



Galileo 03 Ltd.

Mynydd Ty-talwyn Energy Park – Environmental Statement Volume II

Main Written Statement – Chapter 16: Summary of Effects

Project Reference: 663870

This chapter is summarised within the Non-Technical Summary of this Environmental Statement. A Welsh translation of the Non-Technical Summary is also available as part of the application.

Crynoir y bennod hon yng Nghrynodeb Annhechnegol y Datganiad Amgylcheddol hwn. Mae cyfieithiad Cymraeg o'r Crynodeb Annhechnegol hefyd ar gael fel rhan o'r cais.

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RSK

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Environment Ltd.

16 SUMMARY OF EFFECTS

16.1 Introduction

- 16.1.1 **Table 16.1, Table 16.2, Table 16.3 and Table 16.4** summarise the findings reported within this volume of the ES for the construction, operational and decommissioning phases and during the whole life cycle of the Proposed Development respectively. Specifically, these tables set out the potential effects, the additional mitigation proposed and the mechanism(s) by which additional mitigation is secured, the residual effects and any monitoring proposed.
- 16.1.2 With regard to monitoring, Schedule 4(7) of the EIA Regulations 2017 requires monitoring to be arranged for any identified significant adverse effects on the environment, where appropriate. As set out in the tables below, the Proposed Development would lead to significant adverse effects on the environment during the construction, operational and decommissioning phases. However, due to the nature of both the receptors affected and the impacts identified, the Applicant considers that there are no feasible monitoring arrangements that can be proposed.

16.2 Construction Phase Effects

Table 16.1 Summary of the Construction Phase Assessment

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Land, Soils and Groundwater					
Land (potential contamination)	Impacts on land quality due to release of existing contamination or accidental introduction of new contamination (e.g. potential spills).	Construction Environmental Management Plan (CEMP), e.g. good housekeeping, spill response, waste management. Targeted ground investigation and remediation (if necessary) If contaminated soils are encountered, manage in line with industry best practice	CEMP, secured by planning condition. Implementation is the responsibility of the Principal Contractor.	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.
Land (mineral safeguarding)	Temporary reduction in availability/access to safeguarded minerals (sandstone or igneous rock) within localised areas during construction activities and minor loss of resources in excavation areas.	No specific measures beyond standard best practice.	Embedded within the project design. Minerals remain largely safeguarded for potential future extraction after construction.	Neutral or slight adverse T / I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Soil (physical/chemical properties)	Damage to physical structure of soil due to vehicle movements or construction activities; damage to chemical properties of soil due to accidental leaks or spillages.	CEMP, e.g. spill prevention and Soil Management Plan (SMP) such as handle soils when in suitable condition, use low ground pressure vehicles, reinstate layers properly.	CEMP and SMP, secured by planning conditions. Outline versions of these documents have been submitted alongside this application and will be revised by the Principal Contractor, or appointed representative.	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.
Groundwater (quantity, quality and effect on abstraction points)	Reduction in quality due to leaks or spillages or remobilisation of existing contamination. Impacts on groundwater flow due to damage to existing drainage or changes to groundwater regime.	CEMP, e.g. bunded storage, spill kits. If piling occurs, a piling risk assessment may be required to minimise preferential pathways. Targeted ground investigation and remediation (if necessary)	CEMP, secured by planning condition. Implementation is the responsibility of the Principal Contractor.	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Water					
Cwm Risca Meadows SSSI and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses linked to the SSSI from an increase in silt-laden runoff leaving the Site.	CEMP, e.g. sediment control (silt fencing or straw bales downslope of construction works).	CEMP, secured by planning condition. Implementation is the responsibility of the Principal Contractor.	Negligible T / D / ST Not significant	No monitoring proposed.
	Effects to water quality of local watercourses linked to the SSSI and increase in potential of spillages and leaks of fuels, oils and chemicals.	CEMP, e.g. pollution prevention (spill kits, bunded storage of fuels).	CEMP, secured by planning condition. Implementation is the responsibility of the Principal Contractor.	Negligible T / D / ST Not significant	No monitoring proposed.
Kenfig - headwaters to tidal (Nant Craigyraber, Nant Iorweth-goch and Afon Cynffig) and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses and increase in silt-laden runoff leaving the Site.	CEMP, e.g. sediment control (silt fencing or straw bales downslope of construction works).	CEMP, secured by planning condition. Implementation is the responsibility of the Principal Contractor.	Negligible T / D / ST Not significant	No monitoring proposed.
	Effects to water quality of local watercourses and increase in	CEMP, e.g. pollution prevention (spill kits, bunded storage of fuels).	CEMP, secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.

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	potential of spillages and leaks of fuels, oils and chemicals.		Implementation is the responsibility of the Principal Contractor.		
WFD water body of Llynfi - Lletty Brongu STW to conf with Ogmores (Nant y Gadlys, Nant Cedfyw and Afon Llynfi) and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses and increase in silt-laden runoff leaving the Site.	CEMP, e.g. sediment control (silt fencing or straw bales downslope of construction works)	CEMP, secured by planning conditions	Negligible T / D / ST Not significant	No monitoring proposed.
	Effects to water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals.	CEMP, e.g. pollution prevention (spill kits, bunded storage of fuels)	CEMP, secured by planning conditions	Negligible T / D / ST Not significant	No monitoring proposed.
WFD water body of Ogmores - confluence with Llynfi to tidal limit (downstream Afon Llynfi) and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses and increase in silt-laden runoff leaving the Site.	CEMP, e.g. sediment control (silt fencing or straw bales downslope of construction works)	CEMP, secured by planning conditions	Negligible T / D / ST Not significant	No monitoring proposed.
	Effects to water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals.	CEMP, e.g. pollution prevention (spill kits, bunded storage of fuels)	CEMP, secured by planning conditions	Negligible T / D / ST Not significant	No monitoring proposed.

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Cultural Heritage					
Possible Bronze Age burial mounds in Solar Parcel K	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking further archaeological work (such as strip map sample excavation), removal of built infrastructure, or commitment to no-dig construction methods as necessary	Written Scheme of Investigation (WSI) permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Known and potential Bronze Age cremation burials in Solar Parcel H	Truncation and/or destruction of buried archaeological remains	Undertaking further archaeological work (such as strip map sample excavation), removal of built infrastructure, or commitment to no-dig construction methods as necessary.	WSI permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Bronze Age to Romano-British enclosure E1 in Solar Parcel E	Truncation and/or partial to full destruction of potential buried archaeological remains.	Further archaeological work (such as strip map sample excavation), removal of built infrastructure and/or preservation in situ (layout changes).	WSI permission, secured by planning conditions prior to construction.	Slight adverse at most) P / D / N/A Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Roman pit in Solar Parcel J	Truncation and/or destruction of potential buried archaeological remains through removal of development infrastructure	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Slight adverse at most) P / D / N/A Not significant	No monitoring proposed.
The medieval road of Ffordd-y-Gyfraith and its former branches to the British Fortified Residence and Mynydd Baeden	Localised truncation and/or partial destruction of buried archaeological remains through the creation of bellmouths for internal access tracks to T01-T05 inclusive and the intersection of the internal access track to T01 with the Mynydd Baeden track	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse at most) P / D / N/A Not significant	No monitoring proposed.
Post-medieval enclosure E2 in Solar Parcel J	Truncation and/or partial to full destruction of buried archaeological remains.	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse P / D / N/A Not significant	No monitoring proposed.
Post-medieval enclosure E6 in Solar Parcel G	Truncation and/or partial to full destruction of buried archaeological remains.	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.

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Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Post-medieval pit within the footprint of Turbine T03	Truncation and/or partial to full destruction of buried archaeological remains	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Post-medieval pit in Solar Parcel J	Truncation and/or partial to full destruction of buried archaeological remains	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Four large undated pits, which may be associated with post-medieval quarrying, in Solar Parcel G (and others elsewhere across the Site)	Truncation and/or partial to full destruction of buried archaeological remains	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Probable post-medieval ditches (mapped as 'intrenchments') in the vicinity of the access track to Turbine T01	Truncation and/or partial to partial destruction of potential buried archaeological remains.	Undertaking further archaeological work (such as a watching brief)	WSI permission, secured by planning conditions prior to construction.	Slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.

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(and others elsewhere across the Site)					
Landscape and Visual					
Landscape features – grassland	Construction of internal access tracks, hardstanding, turbine foundations and other infrastructure would effect a small part of the overall rolling upland area (with large areas remaining unaffected).	N/A	N/A	Moderate adverse T / D / ST Not significant	No monitoring proposed.
Landscape features – hedgerows	Construction of internal access tracks, hardstanding, turbine foundations and other infrastructure would effect a small part of the overall rolling upland area (with large areas remaining unaffected).	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.
Landscape features – on-site woodland	Construction works are not anticipated to result in any losses or alterations that would affect the character of the landscape.	N/A	N/A	No effect	No monitoring proposed.

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Visual and Sensory Aspect Area CYNONVS473 Host - Mynydd Baedan	Change in the visual character of the southern parts of the aspect area due to views of construction activities	N/A	N/A	Moderate adverse T / D / ST Significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - NPTVS403 – Margam CP	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS35 1 – Maesteg - CYNONVS79 0 - Cefn Hirgoed - VLFGLVS825 - Newton Down - VLFGLVS828 - Between Bridgend and Merthyr Mawr	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.

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- NPTVS811 - Margam Scarp - NPTVS274 - Coastal Dunes - NPTVS799 - Eglwy Nummydd Reservoir					
Visual and Sensory Aspect Areas: - CYNONVS88 4 – Llynfi Valley - CYNONVS96 6 – Bettws - CYNONVS34 9 - Mynydd Llangknwyr (within 5 km)	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Minor-moderate adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS81 1 - Garth Hill	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Moderate adverse T / D / ST Significant	No monitoring proposed.

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Visual and Sensory Aspect Areas: - CYNONVS14 2 - Mynydd y Glyn	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Moderate adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS81 3 - Garw and Caerau Forest - CYNONVS15 1 – Ffordd Y Graith - CYNONVS95 5- Cribwr - CYNONVS73 1- Conifer west of the study area - NPTVS927 – Mynydd Margam	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Minor-moderate adverse T / D / ST Not significant	No monitoring proposed.

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- NPTVS897 – Mynydd Bromil and Scarp Slopes - NPTVS962 - Mynydd Nant y bar/Mynydd Blaenafan - CYNONVS550 - Mynydd y Aber - CYNONVS349 - Mynydd Llangenwyr (portions beyond 5km) - VLFGLVS663 - Ogmore and Old Castle Downs					
Visual and Sensory Aspect Areas: - CYNONVS847 - Pyle	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.

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- CYNONVS72 6 - Bridgend - NPTVS001 – Margam Opencast					
Visual and Sensory Aspect Area - NPTVS543 - Coedhirwaun	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS14 8 – Cym ogwr - NPTVS837 - Margam Works - NPTVS277 - Margam Moor	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	Negligible T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - VLFGLVS378 - Alun Valley	Change in the visual character of the aspect area due to views of construction activities	N/A	N/A	No effect	No monitoring proposed.

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Visual Viewpoint 1: Margam Park (Access Road)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 2: On PRoW, Margam Park Deer Park / Ogwr Ridgeway Long Distance Walk	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 3: Ogwr Ridgeway Walk	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 4: Llangynwyd Conservation Area	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 5: Heol Gelli Lenor, Maesteg	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.

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Visual Viewpoint 6: Heol Dewi Sant, Bettws	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 7: Bridge over River Llynfi east of Coytrahen	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 8: Bridgend Circular Walk	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 9: Heol Shon, Cefn Cribwr	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 10: Kenfig Burrows	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 11: Wales Coast Path at Ogmores-by-Sea	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.

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Visual Viewpoint 12: Ogwr Ridgeway Walk at Waun Wen	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 13: Pen y Foel Trig Point	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 14: Mumbles Hill, Swansea	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 15: Ogof-Ffynnon-Ddu (Bannau Brycheniniog National Park)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Llangynwyd – hamlet to the west	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.

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Llangynwyd – remaining area	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse or no effect T / I / ST Not significant	No monitoring proposed.
Maesteg	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse or no effect T / I / ST Not significant	No monitoring proposed.
				Moderate adverse T / I / ST Significant	No monitoring proposed.
Lletty Brongu	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.
Bettws	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.

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				Minor adverse -no effect T / I / ST Not significant	No monitoring proposed.
Cefn Cribwr	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate-adverse T / I / ST Not significant	No monitoring proposed.
Kenfig Hill and Pyle	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Coedhirwaun	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
Pen-y-fai	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
North Cornelly / Cynffig	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.

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Wales Coastal Path (Ogmore-on-Sea to Swansea)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Cistercian Way - sections within Margam Park	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Cistercian Way - other sections within study area	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Negligible adverse T / I / ST Not significant	No monitoring proposed.
Ogwr Ridgeway Walk - section through Site (3-4 km)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Major adverse T / I / ST Significant	No monitoring proposed.
Ogwr Ridgeway Walk - sections within 5 km of Site	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
Ogwr Ridgeway Walk - sections within 5-10 km of Site	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.

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Ogwr Ridgeway Walk - sections beyond 10 km	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Negligible adverse T / I / ST Not significant	No monitoring proposed.
Route 4	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Route 4 - Margam Park section	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse to no effect T / I / ST Not significant	No monitoring proposed.
Route 4 - coastal sections	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Route 884 (Bryngarw House to Pontycymmer)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse to no effect T / I / ST Not significant	No monitoring proposed.
Route 885 (Bridgend to Afan Forest Park)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.

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Route 887 (Port Talbot to Afan Forest Park)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
M4 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
A4063 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant to Significant at limited gaps in vegetation	No monitoring proposed.
A48 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4107 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse to no effect T / I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
A473 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4061 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4106 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4229 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
B4281 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
B4265 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
B4524 (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
South Wales Main Line Railway (users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
Maesteg Line Railway(users of)	Change to the existing view as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
SLA 3 Western Uplands - Host (BCBC) (areas within the Site)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Major adverse T / I / ST Significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
SLA 3 Western Uplands - Host (BCBC) (areas 1-2 km from Site)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Major-moderate adverse T / I / ST Significant	No monitoring proposed.
SLA 3 Western Uplands - Host (BCBC) (areas 2-4 km from Site)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.
SLA 4 Margam (NPTC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 4 Bryngarw Country Park (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 7 Laleston (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
SLA 6 Kenfig Burrows (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 2 Northern Uplands (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
SLA 9 Merthyr Mawr Warren (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 6 Foel y Dyffryn (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 5 Mynydd y Gaer (BCBC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
SLA 5 Mynydd y Gelli (NPTC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
SLA 6 Foel Trawsnant (NPTC)	Change to the landscape character as a result of construction activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Bannau Brycheiniog National Park	Potential change to views from and character of the National Park	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Gower National Landscape	Potential change to views from and character of the National Landscape	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Noise and Vibration					
NSR 13 and 31	Construction noise effects on residential sensitive receptors.	CEMP implementing BPM for noise control.	CEMP, secured by planning condition	Minor adverse T / D / ST Not significant	No monitoring proposed.
NSR1 – 12, 14-31 and 32	Construction noise effects on residential sensitive receptors.	CEMP implementing BPM for noise control. Noise barrier (for NSR21)	CEMP, secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
NSR 13	Construction vibration effects on residential sensitive receptors.	CEMP implementing BPM for vibration control.	CEMP, secured by planning condition.	Minor adverse T / D / ST Not significant	No monitoring proposed.
NSR1-12, 14 - 32	Construction vibration effects on residential sensitive receptors.	CEMP implementing BPM for vibration control.	CEMP, secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
NSR 1-32	Construction traffic movements (access track)	CEMP implementing BPM for vibration control.	CEMP, secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
All NSR 1 – NSR32	Construction traffic noise effects on residential sensitive receptors.	Construction Traffic Management Plan (CTMP) e.g. designated routes, limit speeds, schedule heavy good deliveries.	CTMP secured by planning condition.	Minor adverse T / D / ST Not significant	No monitoring proposed.
Ornithology					
All key ornithological features	Habitat loss associated with reduction in extent of woodland and hedgerow during construction.	Habitat reinstatement and enhancement following construction (grassland, woodland, hedgerows). Creation of replacement nesting/foraging habitats	CEMP, secured by planning condition. Habitat Management Plan, secured by	Adverse effect (local level) T / D / ST Not significant	Preconstruction surveys and potential monitoring of schedule 1 nesting bird

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
		as per Habitat Management Plan (HMP) and Green Infrastructure Statement (GIS). Pollution prevention measures to protect retained habitats from accidental damage,	planning condition and Ecological Clerk of Works (ECoW) to ensure compliance.		species as well as other species if required. Monitoring required to ensure successful implementation of habitat creation.
Eglwys Nynydd Reservoir SSSI Aberbaiden Farm Meadows SINC Lletty Brongu SINC	Disturbance during construction activities associated with the development resulting in increased noise, human presence, lighting and pollution effects.	N/A	N/A	Adverse effect (local level) T / I / ST Not significant	N/A
Lapwing		Protection measures if active lapwing nesting sites occur in or near works (e.g. restricting works in a set radius or timing them to avoid the breeding season).	CEMP, secured by planning condition. ECoW to ensure compliance.	Adverse effect (local level) T / I / ST Not significant	Monitoring required to ensure lapwing using mitigation areas for nesting.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
		Habitat management enhancements to ensure alternative or improved nesting areas remain functional. Minimising abrupt noise events, with ECoW oversight.			
Breeding bird assemblage		Pre-construction nesting bird checks and set-back distances for active nests. Limiting vegetation removal to outside the breeding season (where possible). Measures to reduce unnecessary noise, dust, or nighttime working (lighting).	CEMP, secured by planning condition. ECoW to ensure compliance.	Adverse effect (local level) T / I / ST Not significant	Monitoring required to ensure breeding bird assemblage using mitigation areas for nesting.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Wintering bird assemblage		Minimisation of noise, lighting, and pollutant risks in winter months if works coincide with peak foraging usage. Retain and protect key features (e.g. hedgerows, grass margins) as far as possible.	CEMP, secured by planning condition. ECoW to ensure compliance.	Adverse effect (local level) T / I / ST Not significant	No monitoring proposed.
Terrestrial Ecology					
Cwm Risca Meadow SSSI - National importance	Indirect effect on species rich acid meadow which could lead to potential changes in species assemblages.	Pollution prevention measures will be implemented to prevent spills contaminating important ecological features. Dust suppression measures throughout the Site.	CEMP, secured by planning condition.	No effect	No monitoring proposed.
NPT Watercourses SINC- County importance	Pollution run off from construction works entering groundwater, potentially ending up at the designated site.	Pollution prevention measures.	CEMP, secured by planning condition.	No effect	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Cwm Nant Gwyn SINC - County importance	Pollution run off from construction works entering groundwater, potentially ending up at the designated site. Increase in possible air pollutants from construction of the Proposed Development.	Pollution prevention measures.	CEMP, secured by planning condition.	No effect	No monitoring proposed.
Nant Cwm-bach SINC - County importance	Pollution run off from construction works entering groundwater, potentially ending up at the designated site. Increase in possible air pollutants from construction of the Proposed Development.	Pollution prevention measures.	CEMP, secured by planning condition.	No effect	No monitoring proposed.
	Construction of an access track across Nant Cwm-bach SINC will directly impact the SINC.	Woodland planting within the wider Site to compensate for tree loss.	Habitat Management Plan (HMP) permission, secured by planning conditions.	Adverse (local level) P / D / LT Significant	Monitoring of compensatory habitat required.
Gilfach Uchaf - County importance	Pollution run off from construction works entering groundwater, potentially ending up at the designated site.	Pollution prevention measures.	CEMP, secured by planning condition.	No effect	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	Increase in possible air pollutants from construction of the Proposed Development.				
	Construction of an access track across Gilfach Uchaf (within a habitat not included within the SINC designation) will not impact the SINC.	N/A – embedded mitigation already avoids the qualifying habitats.	N/A	No effect	No monitoring proposed.
NPT Ancient Semi-Natural Woodland SINC- County importance	Pollution run off from construction works entering groundwater, potentially ending up at the designated site. Increase in possible air pollutants from construction of the Proposed Development.	Pollution prevention measures.	CEMP, secured by planning condition.	No effect	No monitoring proposed.
Woodland - Local importance	Removal of 0.08 ha of woodland to facilitate construction activities.	Woodland planting (19.05 ha throughout the Site) to extend woodland associated with Cwm Nant Gwyn SINC.	HMP, secured by planning condition.	Beneficial (local level) P / D / LT Significant	Monitoring of compensatory habitat required.
Hedgerows - Local importance	Removal of vegetation to facilitate construction activities leading to loss of small sections of hedgerow totalling 169 m of hedgerow.	Hedgerow planting (3.26 km of new planting) to compensate for hedgerow loss and improve connectivity.	HMP secured by planning condition.	Beneficial (local level) P / D / LT Significant	Monitoring of compensatory habitat required.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Fungi – County importance	Pollution run off from construction works entering groundwater and contaminating surrounding habitat. Increase in possible air pollutants (including dust) from construction of the Proposed Development. These could affect (reduce) the fungi assemblage present.	Pollution prevention measures.	CEMP and Net Benefit for Biodiversity (NBB) Report permission, secured by planning conditions.	No effect	No monitoring proposed.
	Removal of vegetation containing fungi to facilitate construction activities including plant tracking through habitat.	Enhancement of grassland habitats nearby (and turf stripping, where feasible) to maintain or relocate mycelium.	CEMP and NBB Report permission, secured by planning conditions.	No effect	Monitoring of habitat enhancements required.
Fungi - Local importance	Removal of vegetation containing fungi to facilitate construction activities including plant tracking through habitat.	Enhancement of grassland habitats to maintain/relocate mycelium if feasible.	CEMP and NBB Report permission, secured by planning conditions.	Beneficial (local level) P / D / LT Significant	Monitoring of compensatory habitat required.
	Pollution run off from construction works entering groundwater and contaminating surrounding habitat. Increase in possible air pollutants (including dust) from construction of the Proposed Development.	Pollution prevention measures.	CEMP and NBB Report permission, secured by planning conditions.	No effect	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	These could affect (reduce) the fungi assemblage present.				
Invasive non-native species	Spreading invasive non-native species inadvertently through construction activities (including enabling works).	Invasive Non-Native Species Management Plan implemented prior to the commencement of work	Invasive Non-Native Species Management Plan, secured by planning conditions	Beneficial (local level) P / D / LT Significant	Monitoring of eradication management required
Great crested newt - Local importance	No impacts to great crested newt are anticipated as there are no construction activities taking place within 350 m of the nearest waterbody with great crested newt presence.	N/A	N/A	No effect	No monitoring proposed.
Bats (roosting) – Local importance	Removal of potential bat roosting trees to facilitate construction activities.	Bat boxes installed onsite to compensate for loss of roosting habitat in trees (2 potential roosts).	HMP secured by planning condition.	Beneficial (local level) P / D / LT Significant	Monitoring of compensatory habitat required.
Bats (foraging and commuting) – Local importance	Removal of vegetation to facilitate construction activities leading to loss of small sections of hedgerow totalling 169 m of hedgerow. The removal of sections of hedgerows could lead to fragmentation of habitats which could prevent bats moving around the landscape.	CEMP referencing hedgerow replanting to mitigate fragmentation (3.26 km new hedgerow and 19 ha of woodland).	CEMP, secured by planning condition HMP secured by planning condition.	Beneficial (local level) P / D / LT Significant	Monitoring of compensatory habitat required.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Hazel dormouse – Local importance	Removal of vegetation to facilitate construction activities leading to loss of small sections of hedgerow totalling 169 m of hedgerow. The removal of sections of hedgerows could lead to fragmentation of habitats which could prevent dormice moving around the landscape.	CEMP and woodland & hedgerow planting (3.26 km hedgerow, 19 ha woodland) to ensure connectivity for dormouse.	CEMP, secured by planning condition HMP secured by planning condition.	Beneficial (local level) P / D / LT Significant	Monitoring of compensatory habitat required.
Otter - local importance	Access tracks are required over two watercourses within the Site. An open span bridge will be constructed in the north of the site. The construction works could cause disturbance to otter if present within the northern watercourse which could temporarily prevent otter movement.	Open span bridge design or bottomless arch culvert to ensure free otter passage. No night time working unless agreed with local authority.	CEMP, secured by planning condition.	Adverse (local level) T / I / ST Not significant	No monitoring proposed.
Traffic & Movement					

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Users of A4063	Changes in traffic quantity or composition leading to increased perception of severance, driver and pedestrian delay, risk on road safety and effects on amenity of non-motorised users.	CTMP, e.g. delivery of HGVs/ abnormal loads outside peak commuter times, roadside signage and community liaison.	CTMP secured by planning condition.	Minor adverse T / I / ST Not significant	No monitoring proposed.
	Increased fear and intimidation.	CTMP, e.g. delivery of HGVs/abnormal loads outside peak commuter times, roadside signage and community liaison.	CTMP secured by planning condition.	Negligible T / I / ST Not significant	No monitoring proposed.
Users of B4281	Changes in traffic quantity or composition leading to increased perception of severance, driver and pedestrian delay, fear and intimidation, risk on road safety and effects on amenity of non-motorised users	CTMP, e.g. delivery of HGVs/ abnormal loads outside peak commuter times, roadside signage and community liaison.	CTMP secured by planning condition.	Minor adverse T / I / ST Not significant	No monitoring proposed.
Users of Fountain Road	Changes in traffic quantity or composition leading to increased perception of severance, driver and pedestrian delay, fear and intimidation, risk on road safety and effects on amenity of non-motorised users.	CTMP, e.g. delivery of HGVs/ abnormal loads outside peak commuter times, roadside signage and community liaison.	CTMP secured by planning condition.	Minor adverse T / I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Residents in: - Aberkenfig; - Tondy; - Coytrahen; - Llangynwyd	Changes in traffic quantity or composition leading to increased perception of severance, driver and pedestrian delay, fear and intimidation, risk on road safety and effects on amenity of non-motorised users	CTMP, e.g. delivery of HGVs/ abnormal loads outside peak commuter times, roadside signage and community liaison.	CTMP secured by planning condition.	Minor adverse T / I / ST Not significant	No monitoring proposed.
Public Rights of Way Users	Increase perception of severance.	CTMP/Access Management Plan	CTMP/Access Management Plan, secured by planning conditions.	Minor adverse T / I / ST Not significant	No monitoring proposed.
	Increased pedestrian delay.	CTMP/Access Management Plan, e.g. marshalled crossings if footpaths intersect a haul route.	CTMP/ Access Management Plan, secured by planning conditions.	Minor adverse T / D / MT Not significant	No monitoring proposed.
	Effects on amenity of non-motorised users.	CTMP/Access Management Plan, e.g. safe signage & route marking.	CTMP/PRoW Management Plan, secured by planning conditions.	Minor adverse T / I / MT Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	Increased levels of fear and intimidation.	CTMP/Access Management Plan, e.g. speed restrictions	CTMP, secured by planning conditions.	Minor adverse T / I / ST Not significant	No monitoring proposed.
	Increase risk on road safety.	CTMP Access Management Plan, e.g. on-site briefing for construction drivers.	CTMP/PRoW Management Plan, secured by planning conditions.	Minor adverse T / D / MT Not significant	No monitoring proposed.
Abnormal Load Route – Users of B4281, Users of Fountain Road and Residents in Aberkenfig	Presence of hazardous/large loads	Abnormal Load Transport Management Plan.	CTMP secured by planning condition. Highways Agreements (S278, S61).	Minor adverse T / D / ST Not significant	No monitoring proposed.
Population					
PRoW	Temporary disruption to users of the Ogwr Ridgeway Walk that runs through the Site.	Access Management Plan.	Access Management Plan, secured by planning condition. An outline version of this plan has been submitted alongside this application (ES	Slight adverse T / D / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
			Volume III, Appendix 13.1 Outline Access Management Plan) and will be revised by the Applicant prior to the start of construction.		
PRoW	Temporary disruption to users of recreational routes in the wider study area.	Access Management Plan.	Access Management Plan permission, secured by planning condition.	Slight adverse T / I / ST Not significant	No monitoring proposed.
Tourism	Potential impacts on small scale tourism facilities.	N/A	N/A	Neutral T / I / ST Not significant	No monitoring proposed.
Tourism	Potential impacts on main tourist attractions within 20 km.	N/A	N/A	Neutral T / I / ST Not significant	No monitoring proposed.
Businesses	Temporary impacts to businesses associated with adverse traffic, noise and visual impacts.	N/A	N/A	Slight adverse T / I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Employment	An increase in temporary construction related employment opportunities in the local area.	N/A	N/A	Slight beneficial T / D&I / ST Not significant	No monitoring proposed.
Employment	An increase in temporary construction related employment opportunities in Wales.	N/A	N/A	Slight beneficial T / D&I / ST Not significant	No monitoring proposed.
GVA	An increase in temporary construction GVA.	N/A	N/A	Slight beneficial T / D&I / ST Not significant	No monitoring proposed.
Intra-Project Combined Effects					
Users of on-Site PRoW	Users of on-site PRoW would experience a significant change in views and disruption including possible delays and temporary diversions.	Access Management Plan.	Access Management Plan, secured by condition.	Adverse T / D&I / ST Significant	No monitoring proposed.
Users of off-Site PRoW	Users of PRoW in the wider area would experience a change in views and possible increased disruptions due to increased presence of construction or decommissioning traffic.	Access Management Plan.	Access Management Plan, secured by condition.	Adverse T / D&I / ST Not significant	No monitoring proposed.

Construction phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Users of A4063	Users of the A4063 would experience both traffic related effects and highly filtered changes in view.	CTMP, e.g. designated routes, limit speeds, schedule heavy good deliveries.	CTMP secured by planning condition.	Adverse T / D&I / ST Not significant	No monitoring proposed.
Users of B4281	Users of the B4281 would experience both traffic related effects and changes in view.	CTMP, e.g. designated routes, limit speeds, schedule heavy good deliveries.	CTMP secured by planning condition.	Adverse T / D&I / ST Significant	No monitoring proposed.

16.3 Operational Phase Effects

Table 16.2 Summary of the Operational Phase Assessment

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Land, Soils and Groundwater					
Land (potential contamination)	Impacts on land quality due to release of existing contamination or accidental introduction of new contamination.	N/A	N/A	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Soil (physical/chemical properties)	Damage to physical structure of soil due to vehicle movements or operational/maintenance activities; damage to chemical properties of soil due to accidental leaks or spillages.	N/A	N/A	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.
Groundwater (quantity, quality and effect on abstraction points)	Reduction in quality due to leaks or spillages or remobilisation of existing contamination. Impacts on groundwater flow due to damage to existing drainage or changes to groundwater regime.	N/A	N/A	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.
Water					
Cwm Risca Meadows SSSI and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses linked to the SSSI from increased hardstanding.	Vegetation and planting beneath the solar PV panels. Drainage Design including Sustainable Drainage Systems (SuDS).	Surface Water Drainage Strategy within Flood Consequence Assessment (FCA), secured by planning conditions.	Negligible T / D / ST Not significant	Maintenance of SuDS in line with a management schedule.
	Water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals which	Use of well-maintained vehicles. Drainage Design including SuDS.	Operator's Environmental management System.	Negligible T / D / ST Not significant	N/A

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	could in turn effect the SSSI due to vehicles for infrastructure maintenance or replacement .				
WFD water body of Kenfig - headwaters to tidal (Nant Craigyraber, Nant Iorweth-goch and Afon Cynffig) and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses from increased hardstanding.	Vegetation and planting beneath the solar PV panels. Drainage Design including SuDS.	Surface Water Drainage Strategy within FCA, secured by planning conditions.	Negligible T / D / ST Not significant	Maintenance of SuDS in line with a management schedule.
	Effects to water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals due to vehicles for infrastructure maintenance or replacement .	Use of well-maintained vehicles. Drainage Design including SuDS.	Operator's Environmental management System.	Negligible T / D / ST Not significant	N/A
WFD water body of Llynfi - Lletty Brongu STW to conf with Ogmere (Nant y Gadlys, Nant Cedfyw and Afon Llynfi) and on-site hydrologically connected watercourses	Effects to water quality and quantity of local watercourses from increased hardstanding.	Vegetation and planting beneath the solar PV panels. Drainage Design including SuDS.	Surface Water Drainage Strategy within FCA, secured by planning conditions.	Negligible T / D / ST Not significant	Maintenance of SuDS in line with a management schedule.
	Effects to water quantity of local watercourses from proposed watercourse crossings.	Suitably designed crossings allowing passage of water during flood event plus a	Detailed design secured by planning conditions.	Negligible P / D / ST Not significant	N/A

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
		blockage and a freeboard allowance. A clear-span bridge or a bottomless arch culvert preference.			
	Effects to water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals due to vehicles for infrastructure maintenance or replacement .	Use of well-maintained vehicles.	Operator's Environmental management System.	Negligible T / D / ST Not significant	N/A
WFD water body of Ogmere - confluence with Llynfi to tidal limit (downstream Afon Llynfi) and on-site hydrologically connected watercourses	Water quality and quantity of local watercourses from hardstanding.	Vegetation and planting beneath the solar PV panels. Drainage Design including SuDS.	Surface Water Drainage Strategy within FCA, secured by planning conditions.	Negligible T / D / ST Not significant	Maintenance of SuDS in line with a management schedule.
	Effects to water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals due to vehicles for infrastructure maintenance or replacement .	Use of well-maintained vehicles. Drainage Design including SuDS.	Operator's Environmental management System.	Negligible T / D / ST Not significant	N/A

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Cultural Heritage					
British Fortified Residence GM086	Change to the visible character of part of the landscape featuring in panoramic views from the asset.	N/A	N/A	Slight-moderate adverse T / I / N/A Not significant	No monitoring proposed.
Mynydd Ty Talwyn Ancient Farms GM092	Change to the visible character of part of the landscape featuring in panoramic views from the asset.	N/A	N/A	Large adverse T / I / N/A Significant	No monitoring proposed.
Mynydd Ty Talwyn Ancient Farms GM093	Change to the visible character of part of the landscape featuring in panoramic views from the asset.	N/A	N/A	Large adverse T / I / N/A Significant	No monitoring proposed.
Earthwork and Platform Houses N of Nant Fadog GM340	Change to the visible character of part of the landscape featuring in panoramic views from the asset.	N/A	N/A	Large adverse T / I / N/A Significant	No monitoring proposed.
Church of St Cynwyd	Change to the visible character of part of the landscape featuring in panoramic views from the asset.	N/A	N/A	Slight to moderate adverse T / I / N/A Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Llangynwyd Conservation Area	Change to the visible character of part of the landscape featuring in panoramic views from the asset.	N/A	N/A	Slight or moderate adverse T / I / N/A Not significant	No monitoring proposed.
Landscape and Visual					
Landscape features – grassland and hedgerows	New vegetation planting including 3.26 km of new or improved hedgerows	N/A	N/A	Year 1 – Minor beneficial P / D / ST - MT Not significant	Monitoring of planting required. See ES Volume III, Appendix 10.4: Net Benefit for Biodiversity Report and supporting Annex.
				Year 15 – Minor-moderate beneficial P / D / LT Not significant	
Landscape features – on-site woodland	New vegetation planting including 19.05 ha of semi-natural broadleaved woodland	N/A	N/A	Year 1 – Minor beneficial T / D / ST - MT Not significant	Monitoring of planting required.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
				Year 15 – Minor-moderate beneficial P / D / LT Not significant	
Visual and Sensory Aspect Area CYNON VS473 Host - Mynydd Baedan	Change in the visual character of the aspect area due to the introduction of the Proposed Development	N/A	N/A	Major adverse T / D & I / LT Significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS884 – Llynfi Valley - CYNONVS966 – Bettws - CYNONVS349 - Mynydd Llangknwyr - CYNONVS811 - Garth Hill	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual and Sensory Aspect Areas: - CYNONVS142 - Mynydd y Glyn	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - NPTVS927 – Mynydd Margam	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS351 – Maesteg - CYNONVS813 – Garw and Caerau Forest - NPTVS897 – Mynydd Bromil and Scarp Slopes	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Minor – moderate adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
- NPTVS962 - Mynydd Nant y bar/Mynydd Blaenafan - CYNONVS550 - Mynydd y Aber - CYNONVS349 - Mynydd Llangenwyr (portions beyond 5km) - VLFGLVS663 - Ogmere and Old Castle Downs					

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual and Sensory Aspect Areas: - CYNONVS955 - Cribwr - CYNONVS731 - Conifer west of the study area - NPTVS403 – Margam CP - CYNONVS151 – Ffordd Y Graith	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - NPTVS920 - Kenfig Sands	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas:	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
- CYNONVS790 - Cefn Hirgoed - VLFGLVS825 - Newton Down - VLFGLVS828 - Between Bridgend and Merthyr Mawr - NPTVS811 - Margam Scarp - NPTVS274 - Coastal Dunes - NPTVS799 - Eglwy Numydd Reservoir - NPTVS543 - Coedhirwaun					
Visual and Sensory Aspect Areas: - CYNONVS847 – Pyle - CYNONVS726 - Bridgend	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
- NPTVS001 – Margam Opencast					
Visual and Sensory Aspect Areas: - CYNONVS148 – Cym ogwr - NPTVS837 - Margam Works - NPTVS277 - Margam Moor	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	Negligible T / I / LT Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - VLFGLVS378 - Alun Valley	Change in the visual character of the aspect area due to views of the Proposed Development	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 1: Margam Park (Access Road)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual Viewpoint 2: On PRoW, Margam Park Deer Park / Ogwr Ridgeway Long Distance Walk	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual Viewpoint 3: Ogwr Ridgeway Walk	Change to the existing view as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.
Visual Viewpoint 4: Llangynwyd Conservation Area	Change to the existing view as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.
Visual Viewpoint 5: Heol Gelli Lenor, Maesteg	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Significant	No monitoring proposed.
Visual Viewpoint 6: Heol Dewi Sant, Bettws	Change to the existing view as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual Viewpoint 7: Bridge over River Llynfi east of Coytrahen	Change to the existing view as a result of the Proposed Development	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 8: Bridgend Circular Walk	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual Viewpoint 9: Heol Shon, Cefn Cribwr	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate-major adverse T / I / LT Significant	No monitoring proposed.
Visual Viewpoint 10: Kenfig Burrows	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-Moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual Viewpoint 11: Wales Coast Path at Ogmores-by-Sea	Change to the existing view as a result of the Proposed Development	N/A	N/A	Negligible T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual Viewpoint 12: Ogwr Ridgeway Walk at Waun Wen	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual Viewpoint 13: Pen y Foel Trig Point	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Significant	No monitoring proposed.
Visual Viewpoint 14: Mumbles Hill, Swansea	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Visual Viewpoint 15: Ogof-Ffynnon-Ddu (Bannau Brycheniniog National Park)	Change to the existing view as a result of the Proposed Development	N/A	N/A	No Effect	No monitoring proposed.
Llangynwyd – hamlet to the west	Change to the existing view as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Llangynwyd – remaining area	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse or no effect T / I / LT Not significant	No monitoring proposed.
Maesteg	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse or no effect T / I / LT Not significant	No monitoring proposed.
				Moderate adverse T / I / ST Significant	No monitoring proposed.
Lletty Brongu	Change to the existing view as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.
Bettws	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
				Minor adverse-no effect T / I / LT	

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
				Not significant	
Cefn Cribwr	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Significant	No monitoring proposed.
Kenfig Hill and Pyle	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Coedhirwaun	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse-no effect T / I / LT Not significant	No monitoring proposed.
Pen-y-fai	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.
North Cornelly / Cynffig	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse-no effect T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Wales Coastal Path (Ogmore-on-Sea to Swansea)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Cistercian Way - sections within Margam Park	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Cistercian Way - other sections within study area	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate-Minor to Minor adverse T / I / LT Not significant	No monitoring proposed.
Ogwr Ridgeway Walk - section through Site (3-4 km)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.
Ogwr Ridgeway Walk - sections within 5 km of Site	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate-major adverse T / I / LT Significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
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Ogwr Ridgeway Walk - sections within 5-10 km of site	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
Ogwr Ridgeway Walk - sections beyond 10 km	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate to minor adverse T / I / LT Not significant	No monitoring proposed.
Route 4	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Route 4 - Margam Park section	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.
Route 4 - coastal sections	Change to the existing view as a result of the Proposed Development	N/A	N/A	No effect	No monitoring proposed.
Route 884 (Bryngarw House to Pontycymmer)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse-no effect	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
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				T / I / LT Not significant	
Route 885 (Bridgend to Afan Forest Park)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate-adverse T / I / LT Not significant	No monitoring proposed.
Route 887 (Port Talbot to Afan Forest Park)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse-no effect T / I / LT Not significant	No monitoring proposed.
M4 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.
A4063 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant to significant at limited gaps in vegetation	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
A48 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
A4107 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-no effect adverse T / I / LT Not significant	No monitoring proposed.
A473 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
A4061 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
A4106 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
A4229 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
B4281 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Significant	No monitoring proposed.
B4265 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.
B4524 (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
South Wales Main Line Railway (users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse-no effect T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Maesteg Line Railway(users of)	Change to the existing view as a result of the Proposed Development	N/A	N/A	Minor adverse-no effect T / I / LT Not significant	No monitoring proposed.
SLA 3 Western Uplands - Host (BCBC) (areas within the Site)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Major adverse T / I / LT Significant	No monitoring proposed.
SLA 3 Western Uplands - Host (BCBC) (areas 1-2 km from Site)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Moderate-major adverse T / I / LT Significant	No monitoring proposed.
SLA 3 Western Uplands - Host (BCBC) (areas 2-4 km from Site)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Significant	No monitoring proposed.
SLA 4 Margam (NPTC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
SLA 4 Bryngarw Country Park (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.
SLA 7 Laleston (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
SLA 6 Kenfig Burrows (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
SLA 2 Northern Uplands (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Moderate to minor-moderate-adverse T / I / LT Not significant	No monitoring proposed.
SLA 9 Merthyr Mawr Warren (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
SLA 6 Foel y Dyffryn (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
SLA 5 Mynydd y Gaer (BCBC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Moderate adverse T / I / LT Not significant	No monitoring proposed.
SLA 5 Mynydd y Gelli (NPTC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
SLA 6 Foel Trawsant (NPTC)	Change to the landscape character as a result of the Proposed Development	N/A	N/A	Minor-moderate adverse T / I / LT Not significant	No monitoring proposed.
Bannau Brycheiniog National Park	Potential change to views from and character of the National Park	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Gower National Landscape	Potential change to views from and character of the National Landscape	N/A	N/A	Minor adverse T / I / LT Not significant	No monitoring proposed.
Noise and Vibration					
NSR1-9, NSR13-20, NSR23, NSR25-29 and NSR31-32	Operational noise effects from solar and substation infrastructure.	N/A	N/A	Negligible / minor adverse T / D / LT Not significant	No monitoring proposed.
NSR10-12, NSR21-22, NSR24 and NSR30	Operational noise effects from solar and substation infrastructure.	N/A	N/A	Negligible T / D / LT Not significant	No monitoring proposed.
NSR 1-32	Operational Noise (Wind Farm) Daytime amenity hours	N/A	N/A	Minor adverse T / D / LT Not significant	No monitoring proposed.
NSR 1-32	Operational Noise (Wind Farm) Noise night-time hours	N/A	N/A	Minor adverse T / D / LT Not significant	No monitoring proposed.
All NSR 1 – NSR32	Operational noise effects from cumulative wind turbines.	N/A	N/A	Minor adverse T / D / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Ornithology					
All key ornithological features	Potential for reduction in foraging availability for passerine and raptor species alongside reduction in suitable nesting habitat for key ornithological species associated with grassland habitats. Potential for collision risk with turbine blades during operation, note this is not considered likely to be significant for passerine species but other bird species were subject to collision risk modelling.	Habitat Management Plan (HMP) established to support post-construction habitat enhancement for key species such as lapwing and passerines. Targeted habitat enhancement measures in specific management areas.	HMP permission, secured by planning conditions.	Adverse (local level) P / D&I / LT Not significant	Monitoring required to ensure lapwing and breeding bird assemblage using mitigation areas for nesting.
Eglwys Nynydd Reservoir SSSI Aberbaiden Farm Meadows SINC Lletty Brongu SINC	Presence of proposed wind turbines and solar panels during operation phase have the potential to cause disturbance and displacement through presence of unfamiliar infrastructure in suitable habitat and increased human presence during the operation phase. There is the potential for collision risk with turbine blades during operation.	N/A	N/A	Adverse (local level) T / I / LT Not significant	No monitoring proposed.
Red kite		N/A	N/A	Adverse (local level) T / I / LT	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
				Not significant	
Lapwing		HMMP includes habitat areas managed to enhance suitability for breeding (e.g. open ground, reduced disturbance).	HMMP permission, secured by planning condition.	Adverse (local level) T / I / LT Not significant	Monitoring required to ensure lapwing and breeding bird assemblage using mitigation areas for nesting.
Terrestrial Ecology					
Bats (roosting) – Local importance	No impacts on roosting bats are anticipated during operation.	N/A	N/A	No effect	No monitoring proposed.
Bats (foraging and commuting) – Local importance	Operational lighting of the Proposed Development could cause disturbance to foraging and commuting bats.	Lighting design to ensure sensitive designed lighting	Lighting design secured by planning condition	Adverse (local level) T / I / LT Not significant	Bat activity monitoring will be required to assess changes in bat activity patterns and the efficacy of mitigation (secured through a Bat Monitoring and Mitigation

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
					Strategy (BMMS)).
	Unknown impact of solar farms displacing bats.	N/A – embedded mitigation.	HMP permission, secured by planning condition.	Adverse (local level) T / I / LT Significant	Bat activity monitoring will be required to assess changes in bat activity patterns and the efficacy of mitigation (secured through a BMMS).
	Noise from Substation.	N/A – embedded mitigation.	HMP permission, secured by planning condition.	Adverse (local level) T / I / LT Not significant	Bat activity monitoring will be required to assess changes in bat activity patterns and the efficacy of mitigation (secured through a BMMS).
	Collision risk.	N/A – embedded mitigation.	HMP permission, secured by	Adverse (local level)	Bat fatality monitoring will be required to

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
			planning condition.	T / D / LT Significant	confirm the accuracy of the collision risk assessment, (secured through a BMMS).
Margam Park SINC	Collision risk affecting the integrity of bat populations within Margam Park	N/A – embedded mitigation.	HMP permission, secured by planning condition.	Adverse (local level) T / D / LT Significant	Bat fatality monitoring will be required to confirm the accuracy of the collision risk assessment, (secured through a BMMS).
Invasive non-native species (INNS)	Spreading invasive non-native species inadvertently through operational maintenance activities.	Continued eradication programme (INNS Management Plan) Biosecurity measures for operational staff and equipment Ongoing habitat management to limit spread of Japanese	INNS permission, secured by planning condition.	Beneficial (local level) T / D / LT Significant	Monitoring of eradication management required.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
		Knotweed, Montbretia, Himalayan Balsam.			
Traffic & Movement					
Users of A4063	Changes in traffic quantity or composition leading to increased perception of severance, pedestrian delay, levels of fear and intimidation, risk on road safety and effects on amenity of non-motorised users.	Management of public access and PRow during operation to ensure safe access for all users.	Access Management Plan secured by planning condition.	Negligible T / I / LT Not significant	No monitoring proposed.
Users of B4281					
Users of Fountain Road					
Residents in Aberkenfig					
Residents in Tondur					
Residents in Coytrahen					
Residents in Llangynwyd					
Public Rights of Way Users					
Population					
PRow	Accessibility for users of the Ogwr Ridgeway Walk that runs through the Site.	Outline Access Management Plan.	Access Management Plan, secured by	Slight beneficial P / D / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
			planning condition. S106 Agreement: a financial contribution for footpath enhancements.		
PRoW	Accessibility for users of recreational routes in the wider study area (proposed permissive route).	Outline Access Management Plan.	Access Management Plan, secured by planning condition.	Slight beneficial T / I / ST Not significant	No monitoring proposed.
Tourism	Potential impacts on small scale tourism facilities.	N/A	N/A	Neutral P / I / LT Not significant	No monitoring proposed.
Tourism	Potential impacts on main tourist attractions within 20 km.	N/A	N/A	Neutral P / I / LT Not significant	No monitoring proposed.
Businesses	Permanent impacts to businesses associated with visual impacts.	N/A	N/A	Neutral P / I / LT Not significant	No monitoring proposed.
Employment	An increase in operational related employment opportunities in the local area.	N/A	N/A	Slight beneficial P / D&I / LT	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
				Not significant	
Employment	An increase in operational related employment opportunities in Wales.	N/A	N/A	Slight beneficial P / D&I / LT Not significant	No monitoring proposed.
GVA	An increase in operational phase related GVA.	N/A	N/A	Slight beneficial P / D&I / LT Not significant	No monitoring proposed.
Intra-Project Combined Effects					
The Windsor Barn Gilfach Uchaf Farm Gilfach Ganol Farm	This receptor group would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Ty Trisant Pentre Lodge Pant Isaf Pentre Farm Pantysgawen Farm	This receptor group would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Hendre Forgan Farm Tyn Yr Heol Farm					
Ty Talwyn Farm The Old Stables	This receptor group would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.
Maes Cadlawr Maes Cadlawr Farm	This receptor group would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Cefn Ydfa Farm House	This receptor would experience a not significant change in views and to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Gelli Las Farm	This receptor would experience a not significant change in views and to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.
Ton Phillip Farm	This receptor would experience a not significant change in views and to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Tynton Farm	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Gadlys Farm	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Bryn Cynan Farm	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Troed Y Rhiw Farm / Swn y Nant	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.
Nant y Neuadd Farm / Park Farm	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.
Ffynnon Iago Farm & Ty Gwn	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Not significant	No monitoring proposed.

Operational phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation will be secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Pentyla Farm	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Y Graig	This receptor would experience a significant change in views and not significant change to background noise levels.	N/A	N/A	Adverse T / D&I / LT Significant	No monitoring proposed.
Users of on-Site PRoW	Users of on-site PRoW would experience a significant change in views and improved paths due to maintenance.	Access Management Plan.	Access Management Plan, secured by condition.	Adverse T / D&I / ST Significant	No monitoring proposed.

16.4 Decommissioning Phase Effects

Table 16.3 Summary of the Decommissioning Phase Assessment

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Land, Soils and Groundwater					
Land (potential contamination)	Impacts on land quality due to release of existing contamination or accidental introduction of new contamination.	Decommissioning Environmental Management Plan (DEMP), e.g. emergency procedures for spills and leaks, good housekeeping, pollution prevention practices.	DEMP secured by planning condition.	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.
Soil (physical/ chemical properties)	Damage to physical structure of soil due to vehicle movements or decommissioning activities; damage to chemical properties of soil due to accidental leaks or spillages.	Soil Management Plan (SMP), e.g. no working in unsuitable conditions, use low ground pressure vehicles, restore soil profiles in correct order.	SMP and DEMP secured by planning conditions.	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.
Groundwater (quantity, quality and effect on abstraction points)	Reduction in quality due to leaks or spillages or remobilisation of existing contamination. Impacts on groundwater flow due to damage to existing drainage or changes to groundwater regime.	SMP and DEMP e.g. emergency response plans, bunded storage areas, piling risk assessment if applicable.	SMP and DEMP secured by planning conditions.	Neutral or slight adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Water					
Cwm Risca Meadows SSSI and on-site hydrologically connected watercourses	Water quality and quantity of local watercourses and increase in silt-laden runoff leaving the site.	DEMP, e.g. no storage of vehicles and equipment within Flood Zone 2/3 or within 15 m of watercourses; fencing/straw bales downslope of works	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
	Water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals.	DEMP, e.g. vehicles inspected on arrival and rejected if leaking; double-skinned bunded fuel bowser located away from watercourse; spill kit.	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
WFD water body of Kenfig - headwaters to tidal (Nant Craigraber, Nant Iorweth-goch and Afon Cynffig) and on-site hydrologically connected watercourses	Water quality of local watercourses and increase in silt-laden runoff leaving the site.	DEMP, e.g. no storage of vehicles and equipment within Flood Zone 2/3 or within 15 m of watercourses; fencing/straw bales downslope of works.	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
	Water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals.	DEMP, e.g. vehicles inspected on arrival and rejected if leaking; double-skinned bunded fuel	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
		bowser located away from watercourse; spill kit.			
WFD water body of Llynfi - Lletty Brongu STW to conf with Ogmored (Nant y Gadlys, Nant Cedfyw and Afon Llynfi) and on-site hydrologically connected	Water quality of local watercourses and increase in silt-laden runoff leaving the site.	DEMP, e.g. no storage of vehicles and equipment within Flood Zone 2/3 or within 15 m of watercourses; fencing/straw bales downslope of works.	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
	Water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals.	DEMP, e.g. vehicles inspected on arrival and rejected if leaking; double-skinned bunded fuel bowser located away from watercourse; spill kit.	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
WFD water body of Ogmored - confluence with Llynfi to tidal limit (downstream Afon Llynfi) and on-site hydrologically connected watercourses	Water quality of local watercourses and increase in silt-laden runoff leaving the site.	DEMP, e.g. no storage of vehicles and equipment within Flood Zone 2/3 or within 15 m of watercourses; fencing/straw bales downslope of works	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.
	Water quality of local watercourses and increase in potential of spillages and leaks of fuels, oils and chemicals.	DEMP, e.g. vehicles inspected on arrival and rejected if leaking; double-skinned bunded fuel	DEMP secured by planning condition.	Negligible T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
		bowser located away from watercourse; spill kit			
Cultural Heritage					
Possible Bronze Age burial mounds in Solar Parcel K	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Known and potential Bronze Age cremation burials in Solar Parcel H	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Bronze Age to Romano-British enclosure E1 in Solar Parcel E	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Roman pit in Solar Parcel J	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
The medieval road of Ffordd-y-Gyfraith and its former branches to the British Fortified Residence and Mynydd Baedan	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Post-medieval enclosure E2 in Solar Parcel J	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Post-medieval enclosure E6 in Solar Parcel J	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Post-medieval pit within the footprint of Turbine T03	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Post-medieval pit in Solar Parcel J	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning	Neutral or slight adverse (at most)	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
			conditions prior to construction.	P / D / N/A Not significant	
Four large undated pits, which may be associated with post-medieval quarrying, in Solar Parcel G (and others elsewhere across the Site)	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
Probable post-medieval ditches (mapped as 'intrenchments') in the vicinity of the access track to Turbine T01 (and others elsewhere across the Site)	Truncation and/or partial to full destruction of potential buried archaeological remains.	Undertaking archaeological watching briefs as necessary	WSI permission, secured by planning conditions prior to construction.	Neutral or slight adverse (at most) P / D / N/A Not significant	No monitoring proposed.
British Fortified Residence GgwM086	Change to the visible character of part of the landscape featuring in panoramic views from the asset – restoration of baseline conditions	N/A	N/A	Neutral P / ID / N/A Not significant	No monitoring proposed.
Mynydd Ty Talwyn Ancient Farms GM092	Change to the visible character of part of the landscape featuring in	N/A	N/A	Neutral P / ID / N/A	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	panoramic views from the asset – restoration of baseline conditions.			Not significant	
Mynydd Ty Talwyn Ancient Farms GM093	Change to the visible character of part of the landscape featuring in panoramic views from the asset – restoration of baseline conditions.	N/A	N/A	Neutral P / ID / N/A Not significant	No monitoring proposed.
Earthwork and Platform Houses N of Nant Fadog GM340	Change to the visible character of part of the landscape featuring in panoramic views from the asset – restoration of baseline conditions.	N/A	N/A	Neutral P / ID / N/A Not significant	No monitoring proposed.
Church of St Cynwyd	Change to the visible character of part of the landscape featuring in panoramic views from the asset – restoration of baseline conditions.	N/A	N/A	Neutral P / ID / N/A Not significant	No monitoring proposed.
Llangynwyd Conservation Area	Change to the visible character of part of the landscape featuring in panoramic views from the asset – restoration of baseline conditions.	N/A	N/A	Neutral P / ID / N/A Not significant	No monitoring proposed.
Landscape and Visual					
Landscape features – grassland and hedgerows	Some limited impact to the landscape features of the Site from the movement of plant and workers associated with the	Measures to limit the potential for effects on landscape features during decommissioning period	DEMP secured by planning condition.	Moderate adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	removal of the built development during decommissioning. Short term medium impacts to the grassland on which the solar arrays would be decommissioned	would also be captured in a DEMP		Minor- moderate adverse T / D / ST Not significant	
Landscape features – on-site woodland	Decommissioning works are not anticipated to result in any losses or alterations that would affect the character of the landscape.	N/A	N/A	No effect	No monitoring proposed.
Visual and Sensory Aspect Area CYNON VS473 Host - Mynydd Baedan	Change in the visual character of the southern parts of the aspect area due to views of decommissioning activities	N/A	N/A	Moderate adverse T / D / ST Significant	No monitoring proposed.
Visual and Sensory Aspect Area CYNON VS473 Host – CYNONVS142 - Mynydd y Glyn	Change in the visual character of the southern parts of the aspect area due to views of decommissioning activities	N/A	N/A	Moderate adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - NPTVS403 – Margam CP	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Minor-moderate adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
- NPTVS962 - Mynydd Nant y bar/Mynydd Blaenafan - CYNONVS550 - Mynydd y Aber - CYNONVS813 - Garw and Caeru Forest - CYNONVS151 – Ffordd Y Graith - CYNONVS955- Cribwr - CYNONVS349 - Mynydd Llangenwyr (portions beyond 5km)					
Visual and Sensory - CYNONVS811 - Garth Hill	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Moderate adverse T / D / ST Significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual and Sensory Aspect Areas: - CYNONVS884 – Llynfi Valley - CYNONVS966 – Bettws - CYNONVS349 - Mynydd Llangenwyr	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Minor- moderate adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - NPTVS920 - Kenfig Sands	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Minor-moderate adverse P / I / LT Not significant	No monitoring proposed.
Visual and Sensory Aspect Area - NPTVS927 – Mynydd Margam - NPTVS897 – Mynydd Bromil and Scarp Slopes - VLFGLVS663 - Ogmere and	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Minor- moderate adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Old Castle Downs - CYNONVS731- Conifer west of the study area					
Visual and Sensory Aspect Areas: - CYNONVS847 – Pyle - CYNONVS726 – Bridgend - NPTVS001 – Margam Opencast	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: - CYNONVS351 – Maesteg - CYNONVS790 - Cefn Hirgoed - VLFGLVS825 - Newton Down - VLFGLVS828 - Between	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Bridgend and Merthyr Mawr - NPTVS811 - Margam Scarp - NPTVS274 - Coastal Dunes - NPTVS799 - Eglwy Nymydd Reservoir - NPTVS543 - Coedhirwaun					
Visual and Sensory Aspect Areas: - CYNONVS148 – Cym ogwr - NPTVS837 - Margam Works - NPTVS277 - Margam Moor	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	Negligible T / D / ST Not significant	No monitoring proposed.
Visual and Sensory Aspect Areas: VLFGLVS378 - Alun Valley	Change in the visual character of the aspect area due to views of decommissioning activities	N/A	N/A	No effect	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual Viewpoint 1: Margam Park (Access Road)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 2: On PRoW, Margam Park Deer Park / Ogwr Ridgeway Long Distance Walk	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 3: Ogwr Ridgeway Walk	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 4: Llangynwyd Conservation Area	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 5: Heol Gelli Lenor, Maesteg	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual Viewpoint 6: Heol Dewi Sant, Bettws	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 7: Bridge over River Llynfi east of Coytrahen	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 8: Bridgend Circular Walk	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 9: Heol Shon, Cefn Cribwr	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate-major adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 10: Kenfig Burrows	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 11: Wales Coast Path at Ogmores-by-Sea	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Visual Viewpoint 12: Ogwr Ridgeway Walk at Waun Wen	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
Visual Viewpoint 13: Pen y Foel Trig Point	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.
Visual Viewpoint 14: Mumbles Hill, Swansea	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Visual Viewpoint 15: Ogof-Ffynnon-Ddu (Bannau Brycheniniog National Park)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Llangynwyd – hamlet to the west	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.
Llangynwyd – remaining area	Change to the existing view as a result of decommissioning	N/A	N/A	Minor adverse or not effect T / I / ST	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	activities (including the presence of cranes)			Not significant	
Maesteg	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse or no effect T / I / ST Not significant	No monitoring proposed.
				Moderate adverse T / I / ST Significant	No monitoring proposed.
Lletty Brongu	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.
Bettws	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
				Minor adverse - no effect T / I / ST Not significant	
Cefn Cribwr	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
Kenfig Hill and Pyle	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Coedhirwaun	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
Pen-y-fai	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
North Cornelly / Cynffig	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
Wales Coastal Path (Ogmore-on-Sea to Swansea)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Cistercian Way - sections within Margam Park	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Cistercian Way - other sections within study area	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Ogwr Ridgeway Walk - section through Site (3-4 km)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Major adverse T / I / ST Significant	No monitoring proposed.
Ogwr Ridgeway Walk - sections within 5 km of Site	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Ogwr Ridgeway Walk - sections within 5-10 km of site	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Ogwr Ridgeway Walk - sections beyond 10 km	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Negligible adverse T / I / ST Not significant	No monitoring proposed.
Route 4	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Route 4 - Margam Park section	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
Route 4 - coastal sections	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	No effect	No monitoring proposed.
Route 884 (Bryngarw House to Pontycymmer)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Route 885 (Bridgend to Afan Forest Park)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
Route 887 (Port Talbot to Afan Forest Park)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
M4 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
A4063 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate-adverse T / I / ST Not significant to significant at limited gaps in vegetation	No monitoring proposed.
A48 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
A4107 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse - no effect T / I / ST Not significant	No monitoring proposed.
A473 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4061 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4106 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
A4229 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
B4281 (users of)	Change to the existing view as a result of decommissioning	N/A	N/A	Moderate adverse T / I / ST	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	activities (including the presence of cranes)			Significant	
B4265 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
B4524 (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
South Wales Main Line Railway (users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
Maesteg Line Railway(users of)	Change to the existing view as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse-no effect T / I / ST Not significant	No monitoring proposed.
SLA 3 Western Uplands - Host	Change to the landscape character as a result of decommissioning activities	N/A	N/A	Major adverse T / I / ST Significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
(BCBC) (areas within the Site)	(including the presence of cranes)				
SLA 3 Western Uplands - Host (BCBC) (areas 1-2 km from Site)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Major-moderate adverse T / I / ST Significant	No monitoring proposed.
SLA 3 Western Uplands - Host (BCBC) (areas 2-4 km from Site)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Moderate adverse T / I / ST Significant	No monitoring proposed.
SLA 4 Margam (NPTC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 4 Bryngarw Country Park (BCBC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 7 Laleston (BCBC)	Change to the landscape character as a result of decommissioning activities	N/A	N/A	Minor-moderate adverse T / I / ST	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	(including the presence of cranes)			Not significant	
SLA 6 Kenfig Burrows (BCBC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 2 Northern Uplands (BCBC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor-moderate adverse T / I / ST Not significant	No monitoring proposed.
SLA 9 Merthyr Mawr Warren (BCBC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 6 Foel y Dyffryn (BCBC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 5 Mynydd y Gaer (BCBC)	Change to the landscape character as a result of decommissioning activities	N/A	N/A	Moderate adverse T / I / ST	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	(including the presence of cranes)			Not significant	
SLA 5 Mynydd y Gelli (NPTC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
SLA 6 Foel Trawsant (NPTC)	Change to the landscape character as a result of decommissioning activities (including the presence of cranes)	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Bannau Brycheiniog National Park	Potential change to views from and character of the National Park	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Gower National Landscape	Potential change to views from and character of the National Landscape	N/A	N/A	Minor adverse T / I / ST Not significant	No monitoring proposed.
Noise and Vibration					
NSR13 and 31	Decommissioning noise effects on residential sensitive receptors.	N/A	N/A	Minor adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
NSR1-12 14-31 and 32	Decommissioning noise effects on residential sensitive receptors.	N/A	N/A	Negligible T / D / ST Not significant	No monitoring proposed.
Receptors NSR 1-32	Decommissioning traffic noise effects on residential sensitive receptors.	N/A	N/A	Negligible T / D / ST Not significant	No monitoring proposed.
Ornithology					
All key ornithological features	Potential habitat loss associated with reduction in extent of woodland and hedgerow if required during decommissioning.	Pollution prevention measures to protect retained habitats from accidental damage,	DEMP, secured by planning condition.	Adverse effect (local level) T / D / ST Not significant	No monitoring proposed.
Eglwys Nunydd Reservoir SSSI Aberbaiden Farm Meadows SINC Lletty Brongu SINC	Disturbance during decommissioning activities associated with the development resulting in increased noise, human presence, lighting and pollution effects.	N/A	N/A	Adverse effect (local level) T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Lapwing		Protection measures if active lapwing nesting sites occur in or near works (e.g. restricting works in a set radius or timing them to avoid the breeding season). Habitat management enhancements to ensure alternative or improved nesting areas remain functional. Minimising abrupt noise events, with ECoW oversight.	DEMP, secured by planning condition. ECoW to ensure compliance.	Adverse effect (local level) T / D / ST Not significant	No monitoring proposed.
Breeding bird assemblage		Pre-works nesting bird checks and set-back distances for active nests. Limiting vegetation removal to outside the breeding season (where possible). Measures to reduce unnecessary noise, dust, or nighttime working (lighting).	DEMP, secured by planning condition. ECoW to ensure compliance.	Adverse effect (local level) T / I / ST Not significant	Monitoring required to ensure breeding bird assemblage using mitigation areas for nesting.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Wintering bird assemblage		Minimisation of noise, lighting, and pollutant risks in winter months if works coincide with peak foraging usage. Retain and protect key features (e.g. hedgerows, grass margins) as far as possible.	DEMP, secured by planning condition. ECoW to ensure compliance.	Adverse effect (local level) T / I / ST Not significant	No monitoring proposed.
Terrestrial Ecology					
Cwm Risca Meadow SSSI - County importance	Indirect effect on species rich acid meadow which could lead to potential changes in species assemblages.	Pollution prevention measures will be implemented to prevent spills contaminating important ecological features. Dust suppression measures throughout the Site.	DEMP, secured by planning condition.	No effect	No monitoring proposed.
NPT Watercourses SINC- County importance	Pollution run off from decommissioning works entering groundwater, potentially ending up at the designated site.	Pollution prevention measures.	DEMP, secured by planning condition.	No effect	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Cwm Nant Gwyn SINC - County importance	Pollution run off from decommissioning works entering groundwater, potentially ending up at the designated site. Increase in possible air pollutants from decommissioning of the Proposed Development.	Pollution prevention measures.	DEMP, secured by planning condition.	No effect	No monitoring proposed.
Nant Cwm-bach SINC - County importance	Pollution run off from decommissioning works entering groundwater, potentially ending up at the designated site. Increase in possible air pollutants from decommissioning of the Proposed Development.	Pollution prevention measures.	DEMP, secured by planning condition.	No effect	No monitoring proposed.
Gilfach Uchaf - County importance	Pollution run off from decommissioning works entering groundwater, potentially ending up at the designated site. Increase in possible air pollutants from decommissioning of the Proposed Development.	Pollution prevention measures.	DEMP, secured by planning condition.	No effect	No monitoring proposed.
NPT Ancient Semi-Natural Woodland SINC- County importance	Pollution run off from decommissioning works entering groundwater, potentially ending up at the designated site.	Pollution prevention measures.	DEMP, secured by planning condition.	No effect	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
	Increase in possible air pollutants from decommissioning of the Proposed Development.				
Invasive non-native species	Spreading invasive non-native species inadvertently through decommissioning activities (including enabling works).	Invasive Non-Native Species Management Plan implemented prior to the commencement of work.	Invasive Non-Native Species Management Plan, secured by planning condition.	Beneficial effect (local level) P / D / LT Significant	Monitoring of eradication management required.
Great crested newt - Local importance	No impacts to great crested newt are anticipated as there are no decommissioning activities taking place within 350 m of the nearest waterbody with great crested newt presence.	N/A	N/A	No effect	No monitoring proposed.
Bats (foraging and commuting) – Local importance	Potential disturbance	No night time working unless agreed with local authority.	DEMP, secured by planning conditions.	No effect	No monitoring proposed.
Otter - local importance	The decommissioning works could cause disturbance to otter if present within the northern watercourse which could temporarily prevent otter movement.	No night time working unless agreed with local authority.	DEMP, secured by planning condition.	Adverse effect (local level) T / I / ST Not significant	No monitoring proposed.
Traffic & Movement					

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Users of A4063	Changes in traffic quantity or composition leading to increased perception of severance, pedestrian delay, levels of fear and intimidation, risk on road safety and effects on amenity of non-motorised users.	Management of public access and PRoW during operation to ensure safe access for all users.	Access (PRoW) Management Plan secured by planning condition.	Minor adverse T / I / LT Not significant	No monitoring proposed.
Users of B4281					
Users of Fountain Road					
Residents in Aberkenfig					
Residents in Tondur					
Residents in Coytrahen					
Residents in Llangynwyd					
Public Rights of Way Users					
Population					
PRoW	Temporary disruption to users of the Ogwr Ridgeway Walk that runs through the Site.	Access Management Plan.	Access Management Plan permission, secured by planning condition. S106 Agreement: a financial contribution for	Slight adverse T / D / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
			footpath enhancements.		
PRoW	Temporary disruption to users of recreational routes in the wider study area.	N/A	N/A	Slight adverse T / I / ST Not significant	No monitoring proposed.
Tourism	Potential impacts on small scale tourism facilities.	N/A	N/A	Neutral T / I / ST Not significant	No monitoring proposed.
Tourism	Potential impacts on main tourist attractions within 20 km.	N/A	N/A	Neutral T / I / ST Not significant	No monitoring proposed.
Businesses	Temporary impacts to businesses associated with adverse traffic, noise and visual impacts.	N/A	N/A	Slight adverse T / I / ST Not significant	No monitoring proposed.
Employment	An increase in temporary decommissioning related employment opportunities in the local area.	N/A	N/A	Slight beneficial T / D&I / ST Not significant	No monitoring proposed.
Employment	An increase in temporary decommissioning related employment opportunities in Wales.	N/A	N/A	Slight beneficial T / D&I / ST Not significant	No monitoring proposed.

Decommissioning phase receptor	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
GVA	An increase in temporary decommissioning GVA.	N/A	N/A	Slight beneficial T / D&I / ST Not significant	No monitoring proposed.
Intra-Project Combined Effects					
Users of on-Site PRow	Users of on-site PRow would experience a significant change in views and disruption including possible delays and temporary diversions.	Access Management Plan.	Access Management Plan, secured by condition.	Adverse T / D&I / ST Significant	No monitoring proposed.
Users of off-Site PRow	Users of PRow in the wider area would experience a change in views and possible increased disruptions due to increased presence of decommissioning traffic.	Access Management Plan.	Access Management Plan, secured by condition.	Adverse T / D&I / ST Not significant	No monitoring proposed.
Users of A4063	Users of the A4063 would experience both traffic related effects and highly filtered changes in view.	CTMP, e.g. designated routes, limit speeds, schedule heavy good deliveries.	CTMP secured by planning condition.	Adverse T / D&I / ST Not significant	No monitoring proposed.
Users of B4281	Users of the B4281 would experience both traffic related effects and changes in view.	CTMP, e.g. designated routes, limit speeds, schedule heavy good deliveries.	CTMP secured by planning condition.	Adverse T / D&I / ST Significant	No monitoring proposed.

16.5 Whole Lifecycle Effects

Table 16.4 Summary of the Assessment for the Whole Lifecycle of the Proposed Development (Construction, Operational, and Decommissioning)

Impact	Potential effects	Additional (secondary and tertiary) mitigation	How additional mitigation secured	Residual effects	Monitoring
Key: P/T = Permanent or Temporary, D/I = Direct or Indirect, ST/MT/LT = Short Term, Medium Term or Long Term, N/A = Not Applicable					
Climate					
Global atmosphere	The Proposed Development is anticipated to result in GHG Savings of 3,647,115 tCO ₂ e against a fossil fuel mix electricity generation over its 50-year lifespan, and 1,695,193 tCO ₂ e against a grid mix electricity generation. The Proposed Development's carbon saving potential will contribute positively to meeting Welsh greenhouse gas emissions targets.	N/A	N/A	Beneficial P / D / LT Significant	No monitoring proposed.