LAND AT UPPER COSMESTON FARM,

LAVERNOCK ROAD, PENARTH

ENVIRONMENTAL STATEMENT - ADDENDUM

VOLUME 2

GLOSSARY

No change to chapter from ES dated September 2020

GLOSSARY AND ABBREVIATIONS

Glossary

| All Chapters | |
|---|---|
| Absolute Capacity | A term used to summarise the operational performance of a junction. This is considered the theoretical capacity of a junction. Junctions modelled using LinSig are considered to operate at absolute capacity where the Degree of Saturation is at 100% on one or more lanes. Junctions modelled using Junctions 9 are considered to operate at absolute capacity where the Ratio of Flow to Capacity is at 1.00 on one or more approach lanes/arms. |
| Air Quality Management Area | Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines. |
| Applicant | Welsh Government |
| Appropriate Assessment or Habitats Regulation Assessment | Controls the environmental impacts of development. Used to test whether a plan or project is likely to have a significant negative effect on: - Special Protection Area – A European designation which protects birds Special Area of Conservation – A European designation which protects habitats Ramsar site – A European designation which protects wetlands |
| Area Management Plan | The plan put in place for managing a specific area. |
| Baseline | The existing (pre-development) landscape and visual context of a study area, including landscape fabric, landscape character and existing views. The landscape baseline is not static and may changing for various reasons. The landscape baseline can also consider such factors and describe the likely future landscape character of the landscape, without the proposed development. |
| Biodiversity | Abbreviated form of 'biological diversity'. |
| Biodiversity Action Plan | Action plans for the most threatened species and habitats to aid recovery and reduce the significant reduction of biodiversity loss in the UK. |
| Biological Oxygen Demand | the amount of dissolved oxygen needed by aerobic organisms to break down organic material present in a given water sample at a certain temperature over a specific time period. |
| Cadw | Cadw is the Welsh Government's historic environment service: Cadw are responsible for the planning issues which affect statutorily protected monuments and buildings. They also grant aid repairs to historic buildings and monuments and manage ancient monuments which are in direct State care. |

| Capacity Assessment | A method of determining the performance of a junction and its ability to accommodate a level of traffic. |
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| Catchment Area | An assessment of the area of a site that affects a particular part of a drainage network. |
| Census | A count of all people and households undertaken every 10 years in the UK. This collects key information about the population, and is used to set policies and estimate resources required to provide services for the population. In transport terms, its provides key information on car ownership levels and the locations of employment. |
| Characteristics | Elements, or combinations of elements, which make a contribution to distinctive landscape character |
| Chartered Institute of Ecology & Environmental Management (CIEEM) | The leading professional membership body representing and supporting ecologists and environmental managers in the UK, Ireland and abroad. |
| Chemical determinands | Where chemical analysis is required, sediment samples must be analysed for a standard set of chemicals including metals and organotins. |
| Chemical Load | The mass of chemicals in a water body such as chlorine and lead. |
| Climate Change | The change in the statistical distribution of weather patterns when the change lasts for an extended period of time. |
| Combined Sewerage System | A sewer designed to carry foul sewage and surface water runoff in the same pipe. |
| Consent Limits | The maximum permitted rate/concentration imposed by a third party such as Natural Resource Wales |
| Conservation Objectives | Measures to conserve or restore the ecological feature to prevent deterioration or significant disturbance to the feature. |
| Conservative Approach | An approach or methodology which tends to estimate the worst case or heavily weighted towards this end of the scale when making its considerations. |
| Construction | All construction and demolition works associated with the proposed development |
| Construction Environmental Management Plan (CEMP) | The aim of the CEMP is to set out the responsibilities with regard to compliance with legislation and to implement mitigation measures. It details management measures to minimise environmental impact from the development construction. |
| Consultation bodies | Anybody specified in the relevant EIA Regulations which the local planning authority must consult in respect of an EIA, and which also has a duty to provide a scoping opinion and information |

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| Controlled Water Bodies | A body of water which is controlled in terms of chemical / biological content, flow rate or physical attributes. |
| Critical Design Storm | a rainfall occurrence resulting in the most severe outcome for an element of the drainage network. |
| Cumulative effects | The summation of effects that result from changes caused by a development in conjunction with other, past, present or reasonably foreseeable actions. |
| Cumulative Impacts | A number of developments in a locality or a continuous activity over time that together may have an increased impact on the environment, local community or economy. |
| Dafor Scale | Relative abundance of each plant species within a standardised 1m x 1m quadrat. |
| Degree of Saturation | A measure of performance of lanes within a junction modelled using LinSig. This is the ratio of flow to capacity of a lane, i.e. a value of 100% for a lane that has capacity for 100 PCUs per hour indicates that it is operating at capacity. |
| Density | In the case of residential development, a measurement of either the number of habitable rooms per hectare or the number of dwellings per hectare. |
| Designated landscape | Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents |
| Development | Any proposal that results in a change to the landscape and/or visual environment |
| Development Advice Map Zones | Zones of varying degrees of fluvial flood risk designated by Natural Resource Wales with Zone A being at least risk of flooding and Zone C at highest risk of flooding. |
| Direct effect | An effect that is directly attributable to the proposed development |
| Discharge Rates | The flow rate of liquid passing through a conduit. |
| Dissolved Oxygen | The oxygen that is dissolved in water via diffusion from the surrounding air; aeration of tumbling water and as a waste product of photosynthesis. |
| Downstream Receiving System | The existing drainage network that receives either foul or surface water flow from the development. |
| Ecological Feature | A statutory/non-statutory wildlife site; habitat and/or species considered to be of ecological importance to the application site. |
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| Ecosystem | A biological community of interacting organisms and their physical environment. |
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| Effect | A change to the environment arising as a result of the proposed development |
| Effluent Flows | The flow water from a natural body of water or manmade structure. |
| EIA Regulations | The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 |
| Environmental Management Plan (EMP) | A specific plan to ensure that appropriate environmental management practises are followed during a projects construction and/or operation. |
| Environmental Impact Assessment | The means of assessing a development project's likely significant effects |
| Environmental Statement | A report summarising the findings of an environmental impact assessment |
| Exceedance | A period of time when the concentration of a pollutant is greater than the appropriate air quality objective. This applies to specific locations with relevant exposure. |
| Field Pattern | The pattern of hedges and walls that define fields in farmed landscapes |
| Flood Consequences Assessment | An assessment of the risk of flooding due to the Proposed Development from all flooding mechanisms, the identification of flood mitigation measures and advice on actions to be taken before and during a flood. |
| Foul Water | Flow generated from household or commercial operations which is directed to the public sewer network for treatment. |
| Green Wedge | Green wedges comprise the open areas around and between parts of settlements, which maintain the distinction between the countryside and built up areas, prevent the coalescence (merging) of adjacent places and can also provide recreational opportunities. |
| Green Infrastructure (GI) | Networks of green spaces and water courses and water bodies that connect rural areas, villages, towns and cities |
| Habitat | The environment in which populations or individual species live or grow. |
| Indirect effects | Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects |
| Indivisibility | Two points on the group or two features are described as 'intervisible' when they are visible from each other |
| Junctions 9 | The industry-standard software programme used to undertake capacity assessments of priority junctions (i.e. T-junction), crossroads junctions, mini-roundabouts and standard roundabouts. |

| Land Allocations | The allocation of land for specific uses in the Council's Local Development Plan. |
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| Land cover | The surface cover of the land. Usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use |
| Land use | What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry |
| Landform | The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes |
| Landscape | An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors |
| Landscape and Visual Impact Assessment (LVIA) | A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity |
| Landscape Capacity | The degrees to which a particular landscape type or area is able to accommodate change without significant effects on its character. Capacity is likely to vary according to the type and nature of change being proposed. |
| Landscape Character | Landscape character arises from a distinct, recognisable and consistent pattern of physical and social elements, aesthetic factors and perceptual aspects in the landscape. |
| Landscape Character Areas (LCAs) | These are single unique areas which are the discrete geographical areas of a particular landscape type. |
| Landscape Character Types | Generic units of landscape that display a distinct, consistent and recognisable landscape character. |
| Landscape Condition | Description of the maintenance and condition of landscape elements and the degree to which landscape elements are representative of the landscape character area. |
| Landscape element | A physical component (both natural and manmade) of the landscape. |
| Landscape fabric | The elements and features that constitute the physical components of the landscape, including ground vegetation, hedgerows, trees, shrubs, walls, fences and vernacular structures. |
| Landscape Units | An umbrella term for landscape character areas and landscape character types. |
| Landscape Value | The importance or value of the landscape to society, usually based on landscape designations or policies as indicators of recognised value. |

| LinSig | The industry-standard software programme used to undertake capacity assessments of signal-controlled junctions. |
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| Local Development Plan | The required statutory development plan for each local planning authority area in Wales under Part 6 of the Planning and Compulsory Purchase Act 2004, which identifies the plan for the future development of the local planning authority area. |
| Local Planning Authority | The local government body that is empowered by law to determine planning applications and exercise planning functions |
| Magnitude (of effect) | A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration. |
| Master Planning | The comprehensive planning of a particular area to ensure a mix of complementary land uses, environmental protection and quality of place. |
| Mitigation Hierarchy | A tool that guides users towards limiting as far as possible the negative impacts on biodiversity from the development project. |
| Mitigation Measures | Measures, including any process, activity or design that will avoid, reduce, remedy or compensate for the predicted significant effects of a development on the environmental baseline. |
| Non-Technical Summary | A report which briefly summaries the main matters addresses in the Environmental Statement in a clear, non-technical manner with no technical jargon |
| Objectives | A nationally defined set of health-based concentrations for nine pollutants, seven of which are incorporated in Regulations, setting out the extent to which the standards should be achieved by a defined date. |
| | Applications for outline planning permission seek to establish whether the scale and nature of a proposed development would be acceptable to the local planning authority, before a fully detailed proposal is put forward. |
| Outline Planning | This type of planning application allows fewer details about the proposal to be submitted. Once outline permission has been granted, the approval of the details (reserved matters) will be required before work can start. |
| Passenger Car Unit | A unit of measurement of traffic flow or capacity, equivalent to that of a single car. Individual vehicle classes are given different PCU values. |
| Phase 1 Habitat Survey | An ecological survey technique that provides a standardised system to record vegetation and wildlife habitats. It enables a basic assessment of habitat type and its potential importance for nature conservation. Each habitat type or feature is identified and presented on a map. |
| Placemaking | Is both a process and a tool to collectively design and manage the public realm to create quality places that are appealing, accessible, safe and |

| | support social interaction and amenities and that people may want to live and work in. |
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| PM _{2.5} | Small airborne particles less than 2.5 micrometres in aerodynamic diameter |
| PM ₁₀ | Small airborne particles, more specifically particulate matter less than 10 micrometres in aerodynamic diameter. |
| Public Access | Land where the public have access either by legal right or by informal agreement. This land can include: Definitive rights of way Permissive paths and bridleways Public Open Space Beaches Access Land Open Access Land |
| Public Rights of Way (PROW) | Paths that the public have a right to pass. PROWs are inclusive of footpaths, bridleways and byways. |
| Receptor | A recipient that has the potential to be affected by the proposed development. This can include humans, animals, plants, buildings or natural features such as water or air |
| Reserved Matters | A detailed planning consent following the granting of outline planning permission. |
| Residual Effects | Those effects of a development that cannot be mitigated following implementation of mitigation measures. |
| Scoping | An exercise to determine the topics to be addressed within the Environmental Statement. |
| Screening | An exercise to determine whether an Environmental Impact Assessment is required. |
| Significance | A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic |
| Significant Effect | An effect that either supports or undermines (positive or adverse impact/effect) biodiversity conservation objectives for 'important ecological features' or for biodiversity in general |
| Site of Importance for Nature Conservation (SINC) | The best sites for wildlife in the County. They are a comprehensive suite of local wildlife sites that are of high value for biodiversity, with habitats and species that are uncommon in the County and sometimes further afield. |
| Site of Special Scientific Interest (SSSI) | The nature conservation agencies have a duty under the Wildlife and Countryside Act 1981, as amended, to notify any area of land which in their opinion is 'of special interest by reason of any of its flora, fauna, or |

| | geographical or physiographical features'. Such areas are known as Sites of Special Scientific interest (SSSIs). |
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| Spatial Distribution | The arrangement of a phenomenon across the Earth's surface. |
| Special Area of Conservation (SAC) | Strictly protected sites designated under the European Commission (EC) Habitats Directive. |
| Specification | A written schedule of works required for a particular project (by a curator, planning archaeologist or client), set out in sufficient detail to be quantifiable, implemented and monitored. Normally prepared by or agreed with the relevant curator. |
| Standards | A nationally defined set of concentrations for nine pollutants below which health effects do not occur or are minimal. |
| Statutory Designations | Provide the legal status that protects wildlife sites. |
| Strategic Environmental Assessment | An appraisal of the environmental impact of larger scale plans and programmes (such as a LDP), where the implementation of its policies/strategies are considered to have significant environmental consequences. The process is a statutory requirement to comply with EU Directive 2001/42/EC, requiring early consultations with key agencies in order to compile an environmental report, the results of which feed into policy development and decision making. |
| SuDS Approval Body | A statutory body responsible for the oversight of design, construction and maintenance of sustainable drainage features, such as swales or attenuation basins. |
| Sustainability Appraisal | A process that considers the extent to which the components of sustainable development (economic development, social well-being, environmental protection and resource conservation) have been integrated within the Development Plan. |
| TEMPro | The industry-standard software programme used to identify forecast future traffic growth on the road network, based on mode, time of day, location and road type. |
| Topography | The arrangement of the natural and artificial physical features of an area. |
| TRICS | The industry-standard database of surveyed development sites. This provides trip rates for various land uses (e.g. residential, employment, education, etc) dependent on their scale and location, which are then used to forecast trip generation of proposals. |
| Triethanolamine | Used to absorb nitrogen dioxide |
| Viewing Distance | The distance that a viewpoint illustration should be held from the eye in order for the illustration to match the scale of the actual view when used in the field to identify the location and scale of the proposed development. |

| Visibility | Visibility is a measure of the distance that can be seen by the human eye at any one time. Daylight visibility will depend on several factors, including: Atmospheric transparency (governed by the solid and liquid particles held in suspension in the atmosphere; |
|---|--|
| Visual amenity | The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area |
| Visual effects | Effects on specific views and on the general visual amenity experienced by people |
| Visual Envelope | Area of land that is visible from points within the application site. The established outer limit of the land that may be visually connected with the application site/proposal |
| Visual receptor(s) | An individual observer or group of observers who are capable of experiencing a change in the view. |
| Zone of Influence | Defined as being the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. |
| Zone of Theoretical Visibility (ZTV) | The ZTVs consider the bareground situation and assume excellent visibility with no atmospheric attenuation. The ZTVs therefore represent the maximum potential, theoretical visibility i.e. the worst-case situation. In reality, other components of the landscape such as forestry, trees, buildings etc will introduce the screening effects which, coupled with the atmospheric conditions will reduce the visibility, in some instances to a considerable extent. |

Abbreviations

| AA | Appropriate Assessment |
|------------|---|
| AADT | Annual Average Daily Traffic |
| ADMS-Roads | Atmospheric Dispersion Modelling System model for Roads |
| aOD | Above Ordnance Datum |
| AONB | Area of Outstanding Natural Beauty |
| AQAL | Air Quality Assessment Level |
| AQC | Air Quality Consultants |
| AQMA | Air Quality Management Area |
| AS | Application Site |
| AURN | Automatic Urban and Rural Network |
| BAP | Biodiversity Action Plan |
| BBS | Breeding Bird Survey |
| BCT | Bat Conservation Trust |
| BGS | British Geological Society |
| BoCC | Birds of Conservation Concern |
| BOD | Biological Oxygen Demand |

| C A | |
|-----------------|--|
| CA | Conservation Area |
| CCW | Countryside Commission for Wales |
| CEMP | Construction Environmental Management Plan |
| C4SL | Category 4 Screening Level |
| CH ₄ | Methane Chartened Institute of Facility and Frazing mental Management |
| CIEEM | Chartered Institute of Ecology and Environmental Management |
| CIEH | Chartered Institute of Environmental Health |
| CIHT | Chartered Institution of Highways and Transportation |
| CMP | Construction Management Plan |
| | Carbon Dioxide |
| CURED | Calculator Using Realistic Emissions for Diesels |
| DAS | Design and Access Statement |
| DCWW | Dwr Cymru Welsh Water |
| DEFRA | Department for Environment, Food and Rural Affairs |
| DfT | Department for Transport |
| DMP | Dust Management Plan |
| DOS | Degree of Saturation |
| DSM | Digital Service Modelling |
| EcIA | Ecological Impact Assessment |
| ECMS | Ecological Construction Method Statement |
| EFT | Emission Factor Toolkit |
| EIA | Environmental Impact Assessment |
| ELC | European Landscape Convention |
| EMP | Ecological Management Plan |
| EPS | European Protected Species |
| EPUK | Environmental Protection UK |
| EPZ | Ecological Protection Zones |
| EQS | Environmental Quality Standards |
| ES | Environmental Statement |
| ESP | Earth Science Partnership Ltd |
| ETL | Electricity Transmission Line |
| EU | European Union |
| EV | Electric Vehicle |
| EVCPs | Electrical Vehicle Charging Points |
| GAC | Generic Assessment Criteria |
| GCN | Great Crested Newts |
| GLVIA3 | Guidelines for Landscape and Visual Impact Assessment, Third Edition |
| GQRA | Generic Quantitative Risk Assessment |
| GSV | Gas Screening Value |
| HE | High Explosive |
| HDV | Heavy Duty Vehicle |
| HGV | Heavy Goods Vehicle |
| HMSO | Her Majesty's Stationery Office |
| HPG | Historic Park and Gardens |
| HRA | Habitat Regulations Assessment |
| H_2S | Hydrogen Sulphide |
| IAQM | Institute of Air Quality Management |
| ICCT | International Council on Clean Transportation |
| IEMA | Institute of Environmental Management and Assessment |
| IEF | Important Ecological Features |
| JAQU | Joint Air Quality Unit |
| | |

| Kph | Kilometres per hour |
|------------------------|--|
| kW | Kilowatt |
| LANDMAP | Landscape Assessment and Decision Making Process |
| LANDINA | Local Area of Play |
| LAQM | Local Air Quality Management |
| LAQINI | Listed Buildings |
| LCA | Landscape Character Areas |
| LCTs | Landscape Character Type |
| LDP | Local Development Plan |
| LDV | Light Duty Vehicles |
| LEAP | Local Equipped Area of Play |
| LEMP | Landscape and Ecology Management Plan |
| LHA | Local Highway Authority |
| LNR | Local Nature Reserve |
| LOS | Level of Service |
| LOS | Local Planning Authority |
| l/h | Litres per hour |
| LQM | Land Quality Management |
| LVIA | Landscape and Visual Impact Assessment |
| NCN | National Cycle Network |
| NEAP | Neighbourhood Equipped Area of Play |
| NERC | National Environment and Rural Communities |
| NGR | National Grid Reference |
| NNR | National Nature Reserve |
| NO | Nitric Oxide |
| NO ₂ | Nitrogen Dioxide |
| NOx | Nitrogen oxides |
| NRW | Natural Resources Wales |
| | |
| O ₂ OLEV | Oxygen Office for Low Emission Vehicles |
| OSGR | Ordnance Survey Grid Reference |
| PAH | Polyaromatic Hydrocarbons |
| PAH PCU | Passenger Car Unit |
| PIC | Personal Injury Collision |
| PICADY | Priority Intersection Capacity and Delay |
| PNECs | Predicted No Effect Concentration |
| POS | Public Open Space |
| PPC | Pollution Prevention and Controls |
| PPG | Pollution Prevention Guidelines |
| PPL | Plausible Pollutant Linkages |
| PPW | Planning Policy Wales |
| PROW | Public Right of Way |
| PVP | Photoviewpoints |
| RCV | Refuse Collection Vehicle |
| RDE | Real Driving Emissions |
| RFC | Ratio of Flow to Capacity |
| RIGGS | Regionally Important Geological and Geomorphological Sites |
| ROC | Royal Observer Corps |
| RPG | Register of Historic Parks and Gardens |
| RQD | Rock Quality Designation |
| RR | Roman Road |
| | Noman Noau |

| RSA | Road Safety Audit |
|---------|---|
| SA | Sustainability Appraisal |
| SAC | Special Area of Conservation |
| SFA | Strategic Environmental Assessment |
| SEWBReC | South East Wales Biodiversity Records Centre |
| S4ULs | Suitable For Use Levels |
| SGV | Soil Guideline Values |
| SINC | |
| SM | Site of Importance for Nature Conservation Scheduled Monuments |
| SPA | |
| SPG | Special Protection Area |
| | Supplementary Planning Guidance |
| SPT | Standard Penetration Tests |
| SPZ | Source Protection Zone |
| SSD | Sight Stopping Distance |
| SSSI | Site of Special Scientific Interest |
| SuDS | Sustainable Drainage System |
| ТА | Transport Assessment |
| TAN | Technical Advice Note |
| TEA | Triethanolamine |
| TEMPro | Trip End Model Presentation Program |
| TIS | Transport Implementation Strategy |
| ТР | Travel Plan |
| TPO | Tree Preservation Order |
| TRICS | Trip Rate Information Computer System |
| μg/m³ | Microgrammes per cubic metre |
| UK DWS | UK Drinking Water Standards |
| ULEVs | Ultra Low Emission Vehicles |
| UXO | Unexploded Ordnance |
| VOGC | Vale of Glamorgan Council |
| WAC | Waste Acceptability Criteria |
| WeITAG | Welsh Transport Planning and Appraisal Guidance |
| WFD | Water Framework Directive |
| WG | Welsh Government |
| WLPG | Wales Landscape Partnership Group |
| WQS | Water Quality Standards |
| WSP | Wales Spatial Plan |
| WWII | World War II |
| Zol | Zone of Influence |
| ZPV | Zone of Primary Visibility |
| ZTV | Zone of Theoretical Visibility |
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