyard allocations have the potential to result in effects including air pollution, and water quality. These allocations are also on elevated sites within intrinsically dark landscapes and natural England welcomes aspirations; "to sensitively landscape the site with tree and hedgerow planting" and to manage external lighting proposals. We would also advise linking green and blue infrastructure and BNG proposals to complement existing species rich grasslands /meadows to the west of the site and priority habitats including ancient woodland. The sites drain to the River Frome corridor (within the catchment of the River Lugg) and nutrient neutrality will apply.

#### **KING2: Land east of Kingswood Road**

This site drains to the river Arrow and is within the Lugg catchment and nutrient neutrality will be required. Natural England welcomes the commitment to enhance and extend access to green and blue spaces.

#### **LEDB2: Land to the South of Ledbury**

Natural England would like to understand the rationale behind these allocations further. The SA states that "the Local Plan seeks to identify land to deliver 182 ha of new strategic employment land over the Plan period. This figure is based on the October 2022 Provision of Employment Land Study, with an addition 7ha added for Ledbury" p31.

Natural England questions whether the levels of development proposed in Ledbury may be disproportionate to development in other areas / catchments as a result of this plans view that nutrient neutrality imposes "restrictions" on development. As a result of this approach other policies within the plan including but not limited to "Creating healthy and sustainable communities" could be undermined leading to potential impacts in other areas.

In the case of proposals in Ledbury a potential impact on the Malvern Hills SSSI in the form of increased recreational pressure has not been recognised. Insufficient information is provided to evidence that the site proposals would not damage or destroy the interest features for which the SSSI had been notified. We advise the council to consider how it will cater for the recreational needs of the increased population, and avoid impacts on the Malvern Hills. For example,

connectivity should be strengthened to promote species movement between habitats including but not limited to Conigree Wood in line with the Lawton principle.

This allocation is also immediately adjacent to the Malvern Hills National Landscape and Natural England notes that the SA concludes that it could “adversely affect the adjoining Areas of Outstanding Natural Beauty in both Ross-on-Wye and Ledbury. Consequently, significant negative effects are identified for SA objective 12 (landscapes and townscapes) p103. We also note that the HRA recognises that this site has “the potential to result in effects including air pollution and air quality information is required”.

### **LEDB3: Land South of Little Marcle Road**

The SA states that “the River Leadon runs adjacent to the western edge of Ledbury and creates a band of land falling in Flood Zone 3 that extends north to south. Development in the centre of Ledbury, and on this western edge, could increase existing levels of flood risk. Policy LEDB1 also provides no mitigation in relation to reducing flood risk. Overall, a significant negative effect is expected in relation to SA objective 14A (flood risk) p259.

Natural England would add that the river Leadon drains to the River Severn representing a significant ecological network. Opportunities for riparian GI enhancement including but not limited to wetland habitat creation, linked to the natural floodplain require further exploration for the purposes of flood management, wildlife conservation and health and wellbeing. This would contribute to the Local Nature Recovery Network.

### **LEDB4: Lawnside and Market Street Regeneration Area**

Natural England notes that the HRA concludes that all proposed sites in Ledbury have “the potential to result in effects including “air pollution” and we advise that Climate change resilience is implemented to; reduce vehicle usage, increase green space provision, access, and Flood resilience. Air quality would also be improved by provision of greenspace, green roofs and walls and tree planting.

### **LEOM2: Land South of the Primary School**

### **LEOM3: Land South of Leominster Enterprise Park**

Development in Leominster is within the catchment of the river Lugg. Nutrient neutrality will therefore be required. The sustainability appraisal states that “A significant negative effect is expected in relation to SA objective 14A (flood risk) as the policy does not provide any mitigation to account for Leominster’s town centre being in close proximity to Flood Zone 3 where development will likely increase flood risk in the area.”p217 And the HRA concludes that both allocations in the town have “the potential to result in effects including air pollution and water quality”.

Natural England notes that’s the farmland included within these allocations is also currently in mid tier Countryside Stewardship scheme. Opportunities for GI, BNG and improved linkages between the school and Local Nature Reserve sites in this area should be explored.

### **ROSS2: Land to the east of Ross on Wye**

Natural England welcomes the proposals for Green Corridors and “wildlife and pollinator-friendly planting” including along the Rudhall Brook linking the town centre to the site.

Further information is required relating to the type and precise location of development areas on this mixed-use site in order to understand the potential for issues including but not limited to water quality as the Rudhall brook is functionally linked to River Wye SAC. Clarification of the proposals for the proposed new north-south road infrastructure on the east of the site is also required.

This largely agricultural area forms part of the Pasture for Life – Agri environment scheme and Natural England notes that the Sustainability Appraisal raises a negative effect with regards to flood risk “The developable area is split by a water course that extends east to west at a mid-point in the site. While this feature generates a significant band of Flood Zone 3 land across the site, much of

the site's western half also coincides with Flood Zone 3. The policy does make provision for natural flood management with the use of SuDS, but development of the site is still likely to increase flood risk. A significant negative effect is therefore identified in relation to SA objective 14A (flood risk)" p 283

In addition the SA identifies "Adverse affects on the adjoining National Landscape" p 103. Any proposals in this area would therefore require a buffer zone around national landscape to be agreed.

### **Policy RURA3: Strategic site allocations in the rural areas**

Natural England's advice on the rural sites put forward will include but not be limited to the loss of Best and Most Versatile (BMV) agricultural land, increased recreational pressure on nearby or adjacent protected sites and landscapes, air quality, intrinsically dark landscapes, surface water runoff into protected catchments, WwTW capacity and nutrient neutrality where applicable. In addition, opportunities including but not limited to GI and BNG will require further site specific discussions.

#### **Bartestree - Land adjoining Nursery Cottages;**

Natural England note the proximity of this farmland site allocation to the Lugg and Hampton Meadows SSSI. Recreational pressure on the SSSI is already being managed to limit adverse impacts.

#### **Bodenham - Land south of Chapel Lane**

Natural England advise that the existing water quality issues in the Bodenham brook (tributary of the River Lugg) require detailed consideration.

#### **Canon Pyon - Land north of Size Brook**

Natural England note that this site drains to the Wellington brook within the catchment of the River Lugg. Consideration and linkages to of existing Agri-environment schemes promoting catchment sensitive farming and natural floodplain management should be considered in this area.

#### **Colwall - Land west of Colwall Primary School**

Within the Malvern Hills national landscape Natural England advise that BNG and GI proposals should include an increased buffer zone between the riparian zone and the watercourse. Tree/hedgerow planting would also benefit climate resilience and riparian effect.

#### **Weston under Penyard - Land opposite playing field**

Natural England welcome that GI and BNG are referenced in this allocation and advise that the potential for screening and meadow creation are explored. Increased recreational pressure on the river Wye national landscape should also be taken into account.

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### **Habitat Regulations Assessment**

Natural England welcomes the opportunity to comment on the Habitats Regulations Assessment of the Herefordshire Local Plan, as a statutory consultee and the Government's adviser on the application of the Conservation of Habitats and Species Regulations 2017.

We advise that considerable further work is required to inform the HRA. The HRA should demonstrate that there are no adverse effects on integrity of Habitats sites as a result of this Local Plan, alone and in combination with other plans and projects, including that site allocations and any mitigation required is deliverable.

It is noted that the HRA has assessed issues by topic, such as water quality, recreational pressure and air quality. It is unclear whether the individual sites proposed as part of the spatial options section of the Local Plan Review have been assessed through the Habitat Regulations Assessment process and how mitigation will be applied here.

### **Air quality**

We agree with the conclusion of the Habitat Regulations Assessment (HRA) that for those Habitats Sites in the area of search with features sensitive to air pollution, adverse effects on integrity, alone or in-combination, cannot be ruled out due to a lack of evidence, sufficient to inform and undertake a HRA. Adverse effects in integrity have not been ruled out in relation to air quality from vehicles at River Wye SAC, River Clun SAC, Wye Valley Woodlands SAC, Wye Valley and Forest of Dean Bat Site SAC, Usk Bat Sites SAC, River Usk SAC, Cwm Clydach Woodlands SAC and Walmore Common SPA and Ramsar Site.

Having reviewed the Plan and supporting documents, Natural England considers that the Plan is at risk of being not sound or legally compliant due to a lack of evidence with regards to air quality and traffic data. It is noted that the HRA states that “further road traffic analysis and/or air quality modelling will be required to inform this assessment and ensure that no adverse effects as a result of air pollution.”

*NPPF paragraph 174e states:*

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

### **Water quality**

We do not agree with the conclusion of the Habitat Regulations Assessment that for those Habitats sites in the area of search with features sensitive to water quality, that adverse effects on integrity, alone or in-combination, can be ruled out.

Natural England considers that there is a substantial lack of evidence with regards to water quality that has been submitted as part of the Local Plan Review, and therefore there is no baseline for which to assess impacts on Habitats sites. The evidence base is a Water Cycle Study dated 2009 and the Nutrient Management Plan which is not significantly out of date. For instance, the river targets have recently been amended. We recommend that a nutrient budget is produced for the plan and that where mitigation is required, the plan should include enough evidence to demonstrate that it is deliverable. The HRA should be revised.

### **Functionally linked land and water**

We advise separating these sites out within the HRA, as they are designated for different things.

The Severn Estuary Special Protection Area (SPA) is designated for waterfowl. The birds can utilise the whole of the Severn and its tributaries, including the Wye and Lugg. We therefore do not agree with screening this out, as there is a pathway for impacts. The potential for AEOI should be considered in an Appropriate Assessment.

There is comprehensive evidence base available for reference:

- [Identification of wintering waterfowl high tide roosts on the Severn Estuary SSSI/SPA \(Brean Down to Clevedon\) 2015 - RP02262 \(naturalengland.org.uk\)](#)



- [Identification of wintering waterfowl roosts in the Severn Estuary SPA/SAC and Ramsar site: Phases 2 and 3 - RP02366 \(naturalengland.org.uk\)](#)
- [Identification Of Wintering Waterfowl High Tide Roosts On The Severn Estuary SSSI/Spa Phase 4 \(Gloucestershire, With Part Of South Gloucestershire\) - RP02966 \(naturalengland.org.uk\)](#)
- [Identification of wintering and passage roosts on functionally linked land of the Severn Estuary - Gloucestershire and Worcestershire \(Phase 5\) - NECR401 \(naturalengland.org.uk\)](#)

The Severn Estuary SAC is designated for its qualifying habitats and for qualifying species sea lamprey, river lamprey and twaite shad. The Ramsar designation includes European eel. There is a functional linkage for migratory fish on linked watercourses in the Severn catchment, which includes the Wye and Lugg. Eel will also be on any connecting floodplains in channels and waterbodies. We therefore do not agree with screening this out, as there is a pathway for impacts. The potential for AEOI should be considered in an Appropriate Assessment.

### **Recreational pressure**

Natural England has concerns that the HRA has screened out recreational pressure for the River Wye and Wye Valley Woodlands. Natural England would like to see further evidence to support this conclusion.

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### **Sustainability Appraisal**

Natural England has reviewed the Sustainability Appraisal (SA) and included comments taken from the assessment throughout our response, we would also particularly highlight the following points where there is some uncertainty and may require further consideration in the next stage of the SA process:

It is noted that all 77 sites have been included in the assessment, including 60 residential, 8 employment and 9 mixed use sites. However, paragraph 5.5 of the SA highlights limitations, where some sites have not been able to be adequately assessed.

*“A number of limitations were encountered through the appraisal of the sites: Some of the sites were not able to be assessed against certain SA objectives due to corresponding HELAA assessments being absent or incomplete. The gaps extend across a number of fields, including the classification of the site as either greenfield or brownfield, site capacity, and the HELAA ratings for ecological and landscape sensitivity, and identified flood risk. The annotation ‘N/A’ shows where data was absent.”*

For some residential options, there is uncertainty, due to the sites not being assessed in the HELAA. Can the Local Authority confirm whether these sites have been included in the Local Plan?

It is also noted that a number of the sites pose a risk to biodiversity and geodiversity across Herefordshire, as outlined below.

*“The overall scale of housing and employment development proposed through the Local Plan poses a risk of damaging the sensitive biodiversity and geodiversity assets that exist in and around Herefordshire. This is recognised in the SA findings for some of the strategic policies – for example, minor negative effects were identified in relation to Policies AG1 (Accommodating Housing Growth) and AG2 (Strategic Rural Housing Distribution) as well as for Policy PE1 (Accommodating Economic Growth). With regards to the place-based policies, minor negative effects are expected across the suite of development sites due to their potential to impact upon local biodiversity and geodiversity. However, the Local Plan includes a range of policies addressing this issue which should mitigate the potential for adverse effects.”*

We note that the next stage of the SA for the Regulation 19 of the Local Plan will set out a monitoring programme to evaluate the ongoing effects of the plan. We look forward to further discussions where necessary.

For any further consultations on your plan, please contact: [sally.mclaughlin@naturalengland.org.uk](mailto:sally.mclaughlin@naturalengland.org.uk) or [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

Yours sincerely

Sally McLaughlin  
Lead Adviser

Emma Johnson  
West Midlands Area Manager

## **Greater Norwich Local Plan - Nutrient Neutrality Evidence**

1. Further to the letter sent by the Greater Norwich partnership on nutrient neutrality on 29<sup>th</sup> April 2022 (examination document [D5.12](#)), this document provides up-to-date evidence on nutrient neutrality for the Greater Norwich Local Plan (GNLP) examination.
2. This evidence consists of:
  - a background section briefly setting out the challenges faced on nutrient neutrality along with the ongoing progress made on the issue;
  - a Statement of Common Ground (SoCG) between the Greater Norwich partnership and Natural England (NE) on addressing nutrient neutrality through the GNLP and
  - an addendum to the submitted Viability Appraisal ([B26.3](#)) covering the costs of nutrient neutrality mitigation measures and their implications for the viability of housing development promoted through the GNLP.

### **Background**

3. On 16<sup>th</sup> March 2022 NE wrote to 74 local planning authorities (LPAs) to advise that LPAs, as the competent authority under the Habitats Regulations, should carefully consider the nutrient impacts of any new plans, policies and development proposals.
4. This affects sites that are in the catchments of the Wensum Special Area of Conservation (SAC) due to phosphorous enrichment along with the Broads SAC and the Broadland Ramsar due to phosphorous and nitrogen enrichment. These catchments cover the majority of Greater Norwich with the exception of the area around Diss, Harleston and the Waveney Valley, Loddon and Acle. The guidance also impacts all the other local planning authorities (LPAs) in Norfolk (see map 1 below). Kings Lynn and West Norfolk District Council and Great Yarmouth Borough Council have since indicated that nutrient neutrality requirements will have a minimal impact on their districts.
5. Housing and a limited number of other types of development such as visitor attractions are affected. The habitats legislation requires that relevant developments will only be granted planning permission when there is certainty around the levels of nutrient enrichment they will generate and mitigation to counter it so that development is nutrient neutral. NE has made it clear it will oppose any deviation from the legal framework

**Map 1 Areas of Norfolk affected by Nutrient Neutrality**



European protected sites requiring nutrient neutrality strategic solutions

Scale: 1:330,000

**Component SSSIs of  
The Broads SAC**

- Local Authorities
- SSSI subject to nutrient neutrality strategy
- Nutrient neutrality SSSI catchment

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6. As a result of the above, the GNLP needs to include policies to require relevant planning applications to provide mitigation to ensure their developments are nutrient neutral. The GNLP's Habitats Regulation Assessment (HRA) and Sustainability Appraisal (SA) must be updated to reflect this. To ensure delivery of affected development, it is also essential that mitigation options are made available to developers.
7. To address the current hiatus in the granting of planning permissions and to enable GNLP policies to be implemented in the longer term, the partnership has committed to working with other Norfolk LPAs, Anglian Water and NE to assist developers in accessing a wide portfolio of mitigation opportunities suitable for different scales of housing development. Emerging evidence suggests that large-scale greenfield sites should be able to provide dedicated on-site mitigation and some brownfield sites in Norwich will benefit from mitigation from a programme of retrofitting water efficiency measures in council housing (see paragraph 23 below). Therefore, the mitigation opportunities provided are likely to be of most importance to the developers of small and medium-scale greenfield sites and brownfield sites not benefitting from the retrofitting programme.
8. Anglian Water has significant expertise at a strategic level in water management and treatment which the partnership does not have and a direct link into all the households in Norfolk. This will be essential in providing some of the solutions within the portfolio of mitigation.
9. A portfolio of mitigation opportunities will enable HRA requirements to be addressed at a reasonable cost, limiting the impact on the viability of development.
10. Rapid delivery of the portfolio of measures will also allow permissions to be granted as soon as possible, to reduce the impact of the delays which are currently being experienced. The impacts on the GNLP's housing delivery trajectory resulting from the hiatus in granting permissions have been taken into account in the revised trajectory also to be considered at the GNLP examination.
11. Ongoing work being done by the Greater Norwich partnership with other partners to address nutrient neutrality consists of:
  - Holding regular meetings with the development industry locally to explain the implications of and potential solutions to nutrient neutrality issues;
  - Providing information and guidance on nutrient neutrality on council websites (see Norwich City Council's [website](#) for an example);
  - Establishing a [local nutrient calculator](#) to enable developers to identify the scale of mitigation requirements on a site-by-site basis. On October 7<sup>th</sup> 2022 NE sent [a letter](#) to the Norfolk LPAs stating that while it is broadly consistent with the national calculator, the authorities will need to be confident that it is robust enough to enable a precautionary approach.
  - Ongoing work from consultants Royal Haskoning on producing a Nutrient Neutrality Mitigation Strategy. NE has been involved in the development of this work. The strategy will identify a portfolio of suitable short, medium and long-term mitigation options. The mitigation solutions, for use separately or in combination, which currently seem most likely to be suitable in Broadland and South Norfolk are:
    - Silt traps
    - Riparian buffer strips



- Wet woodlands
- Willow buffers
- Beetle banks
- Taking land out of agricultural use
- Cessation of fertilizer and manure application
- Cover crops
- Package treatment plants
- Cesspools
- Incentivising commercial water efficiency.
- Sustainable Drainage (SUDs)
- Expediting planned improvements to waste water treatment works
- Portable treatment works.

In Norwich, the last three of the mitigation measures above along with the retrofitting of water saving measures in council owned homes are likely to be the most suitable solutions. Confirmation of the best approaches will be in the Mitigation Strategy which should be completed by the end of January 2023.

- Ongoing work with Anglian Water to establish a Joint Delivery Vehicle (JDV) to broker delivery of variety of mitigation options between providers, such as landowners, and developers. The Joint Venture company is intended to secure mitigation and then issue certificates confirming the credits that had been purchased. Developers would then submit the certificates with their planning applications. Reports on the JDV are being considered by relevant Norfolk LPA cabinets between January and March 2023 (see the South Norfolk [cabinet report](#) as an example) with a view to mitigation credits being available for purchase by Spring 2023.

12. In addition to mitigation to be provided through the JDV and in response to a requirement from government through a [written ministerial statement](#) published on 20<sup>th</sup> July 2022 and a Defra issued [direction](#) on 28<sup>th</sup> July 2022, NE work on strategic mitigation schemes for Greater Norwich is ongoing. It is understood that NE will only provide schemes and nutrient neutrality credits on nature and land-based solutions such as wetlands and woodlands and that these will not provide sufficient capacity to meet all the need in Greater Norwich. These will be medium to long term solutions which are likely to be available later in 2023. Recognising that some landowners may prefer to work with NE rather than the partnership and vice versa, the NE nature and land-based solutions will sit alongside mitigation options provided through the JDV.

13. It is expected that other commercial providers will also enter the nutrient neutrality market in due course.

14. Anglian Water is also affected by nutrient neutrality and the government has indicated that the performance of wastewater treatment plants must improve by 2030. An amendment to the Levelling Up and Regeneration Bill was proposed on the 18 November 2022, which if adopted is expected to reduce the mitigation requirement for phosphorus by 36% and nitrogen by 65% post 2030. It seems likely that the cost of per dwelling nutrient neutrality mitigation measures will be reduced post 2030 once improvements to strategic wastewater treatment plants have been made.

15. The Statement of Common Ground (SoCG) and Viability Study addendum sections below provide further detail on how mitigation will be achieved in Greater Norwich and what it will cost.

### **Statement of Common Ground**

16. The SoCG between the Greater Norwich partnership and NE provides an agreed position relating to the requirement that relevant development promoted by the GNLP must be nutrient neutral. It is in appendix 1.
17. It contains three agreements on
- a. co-operative working on nutrient neutrality mitigation;
  - b. proposed GNLP policy to address nutrient neutrality, with proposed main modifications to policy 2 and an outline of the changes proposed to the supporting text and
  - c. agreement on updating the GNLP Habitats Regulation Assessment.
18. The SoCG demonstrates an agreed position between the partnership and NE on the changes required to the GNLP to address nutrient neutrality for consideration at the examination.

### **Viability Study Addendum**

19. The addendum to the submitted Viability Appraisal ([B26.3](#)) covering the costs of nutrient neutrality mitigation measures and their implications for the viability of housing development is in appendix 2.
20. It takes a precautionary approach using two scenarios for its modelling based on mitigation costing £5,000 or £7,000 per dwelling. This reflects both the experience of other LPAs which have been subject to nutrient neutrality issues for a longer period of time than Greater Norwich and emerging evidence, including work done locally by consultants Royal Haskoning (see paragraphs 34 and 35 and appendix B of the addendum).
21. The modelling concludes that the plan will provide for viable housing development in all but one of the notional typologies provided the schemes now showing a deficit are treated as being marginal and that the Nutrient Neutrality mitigation costs applied are a worst-case scenario:
22. It is also important to note that:
- a. Around 1,400 new dwellings on brownfield sites in Norwich will benefit from mitigation from a programme of retrofitting water efficiency measures in council owned housing which will offset pollutants in wastewater from newbuild homes at an estimated cost of £4,350 per dwelling;
  - b. Most large-scale greenfield developments should be able to provide on-site mitigation measures which could reduce mitigation costs per dwelling;
  - c. Potential main modifications to GNLP policy 5 which have already been discussed at examination hearings would allow for site specific viability issues to be submitted and considered with a planning application. This will enable viability issues on marginal typologies to be fully addressed.



**Greater Norwich Local Plan  
Statement of Common Ground with  
Natural England**

**Nutrient Neutrality Policy**

**(January 20<sup>th</sup> 2023)**

## The Purpose of the Statement

1. This Statement of Common Ground (SoCG) informs the Inspectors of the agreed position of the Greater Norwich Local Plan (GNLP) authorities (the Partnership) and Natural England (NE) relating to the requirement that relevant development promoted by the GNLP must be nutrient neutral.
2. It complements the existing SoCG on strategic planning matters, the Norfolk Strategic Planning Framework (NSPF May 2021 [B2.3](#)).

## Background

3. A separate SoCG ([D4.7](#)) to the NSPF was signed between Partnership and NE officers on 12<sup>th</sup> December 2021. It set out the position of the signatories concerning representations made by NE on the GNLP Regulation 19 Proposed Submission document. It asked the Inspectors to consider these positions in assessing the soundness of the Plan and in determining whether any modifications might be necessary to make the Plan sound. These issues have now been discussed at GNLP hearing sessions and relevant main modifications will be consulted on by the Inspectors in due course.
4. On March 16<sup>th</sup> 2022 a Written Ministerial Statement ([WMS](#)) on Nutrient Levels in River Basin Catchments was issued. It signalled changes in the approach to the assessment of development proposals in catchments where water bodies that are protected sites under the Habitats Regulations are in unfavourable condition due to nutrient pollution. The WMS stated that *“Local Planning Authorities can only approve a project if they are certain it will have no negative effect on the protected site”*.
5. At the same time, the Chief Planner sent [a letter](#) to the affected local planning authorities (LPAs) on nutrient pollution issues, support and funding.
6. NE also published advice and a nutrient neutral methodology on how to evidence that nutrient neutrality will be achieved in relevant new development in order to mitigate impacts on the protected habitats.
7. Supporting documentation identified that relevant development in large parts of Greater Norwich impacts on protected water bodies in the River Wensum and The Broads Special Areas of Conservation (SACs) and in the Broadland Ramsar.
8. On April 19<sup>th</sup> 2022 the GNLP Inspectors wrote to the GNLP team manager ([D5.11](#)) requesting that the Partnership and NE prepare a statement of common ground which sets out work which needs to be done and how the GNLP policies will ensure compliance with the WMS.
9. The Partnership responded to the Inspectors’ letter on 29<sup>th</sup> April 2022 ([D5.12](#)). The response stated that *“From initial discussions with Natural England (NE), the Partnership is satisfied that the issues raised by the WMS and NE’s recent advice are capable of being addressed in a manner which secures compliance with the Conservation of Habitats and Species Regulations 2017 by appropriate amendments to the strategic policies of the GNLP”*.

10. Further to this, the letter stated that *“The Partnership does not consider that it is necessary to have a county-wide mitigation strategy in place prior to the adoption of the GNLP, although the timescale allows for that. It will suffice that the means to mitigate the impacts of the planned growth have been identified and that the occupation of development is tied to mitigation first being in place”*.
11. The response also set out the work which is now being done by consultants Royal Haskoning to produce the “Nutrient Neutrality Mitigation Strategy for the River Wensum and The Broads SACs”, including a timetable for this work. This study will evidence mitigation which can be used to address nutrient neutrality in the affected river catchments within Greater Norwich and elsewhere in Norfolk.
12. Finally, the response stated that the Partnership will also update the Habitats Regulations Assessment (HRA), the Water Cycle Study (WCS) and the Sustainability Appraisal (SA), and keep any viability implications under review.

### **Current work on Nutrient Neutrality**

13. The government and Chief Planner provided updates on measures being developed nationally to address nutrient pollution on 20<sup>th</sup> July 2022. The government’s [press release](#) announced:
  - a. A new legal duty on water companies in England to upgrade wastewater treatment works by 2030 in nutrient neutrality areas to the highest achievable technological levels;
  - b. A new Nutrient Mitigation Scheme established and accredited by NE, allowing LPAs to grant planning permission for new developments in areas with nutrient pollution issues. Defra and Department for Levelling Up, Housing and Communities will provide funding towards the scheme.
14. The legal duty on water and sewerage companies to upgrade wastewater plants is being introduced via an amendment to the Levelling Up and Regeneration Bill. Government stated that the improvements should be factored in for the purposes of Habitats Regulations Assessments.
15. The Nutrient Mitigation scheme will enable developers to purchase ‘nutrient credits’ which will discharge the requirements to provide mitigation. NE will accredit mitigation delivered through the Nutrient Mitigation Scheme, enabling LPAs to grant planning permission for developments which have secured the necessary nutrient credits.
16. The aim is to ensure developers have a streamlined way to mitigate nutrient pollution, allowing planned building to continue and creating new habitats across the country. The scheme is particularly intended to benefit smaller building companies and sites which would be unlikely to be able to provide on-site mitigation measures.
17. The Partnership and NE are also working together through the NSPF member and officer groups to progress local solutions to the nutrient neutrality issue.

18. It is currently envisaged that any NE accredited Nutrient Mitigation Scheme that serves the Greater Norwich area will be developed in tandem with, but may also be in addition to, schemes being developed locally through the work being undertaken for the Norfolk LPAs by consultants Royal Haskoning and a joint venture between the relevant Norfolk LPAs and Anglian Water.
19. The intention is to establish a joint venture company which will secure mitigation projects and will sell nutrient neutrality credits to the development industry from Spring 2023 onwards. It is anticipated that NE mitigation schemes will be in place in 2023. Once the schemes are ready to be implemented, it is expected that planning permissions for housing developments will be able to be granted from that point onwards.
20. Annex 1 to this statement sets out the work the Norfolk Authorities are doing to address nutrient neutrality which forms the basis of Agreement 1 below. The Norfolk Nutrient Neutrality Mitigation Strategy, which Royal Haskoning are producing, is scheduled to be completed by June 2023.

### **Statement of Common Ground Agreements**

21. The following statements provide an agreed position between the Partnership and Natural England on addressing Nutrient Neutrality through the Greater Norwich Local Plan:

#### **Agreement 1 – Co-operative work on Nutrient Neutrality Mitigation**

**The signatories agree that the Partnership and Natural England will continue to work together to provide short-, medium- and long-term solutions to the nutrient neutrality issue as identified through the county wide mitigation study which is currently being developed and through the Nutrient Mitigation Scheme which will be accredited by Natural England. The mitigation schemes will support the delivery of the Greater Norwich Local Plan housing trajectory.**

#### **Agreement 2 - The GNLP Policy**

**The signatories agree that the following text, proposed to be added as section 10 of policy 2 of the GNLP strategy, should be considered by the Inspectors as a potential main modification to the plan:**

**10. Within the catchments of the River Wensum Special Area of Conservation (SAC), The Broads SAC and the Broadland Ramsar:**

- **Residential development that results in an increase in the number of overnight accommodation and**
- **Non-residential development that, by virtue of its scale or type may draw people from outside the catchments of the SACs and/or generate unusual quantities of surface water and/or (by virtue of the processes undertaken) contain unusual pollutants within surface water run-off**

must provide sufficient evidence to enable the Local Planning Authority to conclude through a Habitats Regulations Assessment that the proposal will not adversely affect the integrity of sites in an unfavourable condition.

**Supplementary text should also be included as an additional modification, explaining that the policy:**

- Applies to residential developments leading to an increase in overnight accommodation and non-residential development that, by virtue of its scale or type, may draw people from outside the catchments of the SACs and/or generate unusual quantities of surface water and/or (by virtue of the processes undertaken) contain unusual pollutants within surface water run-off as per the NE advice;
- Only applies to those parts of Greater Norwich affected by the WMS, as southern parts of South Norfolk and Broadland are not in the affected catchments. Maps of the river catchments will be included as an appendix to the plan;
- Ensures that relevant permissions will only be granted with necessary nutrient mitigation in place prior to occupation and in compliance with the Habitats Regulations;
- Requires evidence to be submitted to the local planning authority (as the competent authority) to show that on-site or off-site mitigation has been secured and will be implemented for relevant developments prior to their occupation;
- States that the requirement only applies whilst the protected habitat sites are in unfavourable condition.

### **Agreement 3 – Updates to the Greater Norwich Local Plan Habitats Regulations Assessment (HRA)**

The signatories agree that the Partnership will commission updates to the Greater Norwich Local Plan HRA to update coverage of nutrient neutrality, taking account of the revised situation since submission of the Greater Norwich Local Plan in July 2021. Natural England will be consulted on the updated HRA in accordance with the requirements of the Habitats Regulations.

**On behalf of GNLP authorities:**

Mike Burrell  
Greater Norwich Planning Policy Team Manager

And

Phil Courtier  
Director of Place, Broadland and South Norfolk Councils

**On behalf of Natural England:**

Helen Dixon  
Manager – Norfolk and Suffolk Team

## **Annex 1: Co-operative work on Nutrient Neutrality Mitigation to unlock stalled planning permissions and deliver the GNLP housing trajectory**

In co-operation with the other Norfolk authorities, the partnership is working to address the issue of nutrient neutrality.

Royal Haskoning have been appointed and to date have completed or will undertake the following workstreams:

Work stream	Description	Date due
Inception tasks	Roadmap development and inception meetings	COMPLETED
Literature review	Literature review and source research	COMPLETED
Catchment Mapping	Review of catchment boundaries for surface water and wastewater	COMPLETED
Nutrient Calculator	<ol style="list-style-type: none"><li>1. Review of the scientific evidence base to inform amendments to the NE calculator (population/discharge rates from Water Recycling Centres (WRCs)/maximum water usage per person in new development).</li><li>2. Agreement with NE</li><li>3. Publication</li></ol>	COMPLETED
Mitigation Strategy	<ul style="list-style-type: none"><li>• Refine mitigation options (short, medium and long-term)</li><li>• Refine cost for mitigation</li></ul>	January 2023
Strategic Delivery Report	<ul style="list-style-type: none"><li>• Delivery options</li><li>• Availability and feasibility of land mapping</li></ul>	April 2023
Strategy Adoption	Council adoption processes Legal agreements	June 2023

### **Nutrient Calculator**

The [Norfolk Budget Calculator](#) is on the LPAs' web sites. The Norfolk LPAs have consulted NE on the Norfolk budget calculator and its methodology and NE has provided a detailed response in its [letter](#) to the LPAs dated 7<sup>th</sup> October 2022. In this letter NE notes that the Norfolk calculator deviates from the NE calculator and methodology and is less precautionary, and advises that each LPA must be satisfied that the calculator is based on robust evidence and takes a suitably precautionary approach when used to calculate the nutrient budget for a development and inform an Appropriate Assessment.

### **Mitigation Strategy**

Royal Haskoning have provided a draft short-term mitigation report which is currently being updated after feedback from the local authorities. The report sets out various mitigation measures and how



suitable they are for delivering mitigation in Norfolk. The measures it considers include retrofitting more efficient water fittings in council owned housing stock, change of land use, cover crops/riparian buffer strips/fallowing of agricultural land and WRC upgrades.

The experience of other authorities who have undergone this process suggests costs of the above mitigation of around £5,000 per new dwelling.

Locally, it is becoming apparent from the ongoing work by Royal Haskoning, work done for the emerging Norfolk Joint Venture company (see below) and the requirement for mitigation to be provided by Natural England that a variety of different types of mitigation will be made available to developers to address the needs of different types and locations of housing development. The costs of the provision of the mitigation will be clarified through further work.

At present, it seems likely that:

- A number of brownfield sites in Norwich will benefit from mitigation from a programme of retrofitting water efficiency measures in council owned housing which will offset pollutants in wastewater from newbuild homes at an estimated cost of £4,350 per dwelling (see December 2022 [Norwich Cabinet report](#), page 22, paragraph 28). The planned 5-year retrofitting programme will allow approximately 1,400 new dwellings to be built.
- Most large-scale greenfield developments should be able to provide on-site mitigation measures which could reduce mitigation costs per dwelling.
- Other types of housing development, in particular small and medium scale developments, will be able to benefit from mitigation made available through a Norfolk local councils and Anglian Water promoted Joint Venture company from Spring 2023, most likely at a cost of between £5,000 and £7,000 per dwelling.
- There will also be medium to long term nature-based mitigation schemes available to developers provided by Natural England.

Taking a precautionary approach, the viability study supporting the GNLP has therefore modelled two scenarios based on mitigation costing either £5,000 or £7,000 per dwelling as this is considered to be the best available evidence at the current time.

The implications of the proposed amendments to the Levelling Up and Regeneration Bill (LURB) may see water companies (in Greater Norwich and most of the rest of Norfolk this is Anglian Water) having to achieve their Technically Achievable Limit (TAL) for discharge concentrations at larger WRCs by 2030.

## **Joint Venture**

Work is ongoing on a joint venture between the relevant Norfolk Local Planning Authorities and Anglian Water. The intention is to establish a company which will secure mitigation projects and will sell nutrient neutrality credits to the development industry, with a view to being able to grant planning permissions as early as possible in 2023.

The Royal Haskoning report will be expanded to include the medium and long-term mitigation measures being developed through the joint venture. These are likely to include wetland and woodland provision and further improvements to WRCs.

## **Appendix 2 Addendum to the Greater Norwich Local Plan Viability Study**

**Addendum 1 relating to costs of mitigating Nutrient Neutrality requirements:**

**January 2023**

To the 2020 Viability Appraisal in  
support of the proposed  
Greater Norwich Local Plan

nps.co.uk

## Details regarding the author and accountabilities

This Addendum has been prepared by Norse Consulting (NCGL) 5, Anson Road, Norwich, Norfolk, NR6 6ED on behalf of the Greater Norwich Development Partnership.

The parameters and terms of engagement for this assessment were agreed with the GNDP team on 6 May 2022.

The assessment has been prepared by Tracey Powell who is a member of the Royal Institution of Chartered Surveyors (RICS) and an RICS 'Registered Valuer' (the Practitioner).

The surveyor can confirm on behalf of NCGL that they have complied with the RICS professional standards and guidance, England – Financial viability in planning: conduct and reporting 1<sup>st</sup> edition, May 2019 as far as she was able to, and where any deviance may have occurred this is referred to within the body of the report

The practitioner can confirm that:

- They have remained objective, impartial and reasonable
- There are no known conflicts of interest
- Confirmation of instructions have been complied with
- There is no performance related or contingent fee relating to this commission
- With the exception of confidential material used to assess viability inputs the material used is available
- This is an assessment of sites specific
- Where possible the practitioner has provided commentary with justification and evidence with regard to the agent's appraisal inputs but where a high degree of practitioner judgement has been made, this has been stated
- Commentary regarding the land value including the approach to 'Benchmark Land Value' has been provided
- With regard to Sensitivity Analysis – where appropriate this will be undertaken.

Prepared by: Tracey Powell MRICS  
Norse Consulting

Peer Review: Stuart Bizley MRICS  
Independent Practitioner

Date: 13 January 2023

Date:

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## **Purpose of this Addendum**

1. This Addendum is supplementary to the December 2020 Viability Appraisal ([D26.3](#) in the examination library) and the Supplementary Appendix 1 May 2021 ([D26.5](#)) which were prepared in support of the submitted Greater Norwich Local Plan (GNLP).
2. Its purpose is to test the impact on development viability of additional costs resulting from the recent requirement that the great majority of housing development in Greater Norwich must be “Nutrient Neutral” (see below for a definition and more information on nutrient neutrality).

## Background and Context

3. The December 2020 Viability Appraisal and the May 2021 Supplementary Appendix were prepared to support the submitted Greater Norwich Local Plan.
4. The issue of plan viability, including the supporting evidence documents, was considered by the two appointed Planning Inspectors at hearings on the Greater Norwich Local Plan in early 2022.
5. The Planning Inspectors have since asked the Greater Norwich Local Plan team to identify what plan provision will be made in relation to nutrient neutrality through their letter of 19<sup>th</sup> April 2022 ([D5.11](#)).
6. This follows the Written Ministerial Statement on Nutrient Levels in River Basin Catchments ([WMS](#)), made on March 16<sup>th</sup> 2022, and accompanying advice from Natural England (NE).
7. The implications for Greater Norwich of the above are that all development in river catchments potentially impacting on protected waterways in the River Wensum and the Broads Special Areas of Conservation (SACs) must be nutrient neutral. These catchments cover the majority of Greater Norwich.
8. Nutrient neutrality requires development involving “overnight accommodation” to demonstrate that there are mitigation measures in place to ensure that no more nutrients will flow into the protected waterways. This is to prevent pollution of these protected habitats which results partly from excessive fertilisation from sewage-derived nitrates and phosphorous.
9. This Addendum now includes notional costs on housing development which would provide for nutrient neutrality mitigation measures, either on-site or off-site.
10. The costs are applied to each of the base appraisals for each Typology.

## **Viability Assessment Framework**

11. The key publications and guidance considered in the preparation of this Addendum remain the same as those publications considered for the 2020 Viability Appraisal. These were:

- National Planning Policy Framework 2019 (NPPF) (previously 2012)
- Planning Policy Guidance 2019
- Viability Testing Local Plans: Advice for planning practitioners. Local Housing Delivery Group chaired by Sir John Harman June 2012 (the Harman Report)
- RICS Professional Guidance, England 1st Edition: Financial viability in planning (GN 94/2012)
- RICS Financial viability in planning: conduct and reporting. 1st Edition, May 2019

## **Statement regarding the current economic climate**

12. It is not the purpose of this document to update the impact on the economy on matters arising from any of the following:

- Brexit,
- Covid19,
- The conflict between Ukraine and Russia, or
- The current economic climate.



## General Approach Taken

13. With the exception of Typologies 3b and 4b the base data for each Typology was taken from the 2020 Viability Appraisal. See [D26.3](#) in the examination library.
14. The base data for Typologies 3b and 4b is taken from Supplementary Appendix 1 prepared in May 2021. See [D26.5](#) in the examination library.
15. The Table below provides a summary of the key parameters assessed for each of the Typology baseline appraisals only.
16. Please note that Nutrient Neutrality costs have not been applied to any of the appraisals falling under 'sensitivity analysis', Supplementary Appendix 2: Self Build Plots nor Supplementary Appendix 3: Older Persons Accommodation.

	Description:	Indicative Locations:	No. Dw:	Ha:	Affordable Housing %:	Developers Profit %:	BLV* uplift:
1	South Norfolk Village Clusters	Area outside main towns and key service centres	12	0.50	33%	20%	20 x's
2	Main Town/Service Village	Acle, Aylsham, Brundall Dickelburgh, Harleston, Mulbarton, Wymondham	20	0.71	35%	20%	20 x's
3a	Urban	City – outside inner ring road	20	0.27	35%	20%	30%
3b	Urban	City – outside inner ring road	50	1.00	28%	20%	30%
4a	Urban Centre	City – inside inner ring road	20	0.25	30%	20%	30%
4b	Urban Centre	City – inside inner ring road	50	0.50	20%	20%	20%
5	Main Town/Service Village	Acle, Aylsham, Brundall Dickelburgh, Harleston, Mulbarton, Wymondham	50	2.02	32%	17.5%	17.5 x's
6	Urban Fringe/Main Town	Bowthorpe Aylsham, Drayton, Hellesdon, Costessey Harleston, Wymondham	75	3.04	33%	17.5%	17.5 x's
7	Urban Centre	City – inside inner ring road	100	0.50	28%	17.5%	30%
8	Urban Fringe/Main Town	Bowthorpe Aylsham, Drayton, Hellesdon, Costessey Harleston, Wymondham	100	4.05	33%	17.5%	17.5 x's
9	Urban Fringe/Main Town	Bowthorpe Aylsham, Drayton, Hellesdon, Costessey Harleston, Wymondham	250	10.12	33%	17.5%	15 x's
10	Urban Fringe/Main Town	Bowthorpe Aylsham, Drayton, Hellesdon, Costessey Harleston, Wymondham	600	24.28	33%	17.5%	10 x's
11	Urban Fringe/Main Town	Bowthorpe Aylsham, Drayton, Hellesdon, Costessey Harleston, Wymondham	1000	40.00	33%	17.5%	10 x's

## Proposed Additional Policy Requirements

17. A letter from the Greater Norwich partnership on April 29th 2022 ([D5.12](#)) in response to the Planning Inspectors' letter of April 19<sup>th</sup> 2022 stated that following initial discussions with Natural England (NE), the Partnership is satisfied that the issues raised by the WMS and NE's recent advice are capable of being addressed in compliance with the Conservation of Habitats and Species Regulations 2017. This will be done through amendments to the strategic policies of the GNLP.
18. The letter also stated that the precise wording of the resulting main modifications to the GNLP will be informed by consultants who have been engaged on behalf of all eight Norfolk local planning authorities, given that they are each affected by this issue.
19. It concluded that policy changes will tie the delivery of housing growth more tightly to nutrient levels impacting on internationally protected habitats, taking into account the "Norfolk wide River Wensum SAC and Broads SAC Nitrate and Phosphate Mitigation Strategy (Nutrient Neutrality)". Dependent on the nitrate issue locally, this mitigation strategy will include advice on the costs and types of appropriate on-site mitigation measures for different types of housing development. It will also include advice and costs for off-site mitigation.
20. Assumptions for the likely costs for purchasing mitigation credits in this Addendum are based on work which has already been done elsewhere in the country and on ongoing work from consultants Royal Haskoning. The latter is informing an emerging Norfolk local councils and Anglian Water promoted Joint Venture company which will provide mitigation opportunities for developers from Spring 2023 (see paragraphs 34 and 35 below).

## Application

### Methodology

21. The basic methodology or accepted practice has not altered. Given that this underpins the approach to the assessment of the Typologies, this section is re stated below.
22. The RICS professional guidance Financial viability in planning: GN 94/2012 states:

*'It is accepted practice that a residual valuation model is most often used.*

*This approach uses various inputs to establish the Gross Development Value (GDV) from which the Gross Development Cost is deducted.*

*GDC can include a Site Value as a fixed figure resulting in the developer's residual profit (return) becoming the output which is then considered against a benchmark to assess viability. Alternatively, the developer's return (profit) is an adopted input to GDC, leaving a residual land value as an output from which to benchmark viability i.e., being greater or less than what would be considered an acceptable Site Value.'*

23. The 2020 Viability Appraisal assesses:
- the site or land value as a fixed cost where the value assessed is the benchmark land value,
  - depending on the Typology, the developers profit for market housing is assessed at 17.5% or 20% of revenue, 6% of revenue for all Affordable dwellings irrespective of tenure type, and
  - once the above has been established, the workbooks for each Typology will identify either a surplus or deficit.
24. With regard to this Addendum the outcome of the adjustment made for costs associated with nutrient neutrality required are identified in Appendix 1.

### Process Undertaken

25. Stages 1 and 2 of a 3 stage process has not altered from the 2020 Viability Appraisal or the 2021 Supplementary Appendix.
26. It should be noted that 'testing' viability at Stage 3 where a Typology may now be considered as being marginal or unviable has not been undertaken.

## **Professional Input and Judgement**

27. This has not altered.

## **Gross Development Value (GDV)**

### **Market Revenue – Residential Market, Research and Data applied**

28. With regard to the sales or revenue rates applied to the apartments and dwelling types, this has not altered.

29. Please note however that the revenue or sales rates assessed may have significantly altered since the date assessed.

30. The valuation date remains as the date of the 2020 Viability Appraisal.

### **Affordable Housing Revenue – Research and Data applied**

31. No change.

32. Please note that there may have been changes in approaches made by Registered Social Landlords since the publishing of the 2020 Viability Appraisal when considering proposed affordable products at the date of this report.

## Gross Development Costs (GDC)

33. The principles underlying the Development Costs applied to each typology are as provided in the December 2020 Viability Appraisal.
34. The experience of other authorities which were informed that they have a nutrient neutrality issue prior to Greater Norwich and have existing or emerging strategies to address this matter suggest mitigation costs of around £5,000 per new dwelling (see appendix B).

Locally, it is becoming apparent from ongoing work by Royal Haskoning, work done for the emerging Norfolk Joint Venture company and the requirement for mitigation to be provided Natural England that a variety of different types of mitigation will be made available to developers to address the needs of different types and locations of housing development. The costs of the provision of the mitigation will be clarified through further work. At present, it seems likely that:

- A number of brownfield sites in Norwich will benefit from mitigation from a programme of retrofitting water efficiency measures in council owned housing which will offset pollutants in wastewater from newbuild homes at an estimated cost of £4,350 per dwelling (see December 2022 [Norwich Cabinet report](#), page 22, paragraph 28). The planned 5 year retrofitting programme will allow approximately 1,400 new dwellings to be built.
  - Most large scale greenfield developments should be able to provide on-site mitigation measures which could reduce mitigation costs per dwelling.
  - Other types of housing development, in particular small and medium scale developments, will be able to benefit from mitigation made available through a Norfolk local councils and Anglian Water promoted Joint Venture company from Spring 2023, most likely at a cost of between £5,000 and £7,000 per dwelling.
  - There will also be medium to long term nature based mitigation schemes available to developers provided by Natural England.
35. Taking a precautionary approach, this viability study has therefore modelled two scenarios based on mitigation costing either £5,000 or £7,000 per dwelling as this is considered to be the best available evidence at the current time.
36. For details of all other individual elements or cost headings including the benchmark land values please refer to the 2020 Viability Appraisal.
37. It should be noted that construction and other associated costs will have altered between the Viability Appraisal preparation of this Addendum.

## Summary

38. The impact on viability of incorporating Nutrient Neutrality costs into a notional scheme is shown in the table below.

39. These tables are extracts from Appendix B which compares the findings with the original base appraisals.

Table 2 - £5,000 per dwelling

GNDP: Impact of Nutrient Neutrality Tariff on Viability							
BASE APPRAISALS KEY PARAMETERS					£5,000 Proposed Nutrient Neutrality Tariff / Typo:	VIABILITY APPRAISALS	
Typology:	No Dw:	Affordable Housing %:	Developer Profit (Market)%:	BLV* uplift:		Revised surplus/deficit following NNT:	Viability surplus/deficit per Dw:
1	12	33%	20%	20 x's	60,000	11,230	936
2	20	35%	20%	20 x's	100,000	147,612	7,381
3a	20	35%	20%	30%	100,000	258,815	12,941
3b	50	28%	20%	30%	250,000	233,992	4,680
4a	20	30%	20%	30%	100,000	437,828	21,891
4b	50	20%	20%	20%	250,000	226,062	4,521
5	50	32%	17.5%	17.5 x's	250,000	254,959	5,099
6	75	33%	17.5%	17.5 x's	375,000	635,301	8,471
7	100	28%	17.5%	30%	500,000	416,230	4,162
8	100	33%	17.5%	17.5 x's	500,000	553,068	5,531
9	250	33%	17.5%	15 x's	1,250,000	1,734,216	6,937
10	600	33%	17.5%	10 x's	3,000,000	1,567,597	2,613
11	1000	33%	17.5%	10 x's	5,000,000	5,507,928	5,508
NB	Payment of the Tariff is at the point the dwellings are sold						
	BLV - Benchmark Land Value = Existing Use Value plus						

40. As a consequence of incorporating an additional sum of £5,000 per dwelling to each of the assessed Typologies is that 4 of the notional Typologies move into deficit and therefore unviable although the level of the deficit shown would suggest that the schemes become marginal on the basis that many of the original costs including programming were considered to be fairly generous. A deficit of between £950 to £4,750 to Typologies 1, 3b, 4b and 7 would in practice be valued engineered through the design development process.



Table 3 - £7,000 per dwelling

GNDP: Impact of Nutrient Neutrality Tariff on Viability							
BASE APPRAISALS KEY PARAMETERS					£7,000 Proposed Nutrient Neutrality Tariff / Typo:	VIABILITY APPRAISALS	
		Developer Profit (Market)%	BLV*	Revised		Viability	
Typology:	No Dw:	Housing %:	:	uplift:		surplus/deficit following NNT:	surplus/deficit per Dw:
1	12	33%	20%	20 x's	84,000	35,819	2,985
2	20	35%	20%	20 x's	140,000	106,786	5,339
3a	20	35%	20%	30%	140,000	217,971	10,899
3b	50	28%	20%	30%	350,000	337,920	6,758
4a	20	30%	20%	30%	140,000	479,211	23,961
4b	50	20%	20%	20%	350,000	330,197	6,604
5	50	32%	17.5%	17.5 x's	350,000	151,178	3,024
6	75	33%	17.5%	17.5 x's	525,000	480,494	6,407
7	100	28%	17.5%	30%	700,000	633,767	6,338
8	100	33%	17.5%	17.5 x's	700,000	341,268	3,413
9	250	33%	17.5%	15 x's	1,750,000	1,199,673	4,799
10	600	33%	17.5%	10 x's	4,200,000	310,231	517
11	1000	33%	17.5%	10 x's	7,000,000	3,360,206	3,360
NB	Payment of the Tariff is at the point the dwellings are sold						
	BLV - Benchmark Land Value = Exisitng Use Value plus						

41. As a consequence of incorporating an additional £2,000 per dwelling into each of the Typologies assessed, the surplus generated is less as anticipated and the deficit position is worsened.
42. None of the Typologies assessed where a surplus is generated moves into a deficit position.
43. It should also be noted that £7,000 per dwelling is considered to be at the higher end of what the mitigation costs might reasonably be expected to be i.e., the worst-case scenario as stated in section 35 above.
44. Typology 4a was assessed as being unviable in the original Viability Appraisal and therefore any additional cost applied will increase the deficit.

## Conclusions

45. Based on the methodology and data inputs as set out in the 2020 Viability Appraisal, it is concluded that the emerging Greater Norwich Local Plan will provide for viable housing development in all but one of the notional Typologies provided the schemes now showing a deficit are treated as being marginal for the reasons given above and that the Nutrient Neutrality mitigation costs applied are a worst-case scenario.
46. The Greater Norwich Local Plan's flexibility through main modifications to policy 5 on housing, will allow 'site by site' viability appraisals at the planning application stage which will enable viability issues on marginal Typologies to be fully addressed.

### Appendix A: The cost of nutrient neutrality mitigation

The following examples from the south of England relate to local planning authorities (LPAs) which were informed that they have a nutrient neutrality issue prior to Greater Norwich. Consequently, the LPAs have various types of (mainly interim) strategic approaches in place to provide nutrient neutrality mitigation.

The approach to nitrate offsetting is still emerging but the following charges are known to be sought by councils and other stakeholders:

- a. Currently, Eastleigh Borough Council's position is to charge **£3,000 per nitrate credit** (1 credit equates to 1 kilogramme of nitrate per year). Previously (March 2020), the council were charging a fixed figure of **£4,500 per dwelling**, based on 1.5 credit per dwellings. This previous charging schedule resulted in the council assuming risk on the actual number of credits required per dwelling. By changing the offsetting charging mechanism to reflect the total nitrate levels needing to be mitigated on a project-by-project basis, the credit charge is transparent and proportionate to the development.
- b. Portsmouth City Council have set an indicative cost of **£2,500 per 1kg** of nitrate credit and are recommending **0.8kg of credit per dwelling** (assuming the development is on brownfield land).
- c. Winchester City Council charges **£3,500 per credit** and the Hampshire & Isle of Wight Wildlife Trust have an offset land scheme on the Isle of Wight which offers credits for **£2,500 each**, with such offsets understood be broadly in the range of 1 credit per home.

In relation to phosphorous:

- d. A scheme in Bodmin for Cornwall Council estimates that it would cost £ 1,450 per property (cost estimation for installing appliances/fittings to meet the 110 l/person/day limit) to retrofit an existing property to be more water efficient so freeing up headroom for new development. Three dwellings would need to undergo retrofitting for every new dwelling served by the same treatment works. This is equivalent to a cost of £4,350 per new dwelling.

Thus, based on the best available information from other LPAs, it is concluded that a figure of £5,000 per dwelling is suitable for modelling in this addendum. However, it is also important that a scenario or scenarios based on emerging evidence on the costs of mitigation in Greater Norwich is considered.

Appendix B GNDP: Impact of Nutrient Neutrality Tariff on Viability at a rate of £5,000 per dwelling and £7,000 per dwelling

BASE APPRAISALS KEY PARAMETERS					2020 VIABILITY APPRAISAL				£5,000	2023 VIABILITY APPRAISALS INCORPORATING NUTRIENT NEUTRALITY TARIFF				
		Affordable	Developer Profit		Initial 2020	Viability	Interest /	Interest /	Proposed	Revised	Viability	Interest /	Interest /	
Typology:	No Dw:	Housing %:	(Market)%:	BLV* uplift:	surplus/deficit:	surplus/deficit	Finance £:	Finance per Dw:	Nutrient Neutrality Tariff / Typo:	surplus/deficit following NNT:	surplus/deficit per Dw:	Finance £:	Finance per Dw:	True Cost of applying NNT £:
1	12	33%	20%	20 x's	49,994	4,166	26,308	2,192	60,000	11,230	936	27,532	2,294	61,224
2	20	35%	20%	20 x's	249,722	12,486	65,084	3,254	100,000	147,612	7,381	67,194	3,360	102,110
3a	20	35%	20%	30%	360,925	18,046	71,177	3,559	100,000	258,815	12,941	73,287	3,664	102,110
3b	50	28%	20%	30%	25,701	514	375,338	7,507	250,000	233,992	4,680	385,031	7,701	259,693
4a	20	30%	20%	30%	334,734	16,737	95,697	4,785	100,000	437,828	21,891	98,791	4,940	103,094
4b	50	20%	20%	20%	34,107	682	303,175	6,064	250,000	226,062	4,521	313,344	6,267	260,169
5	50	32%	17.5%	17.5 x's	514,028	10,281	230,584	4,612	250,000	254,959	5,099	239,652	4,793	259,069
6	75	33%	17.5%	17.5 x's	1,021,280	13,617	254,955	3,399	375,000	635,301	8,471	265,934	3,546	385,979
7	100	28%	17.5%	30%	124,884	1,249	482,377	4,824	500,000	416,230	4,162	523,491	5,235	541,114
8	100	33%	17.5%	17.5 x's	1,082,087	10,821	472,892	4,729	500,000	553,068	5,531	501,911	5,019	529,019
9	250	33%	17.5%	15 x's	3,054,957	12,220	563,546	2,254	1,250,000	1,734,216	6,937	634,287	2,537	1,320,741
10	600	33%	17.5%	10 x's	4,692,976	7,822	2,082,640	3,471	3,000,000	1,567,597	2,613	2,208,019	3,680	3,125,379
11	1000	33%	17.5%	10 x's	10,822,469	10,822	3,673,746	3,674	5,000,000	5,507,928	5,508	3,988,288	3,988	5,314,541

BASE APPRAISALS KEY PARAMETERS					2020 VIABILITY APPRAISAL				£7,000	2023 VIABILITY APPRAISALS INCORPORATING NUTRIENT NEUTRALITY TARIFF				
		Affordable	Developer Profit		Initial 2020	Viability	Interest /	Interest /	Proposed	Revised	Viability	Interest /	Interest /	
Typology:	No Dw:	Housing %:	(Market)%:	BLV* uplift:	surplus/deficit:	surplus/deficit	Finance £:	Finance per Dw:	Nutrient Neutrality Tariff / Typo:	surplus/deficit following NNT:	surplus/deficit per Dw:	Finance £:	Finance per Dw:	True Cost of applying NNT £:
1	12	33%	20%	20 x's	49,994	4,166	26,308	2,192	84,000	35,819	2,985	28,121	2,343	85,813
2	20	35%	20%	20 x's	249,722	12,486	65,084	3,254	140,000	106,786	5,339	68,038	3,402	142,936
3a	20	35%	20%	30%	360,925	18,046	71,177	3,559	140,000	217,971	10,899	74,131	3,707	142,954
3b	50	28%	20%	30%	25,701	514	375,338	7,507	350,000	337,920	6,758	388,959	7,779	363,621
4a	20	30%	20%	30%	334,734	16,737	95,697	4,785	140,000	479,211	23,961	100,173	5,009	144,477
4b	50	20%	20%	20%	34,107	682	303,175	6,064	350,000	330,197	6,604	317,480	6,350	364,304
5	50	32%	17.5%	17.5 x's	514,028	10,281	230,584	4,612	350,000	151,178	3,024	243,433	4,869	362,850
6	75	33%	17.5%	17.5 x's	1,021,280	13,617	254,955	3,399	525,000	480,494	6,407	270,741	3,610	540,786
7	100	28%	17.5%	30%	124,884	1,249	482,377	4,824	700,000	633,767	6,338	541,028	5,410	758,651
8	100	33%	17.5%	17.5 x's	1,082,087	10,821	472,892	4,729	700,000	341,268	3,413	513,712	5,137	740,819
9	250	33%	17.5%	15 x's	3,054,957	12,220	563,546	2,254	1,750,000	1,199,673	4,799	668,831	2,675	1,855,284
10	600	33%	17.5%	10 x's	4,692,976	7,822	2,082,640	3,471	4,200,000	310,231	517	2,265,385	3,776	4,382,745
11	1000	33%	17.5%	10 x's	10,822,469	10,822	3,673,746	3,674	7,000,000	3,360,206	3,360	4,136,009	4,136	7,462,263

NB Payment of the Tariff is at the point the dwellings are sold

BLV - Benchmark Land Value = Existing Use Value plus

### 8 Market Units

Capital Receipt			2,433,000
Direct Sale Fees		1.50 %	-36,495
Direct Sale Legal Fees		0.25 %	-6,083
		Total	2,390,423

### 3 ART Units

RSL Payment 1 - 100% Capital Receipt			358,110
Legal Fees		0.35 %	-1,253
		Total	356,857

### 1 AHO Units

Capital Receipt			183,675
Legal Fees		0.35 %	-643
		Total	183,032

### Construction Costs

Construct 12 houses	1,153.00 sq m at	1,128.00 psm	-1,300,584
Construct Garages	168.00 sq m at	600.00 psm	-100,800
Policy - water	12.00 units at	9.00	-108
Policy - energy	12.00 units at	5,000.00	-60,000
Policy - access 20% of homes	2.40 units at	1,400.00	-3,360
External Works		20.00 %	-292,970
Contingency		3.00 %	-43,946
Professional Fee		10.00 %	-146,485
		Total	-1,948,253

### Planning Policy Payments

Visitor Policy	12.00 units at	205.00 a	-2,460
Nutrient Neutrality Tariff (Market)	8.00 units at	5,000.00 a	-40,000
Nutrient Neutrality Tariff (ART)	3.00 units at	5,000.00 a	-15,000
Nutrient Neutrality Tariff (AHO)	1.00 units at	5,000.00 a	-5,000
CIL - payment 1 25%			-19,774
CIL - payment 2 75%			-59,323
PC - informal land purchase			-7,194
PC - informal equip & maintenance			-16,361
PC - formal land purchase			-8,992
PC - formal equipping & maintenance			-17,394
		Total	-191,498

### Notional Land Purchase

Benchmark Land Value	0.50 hectares at	500,000.00	-250,000
SDLT			-2,000
Professional Fees		1.25 %	-3,150
		Total	-255,150

### Other Outgoings

Market Developers Profit at 20%			-486,600
AHO Developers Profit at 6%			-11,021
ART Developers Profit at 6%			-21,487
		Total	-519,108

Debt Interest - Overall	100.00 % of Cost	-2,958,483	(31.33% Used)
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Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-27,532
	31	Revenue	2,974,785
		Outgoings	-2,986,015
		<b>Deficit</b>	<b>-11,230</b>

**13 Market Units**

Capital Receipt			3,829,400
Direct Sale Fees	1.50 %		-57,441
Direct Sale Legal Fees	0.25 %		-9,574
	Total		3,762,386

**5 ART Units**

RSL Payment 1 - 50% Capital Receipt			269,730
RSL Payment 2 - 50% Capital Receipt			269,730
Legal Fees	0.35 %		-1,888
	Total		537,572

**2 AHO Units**

Capital Receipt			426,750
Legal Fees	0.35 %		-1,494
	Total		425,256

**Construction Costs**

Construct 20 houses	1,789.00 sq m at	1,146.00 psm	-2,050,194
Construct Garages	189.00 sq m at	600.00 psm	-113,400
Policy - water	20.00 units at	9.00	-180
Policy - energy	20.00 units at	5,000.00	-100,000
Policy - access 20% of homes	4.00 units at	1,400.00	-5,600
External Works		20.00 %	-453,875
Contingency		3.00 %	-68,081
Professional Fee		10.00 %	-226,937
		Total	-3,018,267

**Planning Policy Payments**

Visitor Policy	20.00 units at	205.00 a	-4,100
Nutrient Neutrality Tariff (Market)	13.00 units at	5,000.00 a	-65,000
Nutrient Neutrality Tariff (ART P1)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (ART P2)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (AHO)	2.00 units at	5,000.00 a	-10,000
CIL - payment 1 25%			-29,857
CIL - payment 2 75%			-89,572
PC - informal land purchase			-11,232
PC - informal equip & maintenance			-25,546
PC - formal land purchase			-14,040
PC - formal equipping & maintenance			-27,162
		Total	-301,509

**Notional Land Purchase**

Benchmark Land Value	0.71 hectares at	500,000.00	-355,000
SDLT			-7,250
Professional Fees inc Bank		1.25 %	-4,528
		Total	-366,778

**Developers Profit on GDV**

Market at 20%			-765,880
AHO at 6%			-25,605
ART at 6%			-32,368
		Total	-823,853

Debt Interest - Overall	100.00 % of Cost	-4,580,804	(39.56% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-67,194
		Revenue	4,795,610
		Outgoings	-4,647,998
		<b>Surplus</b>	<b>147,612</b>

**13 Market Units**

Capital Receipt			3,866,400
Direct Sale Fees	1.50 %		-57,996
Direct Sale Legal Fees	0.25 %		-9,666
	Total		3,798,738

**5 ART Units**

RSL Payment 1 - 50% Capital Reciept			287,820
RSL Payment 2 - 50% Capital Reciept			287,820
Legal Fees	0.35 %		-2,015
	Total		573,625

**2 AHO Units**

Capital Receipt			426,600
Legal Fees	0.35 %		-1,493
	Total		425,107

**Construction Costs**

Construct 4 apartments	240.00 sq m at	1,403.00 psm	-336,720
Construct 16 houses	1,379.00 sq m at	1,116.00 psm	-1,538,964
Policy - water	20.00 units at	9.00	-180
Policy - energy	20.00 units at	5,000.00	-100,000
Policy - access 20% of homes	4.00 units at	1,400.00	-5,600
External Works		20.00 %	-396,293
Contingency		3.00 %	-59,444
Professional Fee		10.00 %	-198,146
		Total	-2,635,347

**Planning Policy Payments**

Visitor Policy	20.00 units at	205.00 a	-4,100
Nutrient Neutrality Tariff (Market)	13.00 units at	5,000.00 a	-65,000
Nutrient Neutrality Tariff (ART P1)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (ART P2)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (AHO)	2.00 units at	5,000.00 a	-10,000
CIL - payment 1 25%			-35,282
CIL - payment 2 75%			-105,847
PC - informal land purchase			-10,222
PC - informal equip & maintenance			-23,251
PC - formal land purchase			-12,778
PC - formal equipping & maintenance			-24,727
		Total	-316,207

**Notional Land Purchase**

Benchmark Land Value	0.27 hectares at	2,407,407.00	-650,000
SDLT			-22,000
Professional Fees		1.25 %	-8,400
		Total	-680,400

**Developers Profit on GDV**

Market at 20%			-773,280
AHO at 6%			-25,596
ART at 6%			-34,538
		Total	-833,414

Debt Interest - Overall	100.00 % of Cost	-4,536,538	(41.09% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-73,287
		Revenue	4,868,640
		Outgoings	-4,609,825
		<b>Surplus</b>	<b>258,815</b>



**36 Market Units**

Capital Receipt		11,236,800
Direct Sale Fees	1.25 %	-140,460
Direct Sale Legal Fees	0.25 %	-28,092
	<b>Total</b>	<b>11,068,248</b>

**10 ART Units**

RSL Payment 1 - 25% Capital Receipt		251,168
RSL Payment 2 - 25% Capital Receipt		251,168
RSL Payment 4 - 25% Capital Receipt		251,168
RSL Payment 4 - 25% Capital Receipt		251,168
Legal Fees	0.35 %	-3,516
	<b>Total</b>	<b>1,001,156</b>

**4 AHO Units**

Capital Receipt		700,350
Legal Fees	0.35 %	-2,451
	<b>Total</b>	<b>697,899</b>

**Construction Costs**

Construct 8 flats	400.00 sq m at	1,403.00 psm	-561,200
Construct 42 houses	3,686.00 sq m at	1,116.00 psm	-4,113,576
Construct 16 Garages	336.00 sq m at	600.00 psm	-201,600
Policy - water	50.00 units at	9.00	-450
Policy - energy	50.00 units at	5,000.00	-250,000
Policy - access 20% of homes	10.00 units at	1,400.00	-14,000
External Works		20.00 %	-1,028,165
Contingency		3.00 %	-154,225
Professional Fee		10.00 %	-514,083
		<b>Total</b>	<b>-6,837,299</b>

**Planning Policy Payments**

Visitor Policy	50.00 units at	205.00 a	-10,250
Nutrient Neutrality Tariff (Market)	36.00 units at	5,000.00 a	-180,000
Nutrient Neutrality Tariff (ART 1)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (ART 2)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (ART 3)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (ART 4)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (AHO)	4.00 units at	5,000.00 a	-20,000
CIL - payment 1 25%			-97,013
CIL - payment 2 75%			-291,038
PC - informal land purchase			-32,813
PC - informal equip & maintenance			-63,492
PC - formal land purchase			-26,250
PC - formal equip & maintenance			-59,705
		<b>Total</b>	<b>-830,561</b>

**Other Outgoings**

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		<b>Total</b>	<b>-50,000</b>

**Notional Land Purchase**

BLV at EUV plus 30%	1.00 hectares at	2,407,407.00	-2,407,407
SDLT			-109,870
Professional Fees		1.25 %	-31,466
		<b>Total</b>	<b>-2,548,743</b>

**Developers Profit on GDV**

Market @ 20%			-2,247,360
AHO @ 6%			-42,021
ART @ 6%			-60,280
		<b>Total</b>	<b>-2,349,661</b>

Debt Interest - Overall	100.00 % of Cost	-12,790,783	(40.03% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-385,031
		Revenue	12,941,822
		Outgoings	-13,175,814
		<b>Deficit</b>	<b>-233,992</b>

**14 Market Units**

Capital Receipt			3,577,000
Direct Sale Fees	1.50 %		-53,655
Dircet Sale Legal Fees	0.25 %		-8,943
	Total		3,514,403

**5 ART Units**

RSL Payment 1 - 50% Capital Reciept			210,938
RSL Payment 2 - 50% Capital Reciept			210,938
Legal Fees	0.35 %		-1,477
	Total		420,399

**1 AHO Units**

Capital Receipt			140,625
Legal Fees	0.35 %		-492
	Total		140,133

**Construction Costs**

Brownfeild Allowance			-100,000
Construct 20 apartments	1,280.00 sq m at	1,403.00 psm	-1,795,840
Policy - water	20.00 units at	9.00	-180
Policy - energy	20.00 units at	5,000.00	-100,000
Policy - access 20% of homes	4.00 units at	1,400.00	-5,600
External Works		15.00 %	-300,243
Contingency		3.00 %	-60,049
Professional Fee		10.00 %	-200,162
		Total	-2,562,074

**Planning Policy Payments**

Visitor Policy	20.00 units at	205.00 a	-4,100
Nutrient Neutrality Tariff (Market)	14.00 units at	5,000.00 a	-70,000
Nutrient Neutrality Tariff (ART P1)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (ART P2)	2.50 units at	5,000.00 a	-12,500
Nutrient Neutrality Tariff (AHO)	1.00 units at	5,000.00 a	-5,000
CIL - payment 1 25%			-28,796
CIL - payment 2 75%			-86,389
PC - informal land purchase			-9,339
PC - informal equip & maintenance			-21,244
PC - formal land purchase			-11,674
PC - formal equipping & maintenance			-22,599
		Total	-284,141

**Notional Land Purchase**

Benchmark Land Value	0.25 hectares at	3,120,000.00	-780,000
SDLT			-28,500
Professional Fees		1.25 %	-10,106
		Total	-818,606

**Developers Profit on GDV**

Market at 20%			-715,400
AHO at 6%			-8,438
ART at 6%			-25,313
		Total	-749,151

Debt Interest - Overall	100.00 % of Cost	-4,478,538	(46.14% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-98,791
		Revenue	4,139,501
		Outgoings	-4,577,329
		<b>Deficit</b>	<b>-437,828</b>

**40 Market Units**

Capital Receipt			11,176,250
Direct Sale Fees		1.25 %	-139,703
Direct Sale Legal Fees		0.25 %	-27,941
		Total	11,008,606

**7 ART Units**

RSL Payment 1 - 25% Capital Receipt			295,313
RSL Payment 2 - 25% Capital Receipt			295,313
Legal Fees		0.35 %	-2,067
		Total	588,559

**3 AHO Units**

Capital Receipt			574,875
Legal Fees		0.35 %	-2,012
		Total	572,863

**Construction Costs**

Demolition			-200,000
Construct 50 apartments	3,632.00 sq m at	1,403.00 psm	-5,095,696
Policy - water	50.00 units at	9.00	-450
Policy - energy	50.00 units at	5,000.00	-250,000
Policy - access 20% of homes	10.00 units at	1,400.00	-14,000
External Works		20.00 %	-1,112,029
Contingency		3.00 %	-166,804
Professional Fee		10.00 %	-556,015
		Total	-7,394,994

**Plannning Policy Payments**

Visitor Policy	50.00 units at	205.00 a	-10,250
Nutrient Neutrality Tariff (Market)	40.00 units at	5,000.00 a	-200,000
Nutrient Neutrality Tariff (ART 1)	3.50 units at	5,000.00 a	-17,500
Nutrient Neutrality Tariff (ART 2)	3.50 units at	5,000.00 a	-17,500
Nutrient Neutrality Tariff (AHO)	3.00 units at	5,000.00 a	-15,000
CIL - payment 1 25%			-91,757
CIL - payment 2 75%			-275,270
PC - informal			-86,781
PC - formal			-97,231
		Total	-811,289

**Other Outgoings**

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		Total	-50,000

**Notional Land Purchase**

BLV at EUV +20%	0.50 hectares at	2,880,000.00	-1,440,000
SDLT			-62,500
Professional Fees		1.25 %	-18,781
		Total	-1,521,281

**Developers Profit on GDV**

Market @ 20%			-2,235,250
AHO @ 6%			-34,493
ART @ 6%			-35,438
		Total	-2,305,181

Debt Interest - Overall	100.00 % of Cost	-12,254,468	(36.33% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-313,344
		Revenue	12,341,751
		Outgoings	-12,567,813
		<b>Deficit</b>	<b>-226,062</b>

### 34 Market Units

Capital Receipt		10,436,400
Direct Sale Fees	1.25 %	-130,455
Direct Sale Legal Fees	0.25 %	-26,091
	Total	10,279,854

### 12 ART Units

RSL Payment 1 - 25% Capital Receipt		388,103
RSL Payment 2 - 25% Capital Receipt		388,103
RSL Payment 3 - 25% Capital Receipt		388,103
RSL Payment 4 - 25% Capital Receipt		388,103
Legal Fees	0.35 %	-5,433
	Total	1,546,979

### 4 AHO Units

Capital Receipt		853,500
Legal Fees	0.35 %	-2,987
	Total	850,513

### Construction Costs

Construct 50 houses	4,859.00 sq m at	1,146.00 psm	-5,568,414
Construct Garages	651.00 sq m at	600.00 psm	-390,600
Policy - water	50.00 units at	9.00	-450
Policy - energy	50.00 units at	5,000.00	-250,000
Policy - access 20% of homes	10.00 units at	1,400.00	-14,000
External Works		20.00 %	-1,244,693
Contingency		3.00 %	-186,704
Professional Fee		10.00 %	-622,346
		Total	-8,277,207

### Plannning Policy Payments

Visitor Policy	50.00 units at	205.00 a	-10,250
Nutrient Neutrality Tariff (Market)	34.00 units at	5,000.00 a	-170,000
Nutrient Neutrality Tariff (ART 1)	3.00 units at	5,000.00 a	-15,000
Nutrient Neutrality Tariff (ART 2)	3.00 units at	5,000.00 a	-15,000
Nutrient Neutrality Tariff (ART 3)	3.00 units at	5,000.00 a	-15,000
Nutrient Neutrality Tariff (ART 4)	3.00 units at	5,000.00 a	-15,000
Nutrient Neutrality Tariff (AHO)	4.00 units at	5,000.00 a	-20,000
CIL - payment 1 25%			-123,097
CIL - payment 2 75%			-369,291
PC - informal land purchase			-29,279
PC - informal equip & maintenance			-66,589
PC - formal land purchase			-36,599
PC - formal equip & maintenance			-70,791
		Total	-955,896

### Other Outgoings

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		Total	-50,000

### Notional Land Purchase

Benchmark Land Value	2.02 hectares at	437,500.00	-883,750
SDLT			-33,688
Professional Fees		1.25 %	-11,468
		Total	-928,906

### Developers Profit on GDV

Market @ 17.5%	-1,826,370
AHO @ 6%	-51,210
ART @ 6%	-93,145
Total	-1,970,725

Debt Interest - Overall	100.00 % of Cost	-12,347,701	(30.28% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-239,652
		Revenue	12,842,312
		Outgoings	-12,587,353
		<b>Surplus</b>	<b>254,959</b>

**50 Market Units**

Capital Receipt		14,481,600
Direct Sale Fees	1.25 %	-181,020
Direct Sale Legal Fees	0.25 %	-36,204
	<b>Total</b>	<b>14,264,376</b>

**19 ART Units**

RSL Payment 1 - 25% Capital Receipt		527,423
RSL Payment 2 - 25% Capital Receipt		527,423
RSL Payment 3 - 25% Capital Receipt		527,423
RSL Payment 4 - 25% Capital Receipt		527,423
Legal Fees	0.35 %	-7,384
	<b>Total</b>	<b>2,102,308</b>

**6 AHO Units**

Capital Receipt dwellings		1,252,200
Legal Fees	0.35 %	-4,383
	<b>Total</b>	<b>1,247,817</b>

**Construction Costs**

Construct 10 apartments	600.00 sq m at	1,370.00 psm	-822,000
Construct 65 houses	5,876.00 sq m at	1,136.00 psm	-6,675,136
Construct Garages	714.00 sq m at	600.00 psm	-428,400
Policy - water	75.00 units at	9.00	-675
Policy - energy	75.00 units at	5,000.00	-375,000
Policy - access 20% of homes	75.00 units at	1,400.00	-105,000
External Works		20.00 %	-1,681,242
Contingency		3.00 %	-252,186
Professional Fee		10.00 %	-840,621
		<b>Total</b>	<b>-11,180,261</b>

**Planning Policy Payments**

Visitor Policy	75.00 units at	205.00 a	-15,375
Nutrient Neutrality Tariff (Market)	50.00 units at	5,000.00 a	-250,000
Nutrient Neutrality Tariff (ART 1)	4.75 units at	5,000.00 a	-23,750
Nutrient Neutrality Tariff (ART 1)	4.75 units at	5,000.00 a	-23,750
Nutrient Neutrality Tariff (ART 1)	4.75 units at	5,000.00 a	-23,750
Nutrient Neutrality Tariff (ART 1)	4.75 units at	5,000.00 a	-23,750
Nutrient Neutrality Tariff (AHO)	6.00 units at	5,000.00 a	-30,000
CIL - payment 1 25%			-161,091
CIL - payment 2 75%			-483,273
PC - informal land purchase			-48,840
PC - informal equip & maintenance			-111,061
PC - formal land purchase			-50,796
PC - formal equipping & maintenance			-98,252
		<b>Total</b>	<b>-1,343,688</b>

**Other Outgoings**

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		<b>Total</b>	<b>-50,000</b>

**Notional Land Purchase**

Benchmark Land Value	3.04 hectares at	437,500.00	-1,330,000
SDLT			-56,000
Professional Fees inc Bank		1.25 %	-17,325
		<b>Total</b>	<b>-1,403,325</b>

**Developers Profit on GDV**

Market @ 17.5%		-2,534,280
AHO at 6%		-75,132
ART @ 6%		-126,581
	<b>Total</b>	<b>-2,735,993</b>

Debt Interest - Overall	100.00 % of Cost	-16,942,257	(24.18% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-265,934
		Revenue	17,843,492
		Outgoings	-17,208,191
		<b>Surplus</b>	<b>635,301</b>

**72 Market Units**

Capital Receipt		18,052,400
Direct Sale Fees	1.25 %	-225,655
Direct Sale Legal Fees	0.25 %	-45,131
	<b>Total</b>	<b>17,781,614</b>

**22 ART Units**

RSL Payment 1 - 25% Capital Receipt		457,875
RSL Payment 2 - 25% Capital Receipt		457,875
RSL Payment 3 - 25% Capital Receipt		457,875
RSL Payment 4 - 25% Capital Receipt		457,875
Legal Fees	0.35 %	-6,410
	<b>Total</b>	<b>1,825,090</b>

**6 AHO Units**

Capital Receipt		1,134,000
Legal Fees	0.35 %	-3,969
	<b>Total</b>	<b>1,130,031</b>

**Construction Costs**

Brownfeild Allowance			-200,000
Construct 100 apartments	6,504.00 sq m at	1,552.00 psm	-10,094,208
Policy - water	100.00 units at	9.00	-900
Policy - energy	100.00 units at	5,000.00	-500,000
Policy - access 20% of homes	20.00 units at	1,400.00	-28,000
External Works		20.00 %	-2,164,622
Contingency		3.00 %	-324,693
Professional Fee		10.00 %	-1,082,311
		<b>Total</b>	<b>-14,394,734</b>

**Planning Policy Payments**

Visitor Policy	100.00 units at	205.00 a	-20,500
Nutrient Neutrality Tariff (Market)	72.00 units at	5,000.00 a	-360,000
Nutrient Neutrality Tariff (ART 1)	5.50 units at	5,000.00 a	-27,500
Nutrient Neutrality Tariff (ART 2)	5.50 units at	5,000.00 a	-27,500
Nutrient Neutrality Tariff (ART 3)	5.50 units at	5,000.00 a	-27,500
Nutrient Neutrality Tariff (ART 4)	5.50 units at	5,000.00 a	-27,500
Nutrient Neutrality Tariff (AHO)	6.00 units at	5,000.00 a	-30,000
CIL - payment 1 25%			-143,206
CIL - payment 2 75%			-429,618
PC - informal land purchase			-47,957
PC - informal equip & maintenance			-109,051
PC - formal land purchase			-59,946
PC - formal equip & maintenance			-115,931
		<b>Total</b>	<b>-1,426,209</b>

**Other Outgoings**

Marketing Showrooms	2.00 units at	50,000.00 a	-100,000
		<b>Total</b>	<b>-100,000</b>

**Notional Land Purchase**

Benchmark Land Value	0.50 hectares at	2,600,000.00	-1,300,000
SDLT			-54,500
Professional Fees		1.25 %	-16,931
		<b>Total</b>	<b>-1,371,431</b>

**Developers Profit on GDV**

Market @ 17.5%		-3,159,170
AHO @ 6%		-68,040
ART @ 6%		-109,890
	<b>Total</b>	<b>-3,337,100</b>

Debt Interest - Overall	100.00 % of Cost	-20,910,639	(21.87% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-523,491
		Revenue	21,017,900
		Outgoings	-21,434,130
		<b>Deficit</b>	<b>-416,230</b>

**67 Market Units**

Capital Receipt		19,588,250
Direct Sale Fees	1.25 %	-244,853
Direct Sale Legal Fees	0.25 %	-48,971
	<b>Total</b>	<b>19,294,426</b>

**25 ART Units**

Payment 1 - 25% Capital Receipt		731,745
Payment 2 - 25% Capital Receipt		731,745
Payment 3 - 25% Capital Receipt		731,745
Payment 4 - 25% Capital Receipt		731,745
Legal Fees	0.35 %	-10,244
	<b>Total</b>	<b>2,916,736</b>

**8 AHO Units**

Capital Receipt		1,734,150
Legal Fees	0.35 %	-6,070
	<b>Total</b>	<b>1,728,080</b>

**Construction Costs**

Construct 10 apartments	540.00 sq m at	1,370.00 psm	-739,800
Construct 90 houses	8,305.00 sq m at	1,136.00 psm	-9,434,480
Construct Garages	882.00 sq m at	600.00 psm	-529,200
Policy - water	100.00 units at	9.00	-900
Policy - energy	100.00 units at	5,000.00	-500,000
Policy - access 20% of homes	20.00 units at	1,400.00	-28,000
External Works		25.00 %	-2,808,095
Contingency		3.00 %	-336,971
Professional Fee		10.00 %	-1,123,238
		<b>Total</b>	<b>-15,500,684</b>

**Planning Policy Payments**

Visitor Policy	100.00 units at	205.00 a	-20,500
Nutrient Neutrality Tariff (Market)	67.00 units at	5,000.00 a	-335,000
Nutrient Neutrality Tariff (ART 1)	6.25 units at	5,000.00 a	-31,250
Nutrient Neutrality Tariff (ART 2)	6.25 units at	5,000.00 a	-31,250
Nutrient Neutrality Tariff (ART 3)	6.25 units at	5,000.00 a	-31,250
Nutrient Neutrality Tariff (ART 4)	6.25 units at	5,000.00 a	-31,250
Nutrient Neutrality Tariff (AHO)	8.00 units at	5,000.00 a	-40,000
CIL - payment 1 25%			-215,916
CIL - payment 2 75%			-647,747
PC - formal land purchase (50%)			-35,021
PC - formal equipment (50%)			-35,277
PC - formal maintenance (100%)			-62,233
PC - formal allotments (100%)			-2,706
PC - infromal land purchase (100%)			-56,034
PC - informal equip & main (100%)			-127,439
		<b>Total</b>	<b>-1,702,873</b>

**Other Outgoings**

Marketing Showrooms	2.00 units at	50,000.00 a	-100,000
		<b>Total</b>	<b>-100,000</b>

**Notional Land Purchase**

Benchmark Land Value	4.05 hectares at	437,500.00	-1,771,875
SDLT			-78,094
Professional Fee		1.25 %	-23,125
		<b>Total</b>	<b>-1,873,094</b>

**Developers Profit on GDV**

Market @ 17.5%		-3,427,944
AHO @ 6%		-104,049
ART @ 6%		-175,619
	<b>Total</b>	<b>-3,707,612</b>

Debt Interest - Overall	100.00 % of Cost	-23,194,401	(21.57% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-501,911
		Revenue	24,249,380
		Outgoings	-23,696,312
		<b>Surplus</b>	<b>553,068</b>



**167 Market Units**

Capital Receipt		48,285,200
Direct Sale Fees	1.25 %	-603,565
Direct Sale Legal Fees	0.50 %	-241,426
	<b>Total</b>	<b>47,440,209</b>

**62 ART Units**

RSL Payment 1 - 25% Capital Receipt		1,831,883
RSL Payment 2 - 25% Capital Receipt		1,831,883
RSL Payment 3 - 25% Capital Receipt		1,831,883
RSL Payment 4 - 25% Capital Receipt		1,831,883
Legal Fees	0.35 %	-25,646
	<b>Total</b>	<b>7,301,886</b>

**21 AHO Units**

Capital Reciept		4,409,550
Direct Sale Fees	0.35 %	-15,433
	<b>Total</b>	<b>4,394,117</b>

**Construction Costs**

Construct 26 apartments	1,500.00 sq m at	1,370.00 psm	-2,055,000
Construct 224 houses	20,749.00 sq m at	1,136.00 psm	-23,570,864
Construct Garages	2,268.00 sq m at	600.00 psm	-1,360,800
Policy - water	250.00 units at	9.00	-2,250
Policy - energy	250.00 units at	5,000.00	-1,250,000
Policy - access 20% of homes	50.00 units at	1,400.00	-70,000
External Works		25.00 %	-7,077,229
Contingency		3.00 %	-849,267
Professional Fee		10.00 %	-2,830,891
		<b>Total</b>	<b>-39,066,301</b>

**Planning Policy Payments**

Visitor Policy	250.00 units at	205.00 a	-51,250
Nutrient Neutrality Tariff (Market)	167.00 units at	5,000.00 a	-835,000
Nutrient Neutrality Tariff (ART1)	15.50 units at	5,000.00 a	-77,500
Nutrient Neutrality Tariff (ART2)	15.50 units at	5,000.00 a	-77,500
Nutrient Neutrality Tariff (ART3)	15.50 units at	5,000.00 a	-77,500
Nutrient Neutrality Tariff (ART4)	15.50 units at	5,000.00 a	-77,500
Nutrient Neutrality Tariff (AHO)	21.00 units at	5,000.00 a	-105,000
CIL - payment 1 20%			-434,057
CIL - payment 2 30%			-651,086
CIL - payment 3 50%			-1,085,142
PC - formal land purchase (50%)			-88,105
PC - formal equipment (50%)			-88,755
PC - formal maintenance (100%)			-156,566
PC - formal allotments (100%)			-6,803
PC - informal land purchase (100%)			-140,968
PC - informal equip & main (100%)			-320,611
		<b>Total</b>	<b>-4,273,343</b>

**Other Outgoings**

Marketing Showrooms	5.00 units at	50,000.00 a	-250,000
		<b>Total</b>	<b>-250,000</b>

**Notional Land Purchase**

Benchmark Land Value	10.12 hectares at	375,000.00	-3,795,000
SDLT			-179,250
Professional Fees		1.25 %	-49,678
		<b>Total</b>	<b>-4,023,928</b>

**Developers Profit on GDV**

Market @ 17.5%		-8,449,910
AHO @ 6%		-264,573
ART @ 6%		-439,652
	<b>Total</b>	<b>-9,154,135</b>

Debt Interest - Overall	100.00 % of Cost	-57,653,778	(11.23% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-634,287
		Revenue	60,022,282
		Outgoings	-58,288,066
		<b>Surplus</b>	<b>1,734,216</b>

<b>400 Market Units</b>			
Capital Receipt			115,459,000
Direct Sale Fees		1.25 %	-1,443,238
Direct Sale Legal Fees		0.25 %	-288,648
		Total	113,727,115
<b>150 ART Units</b>			
RSL Payment 1 - 25% Capital Receipt			4,467,375
RSL Payment 2 - 25% Capital Receipt			4,467,375
RSL Payment 3 - 25% Capital Receipt			4,467,375
RSL Payment 4 - 25% Capital Receipt			4,467,375
Legal Fees		0.35 %	-62,543
		Total	17,806,957
<b>50 AHO Units</b>			
Capital Receipt			10,431,000
Legal Fees		0.35 %	-36,509
		Total	10,394,492
<b>Construction Costs</b>			
Construct 90 apartments	5,800.00 sq m at	1,370.00 psm	-7,946,000
Construct 510 houses	47,385.00 sq m at	1,136.00 psm	-53,829,360
Construct Garages	8,190.00 sq m at	600.00 psm	-4,914,000
Policy - water	600.00 units at	9.00	-5,400
Policy - energy	600.00 units at	5,000.00	-3,000,000
Policy - access 20% of homes	120.00 units at	1,400.00	-168,000
External Works		30.00 %	-20,958,828
Contingency		3.00 %	-2,095,883
Professional Fee		10.00 %	-6,986,276
		Total	-99,903,747
<b>Planning Policy Payments</b>			
Visitor Policy	600.00 units at	205.00 a	-123,000
Nutrient Neutrality Tariff (Market)	400.00 units at	5,000.00 a	-2,000,000
Nutrient Neutrality Tariff (ART 1)	37.50 units at	5,000.00 a	-187,500
Nutrient Neutrality Tariff (ART 2)	37.50 units at	5,000.00 a	-187,500
Nutrient Neutrality Tariff (ART 3)	37.50 units at	5,000.00 a	-187,500
Nutrient Neutrality Tariff (ART 4)	37.50 units at	5,000.00 a	-187,500
Nutrient Neutrality Tariff (AHO)	50.00 units at	5,000.00 a	-250,000
CIL - payment 1 15%			-746,717
CIL - payment 2 15%			-746,717
CIL - payment 3 20%			-995,622
CIL - payment 4 50%			-2,489,056
PC - formal land pur (nil on site)			-1
PC - formal equip (nil on site)			-1
PC - formal maintenance (100%)			-376,309
PC - formal allotments (100%)			-16,370
PC - informal land purchase (100%)			-338,853
PC - informal equip & main (100%)			-770,662
		Total	-9,603,308
<b>Other Outgoings</b>			
Marketing Showrooms	6.00 units at	50,000.00 a	-300,000
		Total	-300,000
<b>Notional Land Purchase</b>			
Benchmark Land Value	24.28 hectares at	250,000.00	-6,070,000
SDLT			-293,000
Professional Fees		1.25 %	-79,538
		Total	-6,442,538
<b>Developers Profit on GDV</b>			
Market @ 17.5%			-20,205,325
AHO @ 6%			-625,860
ART @ 6%			-1,072,170
		Total	-21,903,355
<b>Debt Interest - Overall</b>			
Charged Quarterly	100.00 % of Cost	-139,983,884	(8.12% Used)
Compounded Quarterly	6.00 %pa	Interest	-2,208,019
		Revenue	143,759,500
		Outgoings	-142,191,903
		<b>Surplus</b>	<b>1,567,597</b>

<b>667 Market Units</b>			
Capital Receipt			183,912,600
Direct Sale Fees	1.25 %		-2,298,908
Direct Sale Legal Fees	0.25 %		-459,782
	Total		181,153,911
<b>250 ART Units</b>			
RSL Payment 1 - 25% Capital Receipt			7,376,243
RSL Payment 2 - 25% Capital Receipt			7,376,243
RSL Payment 3 - 25% Capital Receipt			7,376,243
RSL Payment 4 - 25% Capital Receipt			7,376,243
Legal Fees	0.35 %		-103,267
	Total		29,401,705
<b>83 AHO Units</b>			
Capital Receipt			17,258,400
Legal Fees	0.35 %		-60,404
	Total		17,197,996
<b>Construction Costs</b>			
Construct 222 apartments	12,900.00 sq m at	1,370.00 psm	-17,673,000
Construct 778 houses	72,109.00 sq m at	1,136.00 psm	-81,915,824
Construct Garages	7,560.00 sq m at	600.00 psm	-4,536,000
Policy - water	1,000.00 units at	9.00	-9,000
Policy - energy	1,000.00 units at	5,000.00	-5,000,000
Policy - access 20% of homes	200.00 units at	1,400.00	-280,000
External Works		30.00 %	-32,824,147
Contingency		3.00 %	-3,282,415
Professional Fee		10.00 %	-10,941,382
	Total		-156,461,768
<b>Planning Policy Payments</b>			
Visitor Policy	1,000.00 units at	205.00 a	-205,000
Nutrient Neutrality Tariff (Market)	667.00 units at	5,000.00 a	-3,335,000
Nutrient Neutrality Tariff (ART 1)	62.50 units at	5,000.00 a	-312,500
Nutrient Neutrality Tariff (ART 2)	62.50 units at	5,000.00 a	-312,500
Nutrient Neutrality Tariff (ART 3)	62.50 units at	5,000.00 a	-312,500
Nutrient Neutrality Tariff (ART 4)	62.50 units at	5,000.00 a	-312,500
Nutrient Neutrality Tariff (AHO)	83.00 units at	5,000.00 a	-415,000
CIL - payment 1 15%			-1,208,368
CIL - payment 2 15%			-1,208,368
CIL - payment 3 20%			-1,611,157
CIL - payment 4 50%			-4,027,893
PC - formal land pur (nil on site)			-1
PC - formal equip (nil on site)			-1
PC - formal maintenance (100%)			-607,166
PC - formal allotments (100%)			-26,447
PC - informal land purchase (100%)			-546,708
PC - informal equip & main (100%)			-1,243,393
	Total		-15,684,502
<b>Other Outgoings</b>			
Marketing Showrooms	10.00 units at	50,000.00 a	-500,000
	Total		-500,000
<b>Notional Land Purchase</b>			
Benchmark Land Value	40.00 hectares at	250,000.00	-10,000,000
SDLT			-489,500
Professional Fees		1.25 %	-131,119
	Total		-10,620,619
<b>Developers Profit on GDV</b>			
Market @ 17.5%			-32,184,705
AHO @ 6%			-1,035,504
ART @ 6%			-1,770,298
	Total		-34,990,507
<b>Debt Interest - Overall</b>			
Charged Quarterly	100.00 % of Cost	-221,179,757	(8.19% Used)
Compounded Quarterly	6.00 %pa	Interest	-3,988,288
Accrual Interest	0.00 %pa (apr)	Accrual Intr.	0
	Revenue		230,675,972
	Outgoings		-225,168,044
	<b>Surplus</b>		<b>5,507,928</b>

**8 Market Units**

Capital Receipt		2,433,000
Direct Sale Fees	1.50 %	-36,495
Direct Sale Legal Fees	0.25 %	-6,083
	<b>Total</b>	<b>2,390,423</b>

**3 ART Units**

RSL Payment 1 - 100% Capital Receipt		358,110
Legal Fees	0.35 %	-1,253
	<b>Total</b>	<b>356,857</b>

**1 AHO Units**

Capital Receipt		183,675
Legal Fees	0.35 %	-643
	<b>Total</b>	<b>183,032</b>

**Construction Costs**

Construct 12 houses	1,153.00 sq m at	1,128.00 psm	-1,300,584
Construct Garages	168.00 sq m at	600.00 psm	-100,800
Policy - water	12.00 units at	9.00	-108
Policy - energy	12.00 units at	5,000.00	-60,000
Policy - access 20% of homes	2.40 units at	1,400.00	-3,360
External Works		20.00 %	-292,970
Contingency		3.00 %	-43,946
Professional Fee		10.00 %	-146,485
		<b>Total</b>	<b>-1,948,253</b>

**Planning Policy Payments**

Visitor Policy	12.00 units at	205.00 a	-2,460
Nutrient Neutrality Tariff (Market)	8.00 units at	7,000.00 a	-56,000
Nutrient Neutrality Tariff (ART)	3.00 units at	7,000.00 a	-21,000
Nutrient Neutrality Tariff (AHO)	1.00 units at	7,000.00 a	-7,000
CIL - payment 1 25%			-19,774
CIL - payment 2 75%			-59,323
PC - informal land purchase			-7,194
PC - informal equip & maintenance			-16,361
PC - formal land purchase			-8,992
PC - formal equipping & maintenance			-17,394
		<b>Total</b>	<b>-215,498</b>

**Notional Land Purchase**

Benchmark Land Value	0.50 hectares at	500,000.00	-250,000
SDLT			-2,000
Professional Fees		1.25 %	-3,150
		<b>Total</b>	<b>-255,150</b>

**Other Outgoings**

Market Developers Profit at 20%		-486,600
AHO Developers Profit at 6%		-11,021
ART Developers Profit at 6%		-21,487
	<b>Total</b>	<b>-519,108</b>

Debt Interest - Overall	100.00 % of Cost	-2,982,483	(31.28% Used)
Charged Quarterly			

Compounded Quarterly	6.00 %pa	Interest	-28,121
		Revenue	2,974,785
		Outgoings	-3,010,604
		<b>Deficit</b>	<b>-35,819</b>

**13 Market Units**

Capital Receipt			3,829,400
Direct Sale Fees		1.50 %	-57,441
Direct Sale Legal Fees		0.25 %	-9,574
		<b>Total</b>	<b>3,762,386</b>

**5 ART Units**

RSL Payment 1 - 50% Capital Receipt			269,730
RSL Payment 2 - 50% Capital Receipt			269,730
Legal Fees		0.35 %	-1,888
		<b>Total</b>	<b>537,572</b>

**2 AHO Units**

Capital Receipt			426,750
Legal Fees		0.35 %	-1,494
		<b>Total</b>	<b>425,256</b>

**Construction Costs**

Construct 20 houses	1,789.00 sq m at	1,146.00 psm	-2,050,194
Construct Garages	189.00 sq m at	600.00 psm	-113,400
Policy - water	20.00 units at	9.00	-180
Policy - energy	20.00 units at	5,000.00	-100,000
Policy - access 20% of homes	4.00 units at	1,400.00	-5,600
External Works		20.00 %	-453,875
Contingency		3.00 %	-68,081
Professional Fee		10.00 %	-226,937
		<b>Total</b>	<b>-3,018,267</b>

**Planning Policy Payments**

Visitor Policy	20.00 units at	205.00 a	-4,100
Nutrient Neutrality Tariff (Market)	13.00 units at	7,000.00 a	-91,000
Nutrient Neutrality Tariff (ART P1)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (ART P2)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (AHO)	2.00 units at	7,000.00 a	-14,000
CIL - payment 1 25%			-29,857
CIL - payment 2 75%			-89,572
PC - informal land purchase			-11,232
PC - informal equip & maintenance			-25,546
PC - formal land purchase			-14,040
PC - formal equipping & maintenance			-27,162
		<b>Total</b>	<b>-341,509</b>

**Notional Land Purchase**

Benchmark Land Value	0.71 hectares at	500,000.00	-355,000
SDLT			-7,250
Professional Fees inc Bank		1.25 %	-4,528
		<b>Total</b>	<b>-366,778</b>

**Developers Profit on GDV**

Market at 20%			-765,880
AHO at 6%			-25,605
ART at 6%			-32,368
		<b>Total</b>	<b>-823,853</b>

Debt Interest - Overall	100.00 % of Cost	-4,620,804	(39.43% Used)
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Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-68,038
	46	Revenue	4,795,610
		Outgoings	-4,688,842

<b>Surplus</b>	<b>106,768</b>
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**13 Market Units**

Capital Receipt			3,866,400
Direct Sale Fees		1.50 %	-57,996
Direct Sale Legal Fees		0.25 %	-9,666
		<b>Total</b>	<b>3,798,738</b>

**5 ART Units**

RSL Payment 1 - 50% Capital Reciept			287,820
RSL Payment 2 - 50% Capital Reciept			287,820
Legal Fees		0.35 %	-2,015
		<b>Total</b>	<b>573,625</b>

**2 AHO Units**

Capital Receipt			426,600
Legal Fees		0.35 %	-1,493
		<b>Total</b>	<b>425,107</b>

**Construction Costs**

Construct 4 apartments	240.00 sq m at	1,403.00 psm	-336,720
Construct 16 houses	1,379.00 sq m at	1,116.00 psm	-1,538,964
Policy - water	20.00 units at	9.00	-180
Policy - energy	20.00 units at	5,000.00	-100,000
Policy - access 20% of homes	4.00 units at	1,400.00	-5,600
External Works		20.00 %	-396,293
Contingency		3.00 %	-59,444
Professional Fee		10.00 %	-198,146
		<b>Total</b>	<b>-2,635,347</b>

**Planning Policy Payments**

Visitor Policy	20.00 units at	205.00 a	-4,100
Nutrient Neutrality Tariff (Market)	13.00 units at	7,000.00 a	-91,000
Nutrient Neutrality Tariff (ART P1)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (ART P2)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (AHO)	2.00 units at	7,000.00 a	-14,000
CIL - payment 1 25%			-35,282
CIL - payment 2 75%			-105,847
PC - informal land purchase			-10,222
PC - informal equip & maintenance			-23,251
PC - formal land purchase			-12,778
PC - formal equipping & maintenance			-24,727
		<b>Total</b>	<b>-356,207</b>

**Notional Land Purchase**

Benchmark Land Value	0.27 hectares at	2,407,407.00	-650,000
SDLT			-22,000
Professional Fees		1.25 %	-8,400
		<b>Total</b>	<b>-680,400</b>

**Developers Profit on GDV**

Market at 20%			-773,280
AHO at 6%			-25,596
ART at 6%			-34,538
		<b>Total</b>	<b>-833,414</b>

<b>Debt Interest - Overall</b>	<b>100.00 % of Cost</b>	<b>-4,576,538</b>	<b>(40.95% Used)</b>
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-74,131
	<b>47</b>	Revenue	4,868,640
		Outgoings	-4,650,669
		<b>Surplus</b>	<b>217,971</b>

**36 Market Units**

Capital Receipt			11,236,800
Direct Sale Fees	1.25 %		-140,460
Direct Sale Legal Fees	0.25 %		-28,092
	Total		11,068,248

**10 ART Units**

RSL Payment 1 - 25% Capital Receipt			251,168
RSL Payment 2 - 25% Capital Receipt			251,168
RSL Payment 4 - 25% Capital Receipt			251,168
RSL Payment 4 - 25% Capital Receipt			251,168
Legal Fees	0.35 %		-3,516
	Total		1,001,156

**4 AHO Units**

Capital Receipt			700,350
Legal Fees	0.35 %		-2,451
	Total		697,899

**Construction Costs**

Construct 8 flats	400.00 sq m at	1,403.00 psm	-561,200
Construct 42 houses	3,686.00 sq m at	1,116.00 psm	-4,113,576
Construct 16 Garages	336.00 sq m at	600.00 psm	-201,600
Policy - water	50.00 units at	9.00	-450
Policy - energy	50.00 units at	5,000.00	-250,000
Policy - access 20% of homes	10.00 units at	1,400.00	-14,000
External Works		20.00 %	-1,028,165
Contingency		3.00 %	-154,225
Professional Fee		10.00 %	-514,083
		Total	-6,837,299

**Plannning Policy Payments**

Visitor Policy	50.00 units at	205.00 a	-10,250
Nutrient Neutrality Tariff (Market)	36.00 units at	7,000.00 a	-252,000
Nutrient Neutrality Tariff (ART 1)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (ART 2)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (ART 3)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (ART 4)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (AHO)	4.00 units at	7,000.00 a	-28,000
CIL - payment 1 25%			-97,013
CIL - payment 2 75%			-291,038
PC - informal land purchase			-32,813
PC - informal equip & maintenance			-63,492
PC - formal land purchase			-26,250
PC - formal equip & maintenance			-59,705
		Total	-930,561

**Other Outgoings**

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		Total	-50,000

**Notional Land Purchase**

BLV at EUV plus 30%	1.00 hectares at	2,407,407.00	-2,407,407
SDLT			-109,870
Professional Fees		1.25 %	-31,466
		Total	-2,548,743

**Developers Profit on GDV**

Market @ 20%			-2,247,360
AHO @ 6%			-42,021
ART @ 6%			-60,280
		Total	-2,349,661

Debt Interest - Overall	100.00 % of Cost	-12,890,783	(39.76% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-388,959



Revenue	12,941,822
Outgoings	-13,279,742
<b>Deficit</b>	<b>-337,920</b>

**14 Market Units**

Capital Receipt			3,577,000
Direct Sale Fees		1.50 %	-53,655
Dircet Sale Legal Fees		0.25 %	-8,943
		Total	3,514,403

**5 ART Units**

RSL Payment 1 - 50% Capital Reciept			210,938
RSL Payment 2 - 50% Capital Reciept			210,938
Legal Fees		0.35 %	-1,477
		Total	420,399

**1 AHO Units**

Capital Receipt			140,625
Legal Fees		0.35 %	-492
		Total	140,133

**Construction Costs**

Brownfeild Allowance			-100,000
Construct 20 apartments	1,280.00 sq m at	1,403.00 psm	-1,795,840
Policy - water	20.00 units at	9.00	-180
Policy - energy	20.00 units at	5,000.00	-100,000
Policy - access 20% of homes	4.00 units at	1,400.00	-5,600
External Works		15.00 %	-300,243
Contingency		3.00 %	-60,049
Professional Fee		10.00 %	-200,162
		Total	-2,562,074

**Planning Policy Payments**

Visitor Policy	20.00 units at	205.00 a	-4,100
Nutrient Neutrality Tariff (Market)	14.00 units at	7,000.00 a	-98,000
Nutrient Neutrality Tariff (ART P1)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (ART P2)	2.50 units at	7,000.00 a	-17,500
Nutrient Neutrality Tariff (AHO)	1.00 units at	7,000.00 a	-7,000
CIL - payment 1 25%			-28,796
CIL - payment 2 75%			-86,389
PC - informal land purchase			-9,339
PC - informal equip & maintenance			-21,244
PC - formal land purchase			-11,674
PC - formal equipping & maintenance			-22,599
		Total	-324,141

**Notional Land Purchase**

Benchmark Land Value	0.25 hectares at	3,120,000.00	-780,000
SDLT			-28,500
Professional Fees		1.25 %	-10,106
		Total	-818,606

**Developers Profit on GDV**

Market at 20%			-715,400
AHO at 6%			-8,438
ART at 6%			-25,313
		Total	-749,151

Debt Interest - Overall	100.00 % of Cost	-4,518,538	(45.96% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-100,173
	50	Revenue	4,139,501
		Outgoings	-4,618,712

<b>Deficit</b>	<b>-479,211</b>
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**40 Market Units**

Capital Receipt			11,176,250
Direct Sale Fees		1.25 %	-139,703
Direct Sale Legal Fees		0.25 %	-27,941
		<b>Total</b>	<b>11,008,606</b>

**7 ART Units**

RSL Payment 1 - 25% Capital Receipt			295,313
RSL Payment 2 - 25% Capital Receipt			295,313
Legal Fees		0.35 %	-2,067
		<b>Total</b>	<b>588,559</b>

**3 AHO Units**

Capital Receipt			574,875
Legal Fees		0.35 %	-2,012
		<b>Total</b>	<b>572,863</b>

**Construction Costs**

Demolition			-200,000
Construct 50 apartments	3,632.00 sq m at	1,403.00 psm	-5,095,696
Policy - water	50.00 units at	9.00	-450
Policy - energy	50.00 units at	5,000.00	-250,000
Policy - access 20% of homes	10.00 units at	1,400.00	-14,000
External Works		20.00 %	-1,112,029
Contingency		3.00 %	-166,804
Professional Fee		10.00 %	-556,015
		<b>Total</b>	<b>-7,394,994</b>

**Plannning Policy Payments**

Visitor Policy	50.00 units at	205.00 a	-10,250
Nutrient Neutrality Tariff (Market)	40.00 units at	7,000.00 a	-280,000
Nutrient Neutrality Tariff (ART 1)	3.50 units at	7,000.00 a	-24,500
Nutrient Neutrality Tariff (ART 2)	3.50 units at	7,000.00 a	-24,500
Nutrient Neutrality Tariff (AHO)	3.00 units at	7,000.00 a	-21,000
CIL - payment 1 25%			-91,757
CIL - payment 2 75%			-275,270
PC - informal			-86,781
PC - formal			-97,231
		<b>Total</b>	<b>-911,289</b>

**Other Outgoings**

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		<b>Total</b>	<b>-50,000</b>

**Notional Land Purchase**

BLV at EUV +20%	0.50 hectares at	2,880,000.00	-1,440,000
SDLT			-62,500
Professional Fees		1.25 %	-18,781
		<b>Total</b>	<b>-1,521,281</b>

**Developers Profit on GDV**

Market @ 20%			-2,235,250
AHO @ 6%			-34,493
ART @ 6%			-35,438
		<b>Total</b>	<b>-2,305,181</b>

Debt Interest - Overall	100.00 % of Cost	-12,354,468	(36.14% Used)
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Charged Quarterly			
Compounded Quarterly	5.00 %pa	Interest	-317,480

Revenue	12,341,751
Outgoings	-12,671,948

<b>Deficit</b>	<b>-330,197</b>
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### 34 Market Units

Capital Receipt			10,436,400
Direct Sale Fees	1.25 %		-130,455
Direct Sale Legal Fees	0.25 %		-26,091
	Total		10,279,854

### 12 ART Units

RSL Payment 1 - 25% Capital Receipt			388,103
RSL Payment 2 - 25% Capital Receipt			388,103
RSL Payment 3 - 25% Capital Receipt			388,103
RSL Payment 4 - 25% Capital Receipt			388,103
Legal Fees	0.35 %		-5,433
	Total		1,546,979

### 4 AHO Units

Capital Receipt			853,500
Legal Fees	0.35 %		-2,987
	Total		850,513

### Construction Costs

Construct 50 houses	4,859.00 sq m at	1,146.00 psm	-5,568,414
Construct Garages	651.00 sq m at	600.00 psm	-390,600
Policy - water	50.00 units at	9.00	-450
Policy - energy	50.00 units at	5,000.00	-250,000
Policy - access 20% of homes	10.00 units at	1,400.00	-14,000
External Works		20.00 %	-1,244,693
Contingency		3.00 %	-186,704
Professional Fee		10.00 %	-622,346
		Total	-8,277,207

### Plannning Policy Payments

Visitor Policy	50.00 units at	205.00 a	-10,250
Nutrient Neutrality Tariff (Market)	34.00 units at	7,000.00 a	-238,000
Nutrient Neutrality Tariff (ART 1)	3.00 units at	7,000.00 a	-21,000
Nutrient Neutrality Tariff (ART 2)	3.00 units at	7,000.00 a	-21,000
Nutrient Neutrality Tariff (ART 3)	3.00 units at	7,000.00 a	-21,000
Nutrient Neutrality Tariff (ART 4)	3.00 units at	7,000.00 a	-21,000
Nutrient Neutrality Tariff (AHO)	4.00 units at	7,000.00 a	-28,000
CIL - payment 1 25%			-123,097
CIL - payment 2 75%			-369,291
PC - informal land purchase			-29,279
PC - informal equip & maintenance			-66,589
PC - formal land purchase			-36,599
PC - formal equip & maintenance			-70,791
		Total	-1,055,896

### Other Outgoings

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		Total	-50,000

### Notional Land Purchase

Benchmark Land Value	2.02 hectares at	437,500.00	-883,750
SDLT			-33,688
Professional Fees		1.25 %	-11,468
		Total	-928,906

### Developers Profit on GDV

Market @ 17.5%			-1,826,370
AHO @ 6%			-51,210
ART @ 6%			-93,145
		Total	-1,970,725

Debt Interest - Overall	100.00 % of Cost	-12,447,701	(30.18% Used)
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Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-243,433
		Revenue	12,842,312
		Outgoings	-12,691,134
		<b>Surplus</b>	<b>151,178</b>

## 50 Market Units

Capital Receipt		14,481,600
Direct Sale Fees	1.25 %	-181,020
Direct Sale Legal Fees	0.25 %	-36,204
	Total	14,264,376

## 19 ART Units

RSL Payment 1 - 25% Capital Receipt		527,423
RSL Payment 2 - 25% Capital Receipt		527,423
RSL Payment 3 - 25% Capital Receipt		527,423
RSL Payment 4 - 25% Capital Receipt		527,423
Legal Fees	0.35 %	-7,384
	Total	2,102,308

## 6 AHO Units

Capital Receipt dwellings		1,252,200
Legal Fees	0.35 %	-4,383
	Total	1,247,817

## Construction Costs

Construct 10 apartments	600.00 sq m at	1,370.00 psm	-822,000
Construct 65 houses	5,876.00 sq m at	1,136.00 psm	-6,675,136
Construct Garages	714.00 sq m at	600.00 psm	-428,400
Policy - water	75.00 units at	9.00	-675
Policy - energy	75.00 units at	5,000.00	-375,000
Policy - access 20% of homes	75.00 units at	1,400.00	-105,000
External Works		20.00 %	-1,681,242
Contingency		3.00 %	-252,186
Professional Fee		10.00 %	-840,621
		Total	-11,180,261

## Planning Policy Payments

Visitor Policy	75.00 units at	205.00 a	-15,375
Nutrient Neutrality Tariff (Market)	50.00 units at	7,000.00 a	-350,000
Nutrient Neutrality Tariff (ART 1)	4.75 units at	7,000.00 a	-33,250
Nutrient Neutrality Tariff (ART 1)	4.75 units at	7,000.00 a	-33,250
Nutrient Neutrality Tariff (ART 1)	4.75 units at	7,000.00 a	-33,250
Nutrient Neutrality Tariff (ART 1)	4.75 units at	7,000.00 a	-33,250
Nutrient Neutrality Tariff (AHO)	6.00 units at	7,000.00 a	-42,000
CIL - payment 1 25%			-161,091
CIL - payment 2 75%			-483,273
PC - informal land purchase			-48,840
PC - informal equip & maintenance			-111,061
PC - formal land purchase			-50,796
PC - formal equipping & maintenance			-98,252
		Total	-1,493,688

## Other Outgoings

Marketing Showrooms	1.00 units at	50,000.00 a	-50,000
		Total	-50,000

## Notional Land Purchase

Benchmark Land Value	3.04 hectares at	437,500.00	-1,330,000
SDLT			-56,000
Professional Fees inc Bank		1.25 %	-17,325
		Total	-1,403,325

## Developers Profit on GDV

Developers' Profit on CDV	
Market @ 17.5%	-2,534,280
AHO at 6%	-75,132
ART @ 6%	-126,581
Total	-2,735,993

Debt Interest - Overall	100.00 % of Cost	-17,092,257	(24.12% Used)
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Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-270,741
Profit/Cost	2.77%	Revenue	17,843,492
Profit/Revenue	2.69%	Outgoings	-17,362,998
IRR Excl.Intr	17.64%pa	Profit	480,494

**72 Market Units**

Capital Receipt			18,052,400
Direct Sale Fees		1.25 %	-225,655
Direct Sale Legal Fees		0.25 %	-45,131
		Total	17,781,614

**22 ART Units**

RSL Payment 1 - 25% Capital Receipt			457,875
RSL Payment 2 - 25% Capital Receipt			457,875
RSL Payment 3 - 25% Capital Receipt			457,875
RSL Payment 4 - 25% Capital Receipt			457,875
Legal Fees		0.35 %	-6,410
		Total	1,825,090

**6 AHO Units**

Capital Receipt			1,134,000
Legal Fees		0.35 %	-3,969
		Total	1,130,031

**Construction Costs**

Brownfeild Allowance			-200,000
Construct 100 apartments	6,504.00 sq m at	1,552.00 psm	-10,094,208
Policy - water	100.00 units at	9.00	-900
Policy - energy	100.00 units at	5,000.00	-500,000
Policy - access 20% of homes	20.00 units at	1,400.00	-28,000
External Works		20.00 %	-2,164,622
Contingency		3.00 %	-324,693
Professional Fee		10.00 %	-1,082,311
		Total	-14,394,734

**Planning Policy Payments**

Visitor Policy	100.00 units at	205.00 a	-20,500
Nutrient Neutrality Tariff (Market)	72.00 units at	7,000.00 a	-504,000
Nutrient Neutrality Tariff (ART 1)	5.50 units at	7,000.00 a	-38,500
Nutrient Neutrality Tariff (ART 2)	5.50 units at	7,000.00 a	-38,500
Nutrient Neutrality Tariff (ART 3)	5.50 units at	7,000.00 a	-38,500
Nutrient Neutrality Tariff (ART 4)	5.50 units at	7,000.00 a	-38,500
Nutrient Neutrality Tariff (AHO)	6.00 units at	7,000.00 a	-42,000
CIL - payment 1 25%			-143,206
CIL - payment 2 75%			-429,618
PC - informal land purchase			-47,957
PC - informal equip & maintenance			-109,051
PC - formal land purchase			-59,946
PC - formal equip & maintenance			-115,931
		Total	-1,626,209

**Other Outgoings**

Marketing Showrooms	2.00 units at	50,000.00 a	-100,000
		Total	-100,000

**Notional Land Purchase**

Benchmark Land Value	0.50 hectares at	2,600,000.00	-1,300,000
SDLT			-54,500
Professional Fees		1.25 %	-16,931
		Total	-1,371,431

**Developers Profit on GDV**

Market @ 17.5%			-3,159,170
AHO @ 6%			-68,040
ART @ 6%			-109,890
		Total	-3,337,100

Debt Interest - Overall	100.00 % of Cost	-21,110,639	(21.71% Used)
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Charged Quarterly			
Compounded Quarterly	5.50 %pa	Interest	-541,028
		Revenue	21,017,900
		Outgoings	-21,651,667
		<b>Deficit</b>	<b>-633,767</b>



### 67 Market Units

Capital Receipt		19,588,250
Direct Sale Fees	1.25 %	-244,853
Direct Sale Legal Fees	0.25 %	-48,971
	<b>Total</b>	<b>19,294,426</b>

### 25 ART Units

Payment 1 - 25% Capital Receipt		731,745
Payment 2 - 25% Capital Receipt		731,745
Payment 3 - 25% Capital Receipt		731,745
Payment 4 - 25% Capital Receipt		731,745
Legal Fees	0.35 %	-10,244
	<b>Total</b>	<b>2,916,736</b>

### 8 AHO Units

Capital Receipt		1,734,150
Legal Fees	0.35 %	-6,070
	<b>Total</b>	<b>1,728,080</b>

### Construction Costs

Construct 10 apartments	540.00 sq m at	1,370.00 psm	-739,800
Construct 90 houses	8,305.00 sq m at	1,136.00 psm	-9,434,480
Construct Garages	882.00 sq m at	600.00 psm	-529,200
Policy - water	100.00 units at	9.00	-900
Policy - energy	100.00 units at	5,000.00	-500,000
Policy - access 20% of homes	20.00 units at	1,400.00	-28,000
External Works		25.00 %	-2,808,095
Contingency		3.00 %	-336,971
Professional Fee		10.00 %	-1,123,238
		<b>Total</b>	<b>-15,500,684</b>

### Planning Policy Payments

Visitor Policy	100.00 units at	205.00 a	-20,500
Nutrient Neutrality Tariff (Market)	67.00 units at	7,000.00 a	-469,000
Nutrient Neutrality Tariff (ART 1)	6.25 units at	7,000.00 a	-43,750
Nutrient Neutrality Tariff (ART 2)	6.25 units at	7,000.00 a	-43,750
Nutrient Neutrality Tariff (ART 3)	6.25 units at	7,000.00 a	-43,750
Nutrient Neutrality Tariff (ART 4)	6.25 units at	7,000.00 a	-43,750
Nutrient Neutrality Tariff (AHO)	8.00 units at	7,000.00 a	-56,000
CIL - payment 1 25%			-215,916
CIL - payment 2 75%			-647,747
PC - formal land purchase (50%)			-35,021
PC - formal equipment (50%)			-35,277
PC - formal maintenance (100%)			-62,233
PC - formal allotments (100%)			-2,706
PC - informal land purchase (100%)			-56,034
PC - informal equip & main (100%)			-127,439
		<b>Total</b>	<b>-1,902,873</b>

### Other Outgoings

Marketing Showrooms	2.00 units at	50,000.00 a	-100,000
		<b>Total</b>	<b>-100,000</b>

### Notional Land Purchase

Benchmark Land Value	4.05 hectares at	437,500.00	-1,771,875
SDLT			-78,094
Professional Fee		1.25 %	-23,125
		<b>Total</b>	<b>-1,873,094</b>

### Developers Profit on GDV

Market @ 17.5%		-3,427,944
AHO @ 6%		-104,049
ART @ 6%		-175,619
	<b>Total</b>	<b>-3,707,612</b>

Debt Interest - Overall	100.00 % of Cost	-23,394,401	(21.44% Used)
Charged Quarterly			
Compounded Quarterly	6.57 %pa	Interest	-513,712

Revenue	24,249,380
Outgoings	-23,908,112

**Surplus 341,268**

**167 Market Units**

Capital Receipt		48,285,200
Direct Sale Fees	1.25 %	-603,565
Direct Sale Legal Fees	0.50 %	-241,426
	<b>Total</b>	<b>47,440,209</b>

**62 ART Units**

RSL Payment 1 - 25% Capital Receipt		1,831,883
RSL Payment 2 - 25% Capital Receipt		1,831,883
RSL Payment 3 - 25% Capital Receipt		1,831,883
RSL Payment 4 - 25% Capital Receipt		1,831,883
Legal Fees	0.35 %	-25,646
	<b>Total</b>	<b>7,301,886</b>

**21 AHO Units**

Capital Receipt		4,409,550
Direct Sale Fees	0.35 %	-15,433
	<b>Total</b>	<b>4,394,117</b>

**Construction Costs**

Construct 26 apartments	1,500.00 sq m at	1,370.00 psm	-2,055,000
Construct 224 houses	20,749.00 sq m at	1,136.00 psm	-23,570,864
Construct Garages	2,268.00 sq m at	600.00 psm	-1,360,800
Policy - water	250.00 units at	9.00	-2,250
Policy - energy	250.00 units at	5,000.00	-1,250,000
Policy - access 20% of homes	50.00 units at	1,400.00	-70,000
External Works		25.00 %	-7,077,229
Contingency		3.00 %	-849,267
Professional Fee		10.00 %	-2,830,891
		<b>Total</b>	<b>-39,066,301</b>

**Planning Policy Payments**

Visitor Policy	250.00 units at	205.00 a	-51,250
Nutrient Neutrality Tariff (Market)	167.00 units at	7,000.00 a	-1,169,000
Nutrient Neutrality Tariff (ART1)	15.50 units at	7,000.00 a	-108,500
Nutrient Neutrality Tariff (ART2)	15.50 units at	7,000.00 a	-108,500
Nutrient Neutrality Tariff (ART3)	15.50 units at	7,000.00 a	-108,500
Nutrient Neutrality Tariff (ART4)	15.50 units at	7,000.00 a	-108,500
Nutrient Neutrality Tariff (AHO)	21.00 units at	7,000.00 a	-147,000
CIL - payment 1 20%			-434,057
CIL - payment 2 30%			-651,086
CIL - payment 3 50%			-1,085,142
PC - formal land purchase (50%)			-88,105
PC - formal equipment (50%)			-88,755
PC - formal maintenance (100%)			-156,566
PC - formal allotments (100%)			-6,803
PC - informal land purchase (100%)			-140,968
PC - informal equip & main (100%)			-320,611
		<b>Total</b>	<b>-4,773,343</b>

**Other Outgoings**

Marketing Showrooms	5.00 units at	50,000.00 a	-250,000
		<b>Total</b>	<b>-250,000</b>

**Notional Land Purchase**

Benchmark Land Value	10.12 hectares at	375,000.00	-3,795,000
SDLT			-179,250
Professional Fees		1.25 %	-49,678
		<b>Total</b>	<b>-4,023,928</b>

**Developers Profit on GDV**

Market @ 17.5%		-8,449,910
AHO @ 6%		-264,573
ART @ 6%		-439,652
	<b>Total</b>	<b>-9,154,135</b>

Debt Interest - Overall	100.00 % of Cost	-58,153,778	(11.19% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-668,831
		Revenue	60,022,282
		Outgoings	-58,822,609
		<b>Surplus</b>	<b>1,199,673</b>

**400 Market Units**

Capital Receipt			115,459,000
Direct Sale Fees	1.25 %		-1,443,238
Direct Sale Legal Fees	0.25 %		-288,648
	Total		113,727,115

**150 ART Units**

RSL Payment 1 - 25% Capital Receipt			4,467,375
RSL Payment 2 - 25% Capital Receipt			4,467,375
RSL Payment 3 - 25% Capital Receipt			4,467,375
RSL Payment 4 - 25% Capital Receipt			4,467,375
Legal Fees	0.35 %		-62,543
	Total		17,806,957

**50 AHO Units**

Capital Receipt			10,431,000
Legal Fees	0.35 %		-36,509
	Total		10,394,492

**Construction Costs**

Construct 90 apartments	5,800.00 sq m at	1,370.00 psm	-7,946,000
Construct 510 houses	47,385.00 sq m at	1,136.00 psm	-53,829,360
Construct Garages	8,190.00 sq m at	600.00 psm	-4,914,000
Policy - water	600.00 units at	9.00	-5,400
Policy - energy	600.00 units at	5,000.00	-3,000,000
Policy - access 20% of homes	120.00 units at	1,400.00	-168,000
External Works		30.00 %	-20,958,828
Contingency		3.00 %	-2,095,883
Professional Fee		10.00 %	-6,986,276
		Total	-99,903,747

**Planning Policy Payments**

Visitor Policy	600.00 units at	205.00 a	-123,000
Nutrient Neutrality Tariff (Market)	400.00 units at	7,000.00 a	-2,800,000
Nutrient Neutrality Tariff (ART 1)	37.50 units at	7,000.00 a	-262,500
Nutrient Neutrality Tariff (ART 2)	37.50 units at	7,000.00 a	-262,500
Nutrient Neutrality Tariff (ART 3)	37.50 units at	7,000.00 a	-262,500
Nutrient Neutrality Tariff (ART 4)	37.50 units at	7,000.00 a	-262,500
Nutrient Neutrality Tariff (AHO)	50.00 units at	7,000.00 a	-350,000
CIL - payment 1 15%			-746,717
CIL - payment 2 15%			-746,717
CIL - payment 3 20%			-995,622
CIL - payment 4 50%			-2,489,056
PC - formal land pur (nil on site)			-1
PC - formal equip (nil on site)			-1
PC - formal maintenance (100%)			-376,309
PC - formal allotments (100%)			-16,370
PC - informal land purchase (100%)			-338,853
PC - informal equip & main (100%)			-770,662
		Total	-10,803,308

**Other Outgoings**

Marketing Showrooms	6.00 units at	50,000.00 a	-300,000
		Total	-300,000

**Notional Land Purchase**

Benchmark Land Value	24.28 hectares at	250,000.00	-6,070,000
SDLT			-293,000
Professional Fees		1.25 %	-79,538
		Total	-6,442,538

**Developers Profit on GDV**

Market @ 17.5%			-20,205,325
AHO @ 6%			-625,860
ART @ 6%			-1,072,170
		Total	-21,903,355

Debt Interest - Overall	100.00 % of Cost	-141,183,884	(8.11% Used)
Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-2,265,385
		Revenue	143,759,500
		Outgoings	-143,449,269
		<b>Surplus</b>	<b>310,231</b>

**667 Market Units**

Capital Receipt		183,912,600
Direct Sale Fees	1.25 %	-2,298,908
Direct Sale Legal Fees	0.25 %	-459,782
	<b>Total</b>	<b>181,153,911</b>

**250 ART Units**

RSL Payment 1 - 25% Capital Receipt		7,376,243
RSL Payment 2 - 25% Capital Receipt		7,376,243
RSL Payment 3 - 25% Capital Receipt		7,376,243
RSL Payment 4 - 25% Capital Receipt		7,376,243
Legal Fees	0.35 %	-103,267
	<b>Total</b>	<b>29,401,705</b>

**83 AHO Units**

Capital Receipt		17,258,400
Legal Fees	0.35 %	-60,404
	<b>Total</b>	<b>17,197,996</b>

**Construction Costs**

Construct 222 apartments	12,900.00 sq m at	1,370.00 psm	-17,673,000
Construct 778 houses	72,109.00 sq m at	1,136.00 psm	-81,915,824
Construct Garages	7,560.00 sq m at	600.00 psm	-4,536,000
Policy - water	1,000.00 units at	9.00	-9,000
Policy - energy	1,000.00 units at	5,000.00	-5,000,000
Policy - access 20% of homes	200.00 units at	1,400.00	-280,000
External Works		30.00 %	-32,824,147
Contingency		3.00 %	-3,282,415
Professional Fee		10.00 %	-10,941,382
		<b>Total</b>	<b>-156,461,768</b>

**Planning Policy Payments**

Visitor Policy	1,000.00 units at	205.00 a	-205,000
Nutrient Neutrality Tariff (Market)	667.00 units at	7,000.00 a	-4,669,000
Nutrient Neutrality Tariff (ART 1)	62.50 units at	7,000.00 a	-437,500
Nutrient Neutrality Tariff (ART 2)	62.50 units at	7,000.00 a	-437,500
Nutrient Neutrality Tariff (ART 3)	62.50 units at	7,000.00 a	-437,500
Nutrient Neutrality Tariff (ART 4)	62.50 units at	7,000.00 a	-437,500
Nutrient Neutrality Tariff (AHO)	83.00 units at	7,000.00 a	-581,000
CIL - payment 1 15%			-1,208,368
CIL - payment 2 15%			-1,208,368
CIL - payment 3 20%			-1,611,157
CIL - payment 4 50%			-4,027,893
PC - formal land pur (nil on site)			-1
PC - formal equip (nil on site)			-1
PC - formal maintenance (100%)			-607,166
PC - formal allotments (100%)			-26,447
PC - informal land purchase (100%)			-546,708
PC - informal equip & main (100%)			-1,243,393
		<b>Total</b>	<b>-17,684,502</b>

**Other Outgoings**

Marketing Showrooms	10.00 units at	50,000.00 a	-500,000
		<b>Total</b>	<b>-500,000</b>

**Notional Land Purchase**

Benchmark Land Value	40.00 hectares at	250,000.00	-10,000,000
SDLT			-489,500
Professional Fees		1.25 %	-131,119
		<b>Total</b>	<b>-10,620,619</b>

**Developers Profit on GDV**

Market @ 17.5%			-32,184,705
AHO @ 6%			-1,035,504
ART @ 6%			-1,770,298
		Total	-34,990,507
Debt Interest - Overall	100.00 % of Cost	-223,179,757	(8.17%
Used)Charged Quarterly			
Compounded Quarterly	6.00 %pa	Interest	-4,136,009
Accrual Interest	0.00 %pa (apr)	Accrual Intr.	0
		Revenue	230,675,972
		Outgoings	-227,315,766
		<b>Surplus</b>	<b>3,360,206</b>