

**LAND AT UPPER COSMESTON FARM,  
LAVERNOCK ROAD,  
PENARTH**

**ENVIRONMENTAL STATEMENT - ADDENDUM**

**VOLUME 1: NON-TECHNICAL SUMMARY**

## 1.0 INTRODUCTION

- 1.1 The Welsh Government (the Applicant) submitted an outline planning application to the Vale of Glamorgan Council in October 2020, for residential development, a primary school, community space, and public open space (with all matters reserved other than access) on land at Upper Cosmeston Farm, Lavernock Road, Penarth. The planning application reference number is 2020/01170. The site measures approximately 25.2 hectares and is shown in Figure 1 of this non-technical summary (NTS).
- 1.2 An Environmental Statement (ES) was prepared on behalf of Welsh Government to accompany the outline planning application (ref. 2020/001170). An ES is a report of an Environmental Impact Assessment (EIA) undertaken under the EIA Regulations, which are contained in national law. Since the outline planning application was submitted in October 2020, the scheme design has been updated in response to discussions with the Local Planning Authority and their statutory consultees. The ES has therefore been updated by means of an addendum to reflect the amended scheme. The addendum does not replace the submitted ES but is intended to be read alongside that document in order to deal with the specific points highlighted by consultees. This non-technical summary (NTS) summarises the content and conclusions of the ES and the addendum to the ES.
- 1.3 A person who is minded to make an EIA application may ask the relevant local planning authority (LPA) to state their opinion as to the need for an ES (screening opinion) as well as the scope and level of detail of the information to be provided in the ES (scoping opinion). A request for a screening and scoping opinion was submitted to VOGC on the 20<sup>th</sup> December 2018 and VOGC issued its screening opinion to the Applicant on the 8<sup>th</sup> March 2019. Subsequently the VOGC issued its scoping opinion to the Applicant on the 5<sup>th</sup> April 2019. A copy of the screening opinion from VOGC is provided at Volume 3, Appendix 1.1 of the original ES while a copy of the scoping opinion from VOGC is provided at Volume 3, Appendix 1.2 of this ES.
- 1.4 The scope for the EIA was developed following the formal scoping opinion from The Vale of Glamorgan Council. Additionally, following the submission of the outline planning application, in light of the designation of the *Original house at Lower Cosmeston Farm* as a Grade II listed building on 15 October 2021, it was considered that a chapter on Heritage should be included within the ES (as opposed to a standalone Heritage Impact Assessment) to ensure that the environmental impact in heritage terms is fully assessed in line with the EIA regulations.

The key issues which are included in the content of the ES are as follows:-

- Landscape and Visual Impact;
  - Ecology;
  - Ground Conditions;
  - Transportation;
  - Air Quality;
  - Heritage.
- 1.5 The assessment described in the ES Addendum relates to the design of the scheme as it stands in June 2022. The ES is published in three volumes:
- Volume 1: Non-Technical Summary
  - Volume 2: Written Statement; and
  - Volume 3: Appendices to Written Statement

- 1.6 Environmental Impact Assessment was managed by Asbri Planning Ltd. with guidance from the professional consultant team and the applicant. A hard copy of the ES and ES Addendum, figures and appendices can be purchased for £250 each. A hard copy of the NTS can be purchased for £15 each. An electronic copy of the full ES can be purchased on CD for £15 each. All documents are available from:

Asbri Planning  
Unit 9, Oak Tree Court  
Mulberry Drive  
Cardiff Gate Business Park  
Cardiff  
CF23 8RS

- 1.7 The ES and the Addendum to the ES will be available for public viewing during normal office hours from:

The Vale of Glamorgan Council  
Planning Services  
Dock Offices  
Subway Road  
Barry  
CF63 4RT

01446 704656

[planning@valeofglamorgan.gov.uk](mailto:planning@valeofglamorgan.gov.uk)

## **2.0 THE EIA PROCESS**

- 2.1 EIA is a process which assesses the likely significant effects of a proposed development on the environment and the ES which reports those results.
- 2.2 The EIA has been undertaken, and the ES prepared, taking into account the appropriate legislation and guidance. The ES has also had due reference to specific discipline guidance as set out in each technical chapter and has also been informed by the experience and professional judgement of the design team.
- 2.3 The residual significance of impacts is assessed taking into account mitigation. A residual impact is any impact that would remain following the implementation of proposed mitigation measures and mitigation is the action of reducing the severity of significance of something.
- 2.4 Using these criteria, the significance of the impacts arising from the proposed development have been categorised (where appropriate) throughout the ES using a seven point scale, as follows:-
- Negligible;
  - Minor adverse;
  - Minor beneficial;
  - Moderate adverse;
  - Moderate beneficial;
  - Major adverse; and
  - Major beneficial.

- 2.5 Where the above criteria is not suitable a significance of impact criteria appropriate to the particular topic has been applied and this has been identified to the reader.
- 2.6 Impacts are assessed for all phases of the development. Construction impacts are considered to be temporary, short-term impacts which occur during the construction phase only. Permanent impacts are those long terms effects which would occur as a result of the proposed development once it is in operation. Direct impacts can include effects which are as a direct result of the scheme on a receptor. Indirect impacts can include effects off site as a result of a pathway to that receptor. These effects can also be considered as short term, long term, temporary or permanent impacts.
- 2.7 Each chapter has assessed the environmental impacts of the development along with other relevant developments and their associated environmental impacts from the outset of the preparation of the ES. These are known as cumulative impacts.

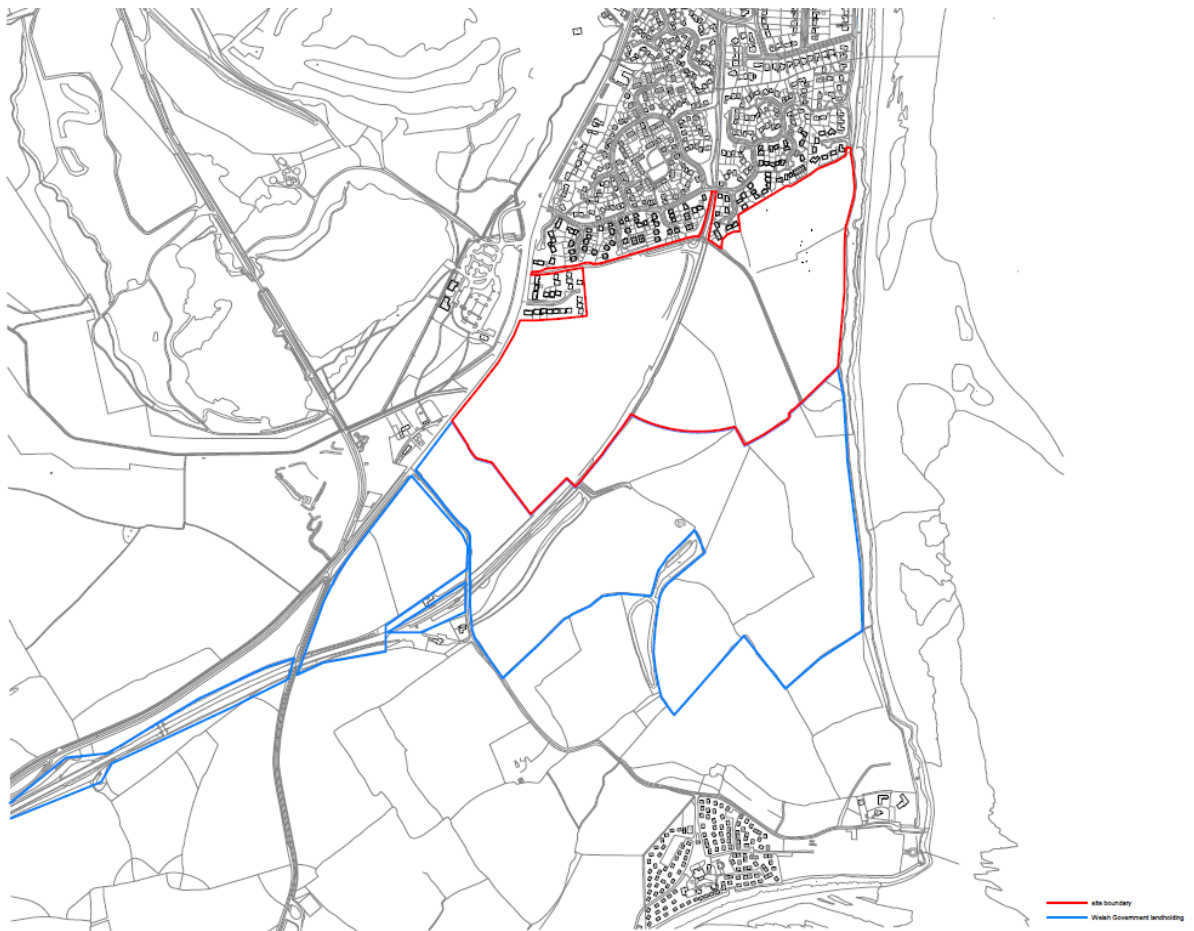
### **3.0 CUMULATIVE IMPACTS**

- 3.1 Cumulative impacts have been considered throughout the ES. The impacts considered include potential effects within this proposed development and also the potential effects of this proposal when combined with existing and/or approved projects. For robustness, OTHER allocations have been addressed cumulatively where appropriate. It is concluded that with appropriate mitigation / measures which will be implemented as part of this proposed development there are no unacceptable cumulative impacts.

### **4.0 SITE CONTEXT**

- 4.1 The Site is located on land at Upper Cosmeston Farm, Lavernock Road, Penarth. The site is bound to the north by residential properties, to the east by the cliff edge, to the west by Lavernock Road (B4267) with Cosmeston Lakes Country Park beyond and to the south by open countryside. The site is located within the administrative boundary of The Vale of Glamorgan Council.
- 4.2 The main transport routes that serve the local area are the B4267 (Lavernock Road) which runs north to south to the west of the site. The B4267 leads northwards through Penarth to the A4055 (Cardiff Road) which is a route into Cardiff and southwards through Sully also to the A4055 which is a route into Barry and Dinas Powys.
- 4.3 The site measures approximately 25.2 hectares and is approximately located at National Grid Reference 318221E, 169163N which is land at the southern edge of Cosmeston. The site is an irregular parcel of land with the majority of the site in agricultural use, comprising seven field parcels in arable use along with the buildings associated with Lower Cosmeston Farm, it also includes a mix of other uses and features including a section of disused railway line, part of the now dormant Lavernock Quarry, a former landfill site known as 'Cosmeston No.1 Old Tip, a number of access tracks and pockets and corridors of woodland/ vegetation. The topography of the site falls from east to west.

Figure 1 - Site Location Plan



4.4 There are no public rights of way located within the site but a segment of the Wales Coastal Path is located to the east of the site and travels north to south adjacent to the cliff edge. To the north of the site there is National Cycle Network 88 (NCN88) which terminates adjacent to Cosmeston Drive.

4.5 The main access to the site is gained via an access point located off Lavernock Road. Pedestrian only access to the site is available from the north via Cosmeston Drive.

## 5.0 PROJECT DESCRIPTION

5.1 The site measures approximately 25.2 hectares and is shown in Figure 1 of this NTS. The site has been allocated for residential development in the Vale of Glamorgan Local Development Plan (LDP) (reference MG24).

5.2 The description of the planning application is below:

‘Outline application for residential development, a primary school, community space and 1 ha of Public Open Space with all matters reserved other than access.’

5.3 Parameter plans have been prepared which identify the limit or scope of particular aspects of the development and are submitted in support of the planning application. These parameter plans set limits

or scope on building heights, land use and densities and green infrastructure. The proposed development will need to be built out in accordance with these general parameter plans. Access plans have also been prepared which seek to confirm the access as part of the application. As such access will not be a reserved matter.

- 5.4 The technical studies have informed these parameter plans and in turn a Concept Master plan has been produced for the whole site.

#### Concept Masterplan



## **6.0 LANDSCAPE AND VISUAL IMPACT**

### Introduction

- 6.1 The Environmental Dimension Partnership (EDP) has assessed the likely significant effects of the Proposed Development on the landscape and visual receptors. The assessment included a review of the baseline conditions at the EIA site and surroundings, the likely significant landscape and visual effects, the mitigation measures required to prevent, reduce or offset any significant adverse effects and the likely residual effects after these measures have been employed.



## Baseline

- 6.2 The Application site predominantly forms the allocated area of 'MG2 (24) Land at Upper Cosmeston Farm, Lavernock', identified within the VoGC LDP. The site is not within any national or locally designated landscapes, though two areas of the site do extend beyond the identified allocation and into an area of Green Wedge between Penarth and Sully. The Application Site comprises c. 25.2ha of agricultural and equestrian land (with associated buildings), bounded by the B4267 (Lavernock Road) to the west, the existing urban edge of Cosmeston to the north, the Wales Coastal Footpath and cliff-edge to the east and further agricultural land to the south. LANDMAP assesses the site to be of no more than local importance, with the site demonstrating general correlation with the characteristics identified. The site is also located in Landscape Character Area (LCA) No. 24 'Sully Ridge/Cosmeston', within the 'Vale of Glamorgan County Borough Council Designation of Landscape Character Areas' (August 2008) Landscape Character Assessment.
- 6.3 The site's undulating topographic context and the established presence of mixed deciduous mature vegetation, both within the site and its surrounding landscape, serve to contain and limit the extent of intervisibility between the site and its surrounding landscape context. Visibility to the site is still available, at least in part, from receptors including: Cosmeston Lake's Country Park and the B4267 to the west, the Wales Coastal Footpath, running north to south past the site's eastern boundary, the existing settlement edge of Cosmeston to the north, and PRow within the landscape to the west. In such views, existing built form of Cosmeston is a regular component, with the site considered to form a logical extension to the existing settlement, as supported by the allocation.

## Methodology

- 6.4 In accordance with best practice, the landscape and visual assessment has been undertaken in line with the 'Guidelines for Landscape and Visual Impact Assessment – Third Edition (LI/IEMA, 2013)' (GLVIA3) as relevant to EIA schemes.

## Summary of Likely Effects

- 6.4 In terms of likely effects on landscape character, the assessment finds that while the character of the site itself would inevitably change as a result of change of use from greenfield land to one of urban development, the residual (year 15) significant effects predicted would be contained to the landscape character of the Application Site itself. This is primarily due to the visual containment of the site within the wider landscape, and the limited extent to which the site contributes to the published landscape character areas. In addition, the fact that (where visible) the site is already seen in the context of existing settlement edge of Cosmeston reduces the anticipated scale of character change.
- 6.5 With regards to likely effects on views and visual amenity of receptors in publicly accessible locations, the assessment finds that there are potentially significant adverse effects (at Year 15) on receptors upon: the Wales Coastal footpath, adjacent to the site boundary and PRow routes on the hillside to the west. Such effects are largely driven by a combination of very high to high sensitivity, proximity of change in the case of the Coastal Footpath and elevation in the case of the western PRow routes
- 6.6 In addition, it is predicted that there would likely be significant effects on residential receptor groups, however the geographical spread of these effects are limited to those properties located directly adjacent to the Application site's northern boundary, and are unsurprising given the change of the Application Site from greenfield land to built form.

- 6.7 Nine photomontages are provided as part of the assessment to demonstrate the predicted visual presence of proposed development within the identified representative photoviewpoints.

#### Mitigation

- 6.8 The proposals are located within agricultural fields with existing mature tree and hedgerow vegetation both on and within their boundaries. These serve to break up and, in part, screen views of the Proposed Development – particularly in terms of the two tree belts which bisect the site. The Proposed Development is sensitively designed with a landscape led approach, and in an environment where it represents a component consistent with the immediate environment and the site landscape character presented.
- 6.9 Key landscape elements across the Application Site, notably the hedges and trees, will be retained where possible. Those landscape elements lost as a result of the proposals, however will be compensated with the provision of substantial landscaping through proposed tree and hedgerow planting, sustainable drainage features, and areas of public open greenspace. These elements in turn provide landscape and visual benefit through the breakup of overall perceived built form and assimilation of proposals into a currently well-treed landscape. It is apparent from the proposals that the site would benefit significantly from the scheme proposed in a number of ways; not least through the improvements to green infrastructure, which would encourage biodiversity, strengthen character features where retained and improve both pedestrian and ecological connectivity, whilst ensuring the long-term maintenance of existing key landscape features. Application boundaries abutting existing development will be sensitively treated so as to minimise effects on perceived character and on the visual amenity of adjacent residents
- 6.10 The above landscape and visual mitigation measures have been taken into account in the identification of environmental effects, where they are discussed in relation to the different receptors identified.

#### Summary

- 6.11 It would be very surprising for an urban extension of this scale upon a green field site to not to give rise to some predicted 'significant' effects. Receptors likely to experience residual significant impacts beyond year 15 are: the landscape character of the site itself, an unavoidable impact when converting a greenfield site to built form; residential properties directly adjacent to the site's northern boundary; and users of localised PRoW L1/4/2 and S13/2/1 upon hillsides to the west. All other significant impacts identified at Year 1 are anticipated to reduce successfully over time through appropriate material and design choices and the maturation of mitigation planting, being not significant by Year 15.
- 6.12 The Landscape and Visual assessment of the Application Site has informed the evolution of the proposed development of the Site. It demonstrates, as far as possible for an outline application, the extent to which sensitive layout and proposal of strategic planting in the masterplan can mitigate views, retain and reinforce the landscape fabric of the Site, and assimilates the Proposed Development into the landscape of the Site's context over time.
- 6.13 Accordingly, the LVIA concludes that the Site can accommodate the Proposed Development as proposed on the masterplan and, given the containment of significant effects, that there is no 'in principle' landscape or visual reason why the Application Site should not be developed.



## **7.0 ECOLOGY**

- 7.1 The Ecology chapter provides an assessment of the significance and consequences of potential ecological effects upon identified Important Ecological Features (IEFs) arising from the proposed residential development of Land at Upper Cosmeston Farm and has been prepared as part of an ES that accompanies an Outline Planning Application for residential purposes with all matters reserved other than access.
- 7.2 Avoidance, mitigation and compensation measures have been prepared as part of a holistic ecology strategy for the proposed development to address any potential significant effects that may arise during the construction (including demolition and remediation works) and operational phases of the proposed development. Additional measures to further ensure all residual effects are avoided, mitigated and compensated for, in addition to further enhancements recommended to enable the proposed development to deliver positive ecological gain, is also discussed.
- 7.3 The impact assessment has identified that certain actions could result in significant negative effects. Inherent avoidance, mitigation and compensation measures, to be delivered through the detailed design of the proposals at the Reserved Matters stage and through the implementation of an Ecological Construction Method Statement (ECMS), Ecology Management Plan (EMP) and future derogation licences approved by NRW, where appropriate, are therefore proposed. Such measures will ensure that residual effects identified are sufficiently ameliorated such that no significant adverse effects upon habitat and species IEFs are likely, with beneficial effects delivered to ensure biodiversity opportunities are maximised.
- 7.4 Based on the impact assessment and consideration of the IEFs, it is concluded that the proposals will conform to the respective legislative protection afforded to these IEFs and with respect to national and local planning policy requirements.

## **8.0 GROUND CONDITIONS**

- 8.1 Chapter 8 of the ES has been prepared by ESP Ltd on behalf of the Welsh Government. The chapter has assessed the likely significant effects of the proposed development on Ground Conditions and is accompanied by a Site Investigation Report.
- 8.2 The intrusive investigation was undertaken between 28th January and 21st February 2019 in accordance with BS5930:2015 and BS10175:2013, and was designed to investigate both geo-environmental and geotechnical hazards that may impact on the proposed Masterplan.
- 8.3 The ES chapter concluded that mitigation measures during construction should include:
- Good Site Management Practices in relation to the storage of materials
  - Wheel Washing facilities to minimise the tracking of material across the site
  - Use of PPE and good hygiene practices to protect construction workers
  - Gas monitoring to be undertaken before personnel enter any excavations
  - Impermeable membranes to be incorporated into building designs
  - Dust suppression measures during construction
  - Regular on-site inspections where required
- 8.4 The ES concluded that mitigation measures during occupation should include:
- Use of trenches to prevent migration of contaminants
  - Incorporation of gas protection measures where required.

- Any potential effects of ground contamination on building materials should be taken into account at design stage
- Water pipes should be from a material resistant to chemical attack
- Design of drainage system to remove contaminants

8.5 The report recommends further investigation to include:

- Completion of GW Monitoring and Preliminary CWRA
- Completion of gas monitoring
- Installation of skip tests
- Investigation of Area E should development be proposed in this area
- Additional sampling in all areas
- Investigation and testing in areas currently not accessible due to ecology
- Supplementary concrete class assessment.

8.6 Many, if not all, of the construction impacts can be substantially reduced or removed by adherence to good site practices. A number of occupational phase impacts are likely to create residual impacts and by implementing the above proposed mitigation measures these impacts should be kept to a minimum. It is concluded that with appropriate mitigation any potential impacts can be addressed and are not considered to be significant or likely to have a significant environmental effect on receptors.

## **9.0 TRANSPORTATION**

9.1 Chapter 9 of the ES has been prepared by Asbri Transport on behalf of the Welsh Government. The chapter has assessed the likely significant effects of the proposed development on Transportation and is accompanied by a Transport Assessment, which has been updated in June 2022.

9.2 The Transport Assessment includes a capacity analysis which indicates that with the exception of the Wesbourne Road junction, that there are no major issues on capacity identified on the majority of the junctions and that the local highway network can generally accommodate a residential development comprising 576 dwellings and a primary school.

9.3 As such the proposed development is also considered to be located within good access to public transport services with frequent services running from bus stops within the site's vicinity. The site is also sustainably located and is within walking distance of a number of facilities/ amenities and therefore reduces the need for private car- borne trips. The proposal has also given consideration to mitigation by providing a good level of active travel improvements.

## **10.0 AIR QUALITY**

10.1 Chapter 10 of the ES has been prepared by Air Quality Consultants on behalf of the Welsh Government. The chapter has assessed the likely significant effects of the proposed development on Air Quality and is accompanied by an Air Quality Assessment.

10.2 The Air Quality Assessment has assessed the impacts of the development during construction and during operation. It is considered that with appropriate mitigation any potential dust emissions during construction can be minimised. As such with the mitigation measures in place it is considered that any effects will be 'not significant'.

- 10.3 The assessment also considered operational impacts in terms of increased traffic emissions arising from the additional traffic on local roads, due to the development. Concentrations have been modelled for twenty-five worst-case receptors, representing existing properties where impacts are expected to be greatest. In addition, the impacts of traffic emissions from local roads on the air quality for future residents have been assessed at six worst-case locations within the new development itself. In the case of nitrogen dioxide, a sensitivity test has also been carried out which considers the potential under-performance of emissions control technology on future diesel cars and vans
- 10.4 It is concluded that concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> will remain below the objectives at all existing receptors in 2022, with or without the proposed development. This conclusion is consistent with the outcomes of the reviews and assessments prepared by Vale of Glamorgan Council, which show that exceedances of the PM<sub>10</sub> objective are unlikely at any location.
- 10.5 In the case of annual mean nitrogen dioxide, concentrations remain below the objective at all existing receptors in 2022, with or without the proposed development, and taking account of the sensitivity test.
- 10.6 The additional traffic generated by the proposed development will affect air quality at existing properties along the local road network. The assessment has demonstrated that the increases in annual mean concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> at relevant locations, relative to the objectives, are predicted to range from 0% to 3%, (when rounded) and the impacts will all be *negligible*. In the case of annual mean nitrogen dioxide, the percentage increases are predicted to range from 0% to 2%, and the impacts will all be *negligible*.
- 10.7 The effects of local traffic on the air quality for residents living in the proposed development have been shown to be acceptable at the worst-case locations assessed, with concentrations being well below the air quality objectives.
- 10.8 The overall operational air quality effects of the development are judged to be 'not significant'. This conclusion, which takes account of the uncertainties in future projections for nitrogen dioxide, is based on the concentrations at existing receptors being well below the objectives and impacts all being *negligible*, while concentrations for future residents of the development will be below the objectives.

## **11.0 HERITAGE**

- 11.1 Chapter 13 of the ES Addendum has been prepared by EDP Ltd on behalf of the Welsh Government. The chapter assesses the likely significant effects of the proposed development on heritage assets, and particularly the proposed development's likely effects upon the historic buildings of the Lower Cosmeston Farm complex in the south western corner, where the Original House on the north western side of the farmyard was designated as a Grade II listed building [ID 87852] by Cadw on 15 October 2021.
- 11.2 It is assessed that implementation of the proposed development would generate a small enhancement to the overall significance of the listed assets at the construction stage, where this would focus on improvements to the form and fabric.
- 11.3 It is considered that the proposed development would bring about substantive change within the assets' wider surroundings, particularly in terms of the construction of the school buildings to the south-east and the houses reaching up to three storeys in height to the north; it would still nevertheless represent no more than a minor adverse impact following completion, as the setting of these assets makes just a small contribution to their total significance.

- 11.4 Overall a 'small' loss of significance over the long term, resulting from substantive changes to the historic assets' setting, would be counter-balanced by the short-term enhancements in their standing form and fabric that would be generated during the construction stage.
- 11.5 Although these short and long term effects (which are not 'significant' in EIA terms) need to be evaluated and considered in the context of current legislation and planning policy for the conservation and management of the historic environment, it is clearly appropriate and reasonable to conclude that there is nothing in either the legislation or current national planning policy that would preclude the positive determination of the outline planning application for the site in terms of the heritage matters.
- 11.6 Consideration has been given to the potential for a cumulative impact between this Development and other proposed or committed development schemes located in the Site's wider surroundings. This exercise reaches the conclusion that the Development would have a cumulative impact with the Specialised School proposed for the land on the south side of Lower Cosmeston Farm, as this educational facility's construction is expected to give rise to an impact on the significance of the buildings through change within their setting and this would exacerbate the identified impact to the Original House and other historic buildings at Lower Cosmeston Farm following completion.

## **12.0 SUMMARY**

- 12.1 The Development has been subject to a thorough analysis of environmental constraints and opportunities and as the process evolved, measures have been incorporated into the proposals to avoid, reduce or offset environmental effects. Where this has not been possible, further mitigation measures have been proposed.
- 12.2 In conclusion, the ES has identified that the Development will result in the following beneficial residual effects:
- Provision of housing meeting a local need for housing, including affordable housing, as identified in the Local Development Plan and the Affordable Housing SPG;
  - Enhancements to the highway network;
  - Ecological and landscape enhancements;
  - The integration of drainage with landscape, ecology and amenity features; and,
  - Provision of a new primary school and community facilities; and,
  - Provision of a new cycleway and pedestrian enhancements for the site and wider area; and;
  - Enhancement to the overall significance of the listed assets at the construction stage, where this would focus on improvements to the form and fabric.
- 12.3 The ES has also identified a number of adverse residual effects, some of which relate to effects during construction, including:
- Effects resulting from changes to the landscape and views;
  - Disturbance to habitats and protected species; and
  - Effects on the Listed Farm Buildings and setting – a 'small' loss of significance over the long term, resulting from substantive changes to the historic assets' setting, would be counter-balanced by the short-term enhancements in their standing form and fabric that would be generated during the construction stage.