LAND AT UPPER COSMESTON FARM, LAVERNOCK ROAD, PENARTH

ENVIRONMENTAL STATEMENT

VOLUME 1: NON-TECHNICAL SUMMARY

1.0 INTRODUCTION

1.1 Welsh Government (the Applicant) is submitting an outline planning application for the residential development, a primary school with all matters reserved other than access on land at Upper Cosmeston Farm, Lavernock Road, Penarth, within the administrative boundary of The Vale of Glamorgan Council (VOGC). The site measures approximately 25.2 hectares and is shown in Figure 1 of this NTS.

1.2 This Environmental Statement (ES) has been prepared on behalf of Welsh Government to accompany the planning application and an ES is a report of an Environmental Impact Assessment (EIA) undertaken under the EIA Regulations, which are contained in national law. This document is a non-technical summary (NTS) of the ES and summarises its content and conclusions.

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 20th December 2018 and VOGC issued its screening opinion to the Applicant on the 8th March 2019. Subsequently the VOGC issued its scoping opinion to the Applicant on the 5th April 2019. A copy of the screening opinion from VOGC is provided at Volume 3, Appendix 1.1 of this ES while a copy of the scoping opinion from VOGC is provided at Volume 3, Appendix 1.2 of this ES.

1.4 In its scoping opinion, the LPA considered that following topics would need to be addressed in the ES:

- Landscape and Visual;
- Ecology
- Ground Conditions
- Transportation; and,
- Air Quality

1.5 The assessment described in this Environmental Statement (ES) relates to the design of the scheme as it stands in July 2019. 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, 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 Once the planning application is submitted, 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[redacted]

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.

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_{10} and $PM_{2.5}$ 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_{10} 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_{10} and $PM_{2.5}$ 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.

10.9 The proposed development is consistent with Planning Policy Wales, which requires that new development is appropriate for its location in order to prevent unacceptable risks from air pollution. Furthermore, the proposed development does not conflict with the requirements of Policy MD7 of the Vale of Glamorgan Local Development Plan.

11.0 SUMMARY

11.1 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.

11.2 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,

11.3 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; and
- Disturbance to habitats and protected species.