# 11 SUMMARY OF MITIGATION

11.1.1. **Table 11-1** sets out a summary of significant effects and the subsequent mitigation and enhancement measures that the Applicant and NGED have committed to implementing prior to and during the construction, operation and decommissioning phases of the Project. **Table 11-1** provides a list of:

- embedded mitigation;
- significant effects prior to enhancement measures (additional mitigation);
- additional mitigation; and
- residual effects.

11.1.2. These have been identified through the EIA process, as explored in more details within **Chapters 6-10**.

11.1.3. The definition of significance, particularly in respect of how this relates to “significant effects” in terms of the EIA Regulations, is described within **Chapter 2: EIA Approach**. A definition of how significant effects are derived for each topic is set out in the corresponding technical chapter along with the relevant explanation and descriptions of receptor sensitivity, the magnitude of change, and levels of effect that are considered significant in terms of the EIA Regulations.

11.1.4. Most of the pre-construction and construction phase mitigation would be delivered through a CEMP (**Appendix 4A**). The CEMP will provide a general overview of the standard good practice measures to be adopted. These are measures primarily applicable to the construction phase, which is the phase of activities with greatest risk of adverse effects in terms of both probability and magnitude. The principles identified for management of construction are also be anticipated to be applicable for decommissioning.

11.1.5. Further details on specific measures to be included in the final CEMP are contained in each of the technical chapters of the EIA report, where relevant. The final CEMP will be prepared as a condition of consent, prior to commencement of construction, in consultation with the local planning authorities - BCBC and NPTCBC - and other relevant stakeholders, which will take account of the approved plans and conditions attached to the consent granted for the Project.

**Table 11-1 - Summary of Significant Effects**

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
|---|---|---|---|---|---|---|
| **Landscape and Visual** | | | | | | |
| **LVIA - General** | Construction and Operation | The Project has been developed through an iterative design process which considered balanced environmental and technical factors.<br><br>Minimising the number of potential visual receptors and reducing landscape effects by avoiding the requirement to create corridors through forested areas where possible, ensuring the Project is generally backdropped by existing forestry and/ or elevated topography and following the existing topography | Potential effects on landscape character and designations, and visual amenity. | Embedded Landscape Mitigation has been included through the design process. | Condition of Consent | **Landscape Character Significant Effects of the Project:**<br><br>The Project is considered to have a Moderate and Significant level of effect at construction and operation stages on LCA 1: Llangynwyd Rolling Uplands and on LANDMAP Visual and Sensory Aspect Area CYNONVS473 Mynydd Baedan (which in part cover the same geographic area) as a result of the UGC (construction phase only) and both the northern and southern OHLs. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | reflecting the guidance provided in the Holford Rules. | | | | This LCA and VSAA have a High-Medium Sensitivity. The northern OHL lies within the Foel y Dyfrryn SLA and the southern OHL lies within the Western Uplands SLA.<br>**Visual Significant Effects of the Project:**<br>The Project is considered to have a Major to Moderate and Significant level of effect at both construction and operation phases on users of Footpath MAE/15/2 (represented by Viewpoint 1) as a result of the proposed northern OHL.<br>The Project is considered to have a Major to Moderate - Moderate and Significant level of effect at both construction and |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | | | | | operation phases on users of Footpath MAE/50/2 and nearby residents (represented by Viewpoint 3) and users Cistercian Way Long Distance footpath/ Bridleway LDM/17/1 (represented by Viewpoint 4) as a result of the proposed southern OHL.<br><br>At operation, residents particularly Cae Emi Farm and Lluest-wen, along with users of the footpaths/ bridleways would experience noticeable views of the proposed southern OHL over a wide horizontal field of view. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Traffic and Transport** | | | | | | |
| **Traffic and Transport - General** | Construction and Operation | Two supporting documents have been prepared which include the key management and mitigation measures which related to traffic and transport.<br><br>An Outline CTMP (**Appendix 7A**) - a CTMP sets out details of the impacts of the Project construction traffic on the road network and the mitigation measures and management strategy for the effects. The Outline CTMP will be developed into a full CTMP in consultation and agreement with the relevant local authority officers; and<br><br>An Outline PRoWMP (Appendix 7B) – a PRoWMP sets out | Potential effects on traffic and transport. | Additional mitigation measure will be incorporated within the full CTMP, to include the following:<br>▪ Restriction of construction traffic movements on the A4063 Maesteg (north of Llan Road north) during peak school pick up and drop off times, to be discussed and agreed with the LHA to prevent Project construction traffic impacting on school children. This will minimise impact on pedestrian amenity and therefore result in this effect being reduced to Not Significant;<br>▪ The Contractor will consult / agree with the LHA for suitable mitigation measures for | CTMP | With the implementation of the full CTMP and full PRoWMP there will be a package of measures in place to minimise the traffic and transport effects of the Project construction traffic. These mitigation measures will need to include specific measures to address pedestrian amenity near sensitive receptors, such as the primary school alongside the A4063 Maesteg (north of Llan Road north) and the various single-track roads proposed to be used by Project construction traffic. With appropriate mitigation and management in place the impact of the Project on traffic and |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | details of the impacts of the Project on the PRoW network and the mitigation measures and management strategy for the effects. The Outline PRoWMP will be developed into a full PRoWMP in consultation and agreement with the relevant local authority officers.<br><br>In addition, a Construction Environment Management Plan (CEMP) has been developed as part of the EIA (**Appendix 4A**). | | Unnamed Road to Sychbant Farm, along with the other narrow single-track roads proposed to be utilised by the Project construction traffic via the development and approval of the full CTMP. This will allow location specific mitigation to be put in place. This will minimise traffic and transport impacts on these road links and therefore result in this effect being reduced to Not Significant; and<br>■ The section of the A4063 between Llangynwyd and the northern extent of Tondu should be highlighted, as part of mitigation measures, regarding its accident record and mitigation implemented such as driver information and training/awareness. This would | | transport is likely to be **Not Significant**. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | | | be secured through the full CTMP. | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology** | | | | | | |
| **Ecology – General (habitat degradation)** | Construction | See embedded measures to manage pollution associated with air quality, hydrology, noise, vibration and visual within the CEMP.<br>Construction works would be undertaken using all necessary and practical measures to minimise the release of additional sediment-laden run-off into nearby watercourses. | Potential effects on ecological features (Priority Habitat, ancient woodland and SINCs) | Embedded mitigation has been included through the design process. | CEMP | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – General (habitat fragmentation)** | Construction | Where habitats are subject to temporary loss, these will be replaced as soon as possible following construction.<br><br>The OHL would be located predominantly in open grassland fields. Micro-siting will be used to avoid impacts to hedgerows, tree lines and watercourse, avoiding direct impacts to these habitats. | Potential effects on ecological features (bats, badgers, otter, brown hare, hedgehog, harvest mouse, reptiles, amphibians, birds and invertebrates) | Embedded mitigation has been included through the design process. | CEMP | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – General (noise and vibration disturbance)** | Construction | Construction works would be undertaken using all necessary and practical measures to minimise the noise, vibration and visual disturbance. Construction works will take place between 07:00 to 19:00 hours on weekdays and 07:00 to 13:00 on Saturdays. In exceptions, there may be a requirement for a 7-day work week. This would be agreed with the local council as appropriate.<br><br>Full measures to address noise, vibration and visual disturbance are detailed in the CEMP. | N/A | Embedded mitigation has been included through the design process. | Noise and Vibration Manageme nt Plan via CEMP | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – General**<br>**(air quality/ dust)** | Construction | Due to the nature of the Project, impacts arising from dust generation have been assessed as being minimal (see **Chapter 4: Description of the Project**). There will be little to no demolition and earthworks will be undertaken only for the underground works under existing roads. | N/A | Embedded mitigation has been included through the design process. | CEMP | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – General**<br>**(removal of trees)** | Construction | Whilst the intention is for the OHL route to be as straight as possible, there will be some deviation to avoid environmental features, such as trees. At points of deviation, angle poles will be used; these are likely to be H-pole structures. The three trees with bat suitability will not be impacted. It is currently anticipated that trees within one location will require removal (Figure 8.5). | Potential effects on ecological features | Embedded mitigation has been included through the design process. | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – General (introductio n or spread of INNS)** | Construction | Biosecurity measures, such as boot wash stations, will be implemented throughout construction to avoid the introduction or spread of INNS | Potential effects on ecological features | Embedded mitigation has been included through the design process. | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – SINCs, Priority Habitats, Ancient Woodland (temporary habitat loss)** | Construction | Habitat loss will be avoided in the first instance to minimise the overall habitat loss resulting from the Project.<br><br>Where habitats are subject to temporary loss, these will be replaced as soon as possible following construction.<br><br>Poles will be stored at the temporary construction compound and transported to the works area on the day of installation. | Potential effects on ecological features (SINCs, Priority Habitats, Ancient Woodland) | A Conservation Plan will be devised in consultation with the LPA. This will incorporate habitat creation, management and monitoring of the habitats present within the Site. The Conservation Plan will include creation and enhancement of existing habitats.<br><br>The turf layer will be translocated during construction following an appropriate methodology to avoid soil compaction. It will be stored in a secure location and will be immediately reinstated following the completion of the trench digging.<br><br>There will be no loss of floral diversity within the turf layer as it will be reinstated with appropriate aftercare if required (e.g. watering in dry weather). | CEMP, Conservatio n Plan | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – Bats (temporary habitat loss, disturbance/ collision risk, changes in light levels)** | Construction and Operation | Habitat loss will be avoided in the first instance to minimise the overall habitat loss resulting from the Project.<br><br>Where habitats are subject to temporary loss, these will be replaced as soon as possible following construction.<br>A method statement will be prepared which will include measures such as ensuring all excavations will have sloped sides or have a means of escape for entrapped animals; excavations to be checked each morning by operatives prior to work within the excavation. This will include the protection of retained features, designated | Potential effects on ecological features (Bats) | Habitats lost will be reinstated, as to be detailed in the Conservation Plan. In the event that direct effects upon bat roosts cannot be avoided, this will be subject to a licence administered by NRW and implementation of a licensed method statement. Mitigation will avoid a net reduction in habitat suitability for bats, which is achievable given the suitability of habitat across the wider Site.<br><br>Any trees assessed as having potential to support roosting bats will be subject to Potential Roost Feature (PRF) aerial inspection surveys to determine the presence or likely absence of roosting bats.<br><br>In the event that direct effects upon bat roosts or disturbance on flight | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | haul routes, ecological supervision (ECoW).<br><br>Construction activities will be minimised outside of normal working hours (with works taking place between 07:00 and19:00 hours on weekdays and 07:00 to 13:00 on Saturdays). In exceptions, there may be a requirement for a 7-day work week. This would be agreed with the local council as appropriate<br><br>This will largely avoid the hours of darkness, particularly in the summer when species are most active. The winter months when day length is shorter, some site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to | | lines cannot be avoided, this will be subject to a licence administered by NRW and implementation of a licensed method statement.<br><br>The results of the roost surveys will be used to support the Final ES.<br><br>A programme of surveys for bats is underway. The results of the surveys will inform the programme and clearance methodology at sensitive locations. Mitigation is likely to include:<br><br>▪ potential for the OHL to be micro-sited away from any sensitive locations;<br>▪ minimum stand-off buffers from sensitive habitats which will reduce collision. The stand-off | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | features that may be used by nocturnal species. | | buffers will be determined following the receipt of bat survey data; and<br>■ habitat management under OHL may also be required to discourage sensitive species from foraging.<br>These measures will be provided in a Conservation Plan will be devised in consultation with the LPA. | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – Otters (Disturbance, changes in light levels)** | Construction | A method statement will be prepared which will include measures such as ensuring all excavations will have sloped sides or have a means of escape for entrapped animals; excavations to be checked each morning by operatives prior to work within the excavation. This will include the protection of retained features, designated haul routes, ecological supervision (ECoW).<br><br>Construction activities will be minimised outside of normal working hours (with works taking place between 07:00 and19:00 hours on weekdays and 07:00 to 13:00 on Saturdays). In exceptions, there may be a requirement for a 7-day work | Potential effects on ecological features (Otters) | During the winter months, when day length is shorter, site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to features that may be used by nocturnal species.<br><br>Should additional lighting be required this will be task specific and will restrict light spill onto retained adjacent habitats.<br><br>A pre-works survey will take place ahead of works at the Nant Sychbant watercourse. Specific measures to minimise and avoid impacts to otter will be provided in a PMoW. A suitability experienced ecologist will supervise supervising works at this location. | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | week. This would be agreed with the local council as appropriate<br><br>This will largely avoid the hours of darkness, particularly in the summer when species are most active. The winter months when day length is shorter, some site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to features that may be used by nocturnal species. | | If the otter surveys identify a confirmed otter holt or resting place within the relevant ZoI, a licence will be required from NRW. | | |
| **Ecology – Water Vole (temporary habitat loss, disturbance,** | Construction | Habitat loss will be avoided in the first instance to minimise the overall habitat loss resulting from the Project.<br><br>Where habitats are subject to temporary loss, these will be | Potential effects on ecological features (Water Voles) | A pre-construction survey of the footprint of the Site and a suitably sized area (250m radius based on the ZoI of disturbance impacts) will be conducted to ascertain any new water vole habitats within the Site. | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **changes in light levels)** | | replaced as soon as possible following construction.<br>A method statement will be prepared which will include measures such as ensuring all excavations will have sloped sides or have a means of escape for entrapped animals; excavations to be checked each morning by operatives prior to work within the excavation. This will include the protection of retained features, designated haul routes, ecological supervision (ECoW).<br><br>Construction activities will be minimised outside of normal working hours (with works taking place between 07:00 and19:00 hours on weekdays and 07:00 to 13:00 on Saturdays). In | | Specific measures to minimise and avoid impacts to water vole will be provided in a PMoW. A suitability experienced ecologist will supervise works at this location to minimise the risk of direct mortality or injury.<br><br>Confirmed water vole habitat that will be impacted by the Project will be subject to a licence application with NRW.<br>To ensure long-term protection measures for water vole, maintenance and enhancement, a Conservation Plan will be devised in consultation with the LPA. This will incorporate long-term management and monitoring of the habitats present within the Site. | | ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | exceptions, there may be a requirement for a 7-day work week. This would be agreed with the local council as appropriate<br><br>This will largely avoid the hours of darkness, particularly in the summer when species are most active. The winter months when day length is shorter, some site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to features that may be used by nocturnal species. | | | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology – Reptiles (temporary habitat loss, disturbance, changes in light levels)** | Construction | Habitat loss will be avoided in the first instance to minimise the overall habitat loss resulting from the Project.<br><br>Where habitats are subject to temporary loss, these will be replaced as soon as possible following construction.<br><br>Disturbance to features that could support reptiles or amphibians (e.g. scrub, dense tussocky grassland, rocks) will be kept to a minimum, and works in these areas will take place outside the hibernation period for those species.<br><br>A method statement will be prepared which will include measures such as ensuring all | Potential effects on ecological features (Reptiles) | A pre-works check for reptiles will be carried out prior to habitat removal. This will be carried out by a suitably experienced ecologist.<br><br>A two-stage cut will also be implemented to minimise the risk of killing and injury of reptiles. This will be defined in a Method Statement.<br><br>Potential refugia/hibernacula will be dismantled during the active season. No clearance of hibernacula should take place between October – March inclusive.<br><br>Any reptiles discovered during construction will be moved out of harm into adjacent suitable vegetation. | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | excavations will have sloped sides or have a means of escape for entrapped animals; excavations to be checked each morning by operatives prior to work within the excavation. This will include the protection of retained features, designated haul routes, ecological supervision (ECoW).<br><br>Construction activities will be minimised outside of normal working hours (with works taking place between 07:00 and19:00 hours on weekdays and 07:00 to 13:00 on Saturdays). In exceptions, there may be a requirement for a 7-day work week. This would be agreed with the local council as appropriate | | To provide enhancement for this species, a Conservation Plan will be devised in consultation with the LPA.<br><br>This will incorporate long-term management and monitoring of the habitats present within the Site. This will include 'reptile friendly' cutting of associated habitats. | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | This will largely avoid the hours of darkness, particularly in the summer when species are most active.<br><br>The winter months when day length is shorter, some site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to features that may be used by nocturnal species. | | | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Ecology - Protected or notable birds (temporary habitat loss, disturbance disturbance/ collision risk)** | Construction and Operation | Habitat loss will be avoided in the first instance to minimise the overall habitat loss resulting from the Project.<br><br>Where habitats are subject to temporary loss, these will be replaced as soon as possible following construction.<br><br>Disturbance to features that could support reptiles or amphibians (e.g. scrub, dense tussocky grassland, rocks) will be kept to a minimum, and works in these areas will take place outside the hibernation period for those species.<br><br>A method statement will be prepared which will include measures such as ensuring all | Potential effects on ecological features (Birds) | A programme of surveys for protected or notable birds is underway. The results of the surveys will inform the programme and clearance methodology at sensitive locations.<br>Vegetation clearance within sensitive locations for birds will take place out of the breeding bird season for that particular season.<br>The OHL will be micro-sited away from sensitive locations.<br><br>A programme of surveys for birds is underway. The results of the surveys will inform the programme and clearance methodology at sensitive locations. Mitigation is likely to include: | CEMP, PMoW and ECoW | With the implementation of the ecological mitigation measures described, at this stage, it is concluded likely that residual effects will be Not Significant in the long-term for those important ecological features which have been fully assessed. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | excavations will have sloped sides or have a means of escape for entrapped animals; excavations to be checked each morning by operatives prior to work within the excavation. This will include the protection of retained features, designated haul routes, ecological supervision (ECoW).<br><br>Construction activities will be minimised outside of normal working hours (with works taking place between 07:00 and19:00 hours on weekdays and 07:00 to 13:00 on Saturdays). In exceptions, there may be a requirement for a 7-day work week. This would be agreed with the local council as appropriate | | ▪ use of bird flight diverters on the OHL to improve visibility for birds and reduce collision events;<br>▪ habitat management under OHL route to discourage sensitive species;<br>▪ potential for the OHL to be micro-sited away from any sensitive locations; and<br>▪ minimum stand-off buffers may be required from sensitive habitats which will reduce collision.<br><br>These measures will be provided in a Conservation Plan will be devised in consultation with the LPA. Appropriate mitigation will ensure legal compliance with respect to | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | This will largely avoid the hours of darkness, particularly in the summer when species are most active.<br><br>The winter months when day length is shorter, some site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to features that may be used by nocturnal species. | | effects upon Schedule 1 WCA birds. | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Historic Environment** | | | | | | |
| **Historic Environment – General** | Construction and Operation | **Construction Phase**<br>Construction phase will be temporary, totalling 9 months with 2 months planned for OHL installation.<br>Micro-siting of H-pole pylon foundations (OHL), underground cable (UGC) or construction compound to avoid known historic assets.<br>Avoidance maps of known non-designated historic assets within the CEMP. | Potential effects on Historic Environment (Cultural Heritage). features. | Embedded mitigation has been included through the design process. | CEMP and Recommended archaeological monitoring (Watching Brief), secured by Planning condition. | Subject to the implementation of the environmental measures, the Project will avoid significant effects upon the sub-surface aspect of the historic environment.<br>Since the installation works would only take place over 2 months, any impacts to their setting during the construction phase would be temporary and therefore negligible.<br>During the operation phase, the new OHL site would be visible within a landscape in which existing OHL of greater sizes are |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | Micro-siting of H-pole pylon foundations (OHL), underground cable (UGC) or construction compound to avoid historic assets.<br><br>Peat surveys conducted to enable identification of peat deposits of potential paleoenvironmental significance.<br><br>Micro-siting H-pole foundations or underground cable routes to avoid disturbing.<br><br>**Operation phase**<br><br>Proposed OHL design using wooden H-poles, have kept effects on setting to a minimum.<br><br>The underground cable route will not directly impact any | | | | already prominent and visible, and therefore the impact is also considered negligible. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | designated assets, nor will it be visible due to its position below the ground. | | | | |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| **Water Resource and Flood Risk** | | | | | | |
| **Water Resource and Flood Risk – General** | Construction and Operation | **Construction Phase**<br>The CEMP will contain principles to be carried forward in order to mitigate potentially significant impacts to surface water and groundwater receptors within the study area. The CEMP will refer to a number of industry standard best-practice guidance documents.<br>The following is a list of mitigation measures to be followed:<br>▪ Existing access tracks will be used to transport construction | Potential effects on Hydrological features | **Construction Phase**<br>▪ Where necessary, use barriers to adequately capture sediment to allow for disposal in-line with CEMP and OWC requirements, including at the location of temporary dam use;<br>▪ Upstream and downstream water quality sampling to be undertaken to gauge potential adverse impacts to the quality of receiving waterbodies, in particular WFD waterbodies;<br>▪ Consideration of Phase 1 Ground Investigation data when it comes to incorporating mitigation measures into the | CEMP and OWC | Following mitigation measures, no residual effects are expected. Measures are expected to sufficiently mitigate the potential Water Environment and Flood Risk risks. |

| Issue | Project Stage | Embedded measures | Potentially Significant Effect prior to Mitigation | Outline Mitigation/Enhancement Measure | Means of Implement ation | Significance of Residual Effect Following Implementation |
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| | | materials to and from the compound;<br>▪ The method of works will consider the potential for impacts to Water Environment and Flood Risk receptors, particularly where works are undertaken within 10m of a surface water feature;<br>▪ Where possible, topographical gradients should be kept as shallow as possible in order to minimise the risk of watercourse contamination from silt runoff;<br>▪ Surface water runoff should be captured at source and disposed of in accordance with best-practice guidance and allocated permits;<br>▪ The refuelling of construction and maintenance vehicles | | contractor's method statement, for example providing adequate lining of underground infrastructure at locations where a shallow water table is discovered to mitigate against groundwater receptor contamination;<br>▪ Have discussions with contractor undertaking works on the Welfare Park project (P/12/877/BCB) to discuss and sufficiently mitigate against the potential for cumulative impacts through the construction phases of both projects.<br>**Operational Phase**<br>Embedded mitigation has been included through the design process. | | |

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| | | should be undertaken in a controlled area with measures in place to prevent spillages from contaminating surface water and groundwater resources, such as drip trays and bunds, if necessary;<br>▪ Those conducting the works should have an understanding of the hydraulic connectivity of the site, including the watercourses and urban drainage networks, to ensure work can be undertaken in such a way that minimises pollution to sensitive water features;<br>▪ OWC to be applied for by the appointed contractor;<br>▪ Structural integrity of culverts in the built up areas of Maesteg and Natyffyllon to be | | | | |

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| | | confirmed with Bridgend CBC and Neath Port Talbot CBC LLFAs prior to commencement of works; and<br>▪ Hydraulic connectivity and flow dynamics to be considered at the location of temporary dam works at the Nant Sychbant.<br>**Operation Phase**<br>Proportionate measures for protection of flood risk receptors through the operational phase of the scheme are as follows:<br>▪ The location of poles will be considered through detailed design to ensure they are located outside high risk flood zones, while understanding there are a number of | | | | |

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| | | engineering design requirements that will also need to be satisfied through detail design; and<br>▪ The hydraulic models received by NRW will be used to inform the high-level assessment of flood risk to the Project where necessary, for example at the location of the temporary dam works at the Nant Sychbant. | | | | |