

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

ENVIRONMENTAL STATEMENT

**VOLUME 2
GLOSSARY AND ABBREVIATIONS**

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: - <ul style="list-style-type: none"> • 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.
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.
Ecosystem	A biological community of interacting organisms and their physical

	environment.
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.
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.

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.
Outline Planning	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. 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.
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: <ul style="list-style-type: none"> • 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).
Spatial Distribution	The arrangement of a phenomenon across the Earth's surface.
Special Area of	Strictly protected sites designated under the European Commission (EC)

Conservation (SAC)	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	<p>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:</p> <ul style="list-style-type: none"> • 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
CA	Conservation Area
CCW	Countryside Commission for Wales
CEMP	Construction Environmental Management Plan
C4SL	Category 4 Screening Level
CH ₄	Methane
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
CO ₂	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
EclA	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 ₂ S	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
LAP	Local Area of Play
LAQM	Local Air Quality Management
LB	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
LPA	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
NO _x	Nitrogen oxides
NRW	Natural Resources Wales
O ₂	Oxygen
OLEV	Office for Low Emission Vehicles
OSGR	Ordnance Survey Grid Reference
PAH	Polyaromatic Hydrocarbons
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
RSA	Road Safety Audit
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEWBRcC	South East Wales Biodiversity Records Centre
S4ULs	Suitable For Use Levels
SGV	Soil Guideline Values

SINC	Site of Importance for Nature Conservation
SM	Scheduled Monuments
SPA	Special Protection Area
SPG	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
TA	Transport Assessment
TAN	Technical Advice Note
TEA	Triethanolamine
TEMPro	Trip End Model Presentation Program
TIS	Transport Implementation Strategy
TP	Travel Plan
TPO	Tree Preservation Order
TRICS	Trip Rate Information Computer System
$\mu\text{g}/\text{m}^3$	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
ZoI	Zone of Influence
ZPV	Zone of Primary Visibility
ZTV	Zone of Theoretical Visibility