

Ecological Impact Assessment



Transcontinental Advanced Coatings

20th December 2023



**Tyler
Grange**

TG Report No. 15581_R05b_DP_BP_CW

Report No:	Date	Revision	Author	Peer Review	Approved
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Summary

- S.1. This report has been prepared by Tyler Grange Group Limited on behalf of Transcontinental Advanced Coatings UK Limited. It sets out the findings of an Ecological Impact Assessment (EclA) of a land parcel within Wrexham Industrial Estate, Wrexham (OS Grid Reference SJ 38019 50643). It has been produced to accompany a planning application for the installation of a new oxidiser and removal of the an existing oxidiser.
- S.2. The site comprises an existing oxidiser within a fenced boundary, located in Wrexham Industrial Estate, directly north of Ash Road North. The wider Transcontinental site measures approximately 1.4 hectares, and comprises predominantly of hardstanding and industrial buildings, with areas of amenity grassland, scrub, and mature trees.
- S.3. Development proposals for the site are provided in **Appendix 2** at the end of this report. **Table 5.1** below summarises each ecological receptor considered, the potential impacts, and recommendations for mitigation.

Table 5.1 – Summary of constraints for the site.

Ecological Receptor	Potential Impact	Mitigation/ further assessment
Land Designations	None	All designated sites considered to be sufficiently far from site and not physically or functionally linked.
Habitats	Loss of 3x mature trees, and 0.03ha of grassland.	Compensation will be provided by planting of 4x native broadleaved trees, and the enhancement of 0.04ha of retained grassland. Management of retained habitats will ensure the site achieves a Biodiversity Net-Benefit overall.
Amphibians/ GCN/ Reptiles/ Water Vole/ Otter	None	No suitable habitat to be impacted present on site for these species groups.
Badgers/ Hedgehog	Low likelihood of badgers/ hedgehogs crossing site during construction phase.	Adoption of sensitive working techniques.
Bats	Disturbance of commuting/foraging areas.	Retention of dark corridor along the boundary of site, along with production of sensitive lighting plan.
Birds	Loss of habitat, risk of encountering nests during site clearance activities.	Inclusion of native landscaping, along with sensitively timed site clearance works and/or check for nests by an ecologist.

- S.4. In conclusion, it is considered that development within the site of the scale proposed would be in conformity with both Local and National legislation and planning policy relating to biodiversity. All potential effects on protected/ notable protected species would also be avoided or adequately mitigated.



Section 1: Introduction

- 1.1. This report has been prepared by Tyler Grange Group Limited on behalf of Transcontinental Advanced Coatings UK Limited. It sets out the findings of an Ecological Impact Assessment (EclA) of a land parcel within Wrexham Industrial Estate, Wrexham (OS Grid Reference SJ 38019 50643). It has been produced to accompany a planning application for the installation of a new oxidiser and removal of the an existing oxidiser.
- 1.2. The site comprises an existing oxidiser within a fenced boundary, located in Wrexham Industrial Estate, directly north of Ash Road North. The site comprises predominantly hardstanding and industrial buildings, with areas of amenity grassland, scrub, and mature trees. **Figure 1.1** below provides an illustration of the site's location.

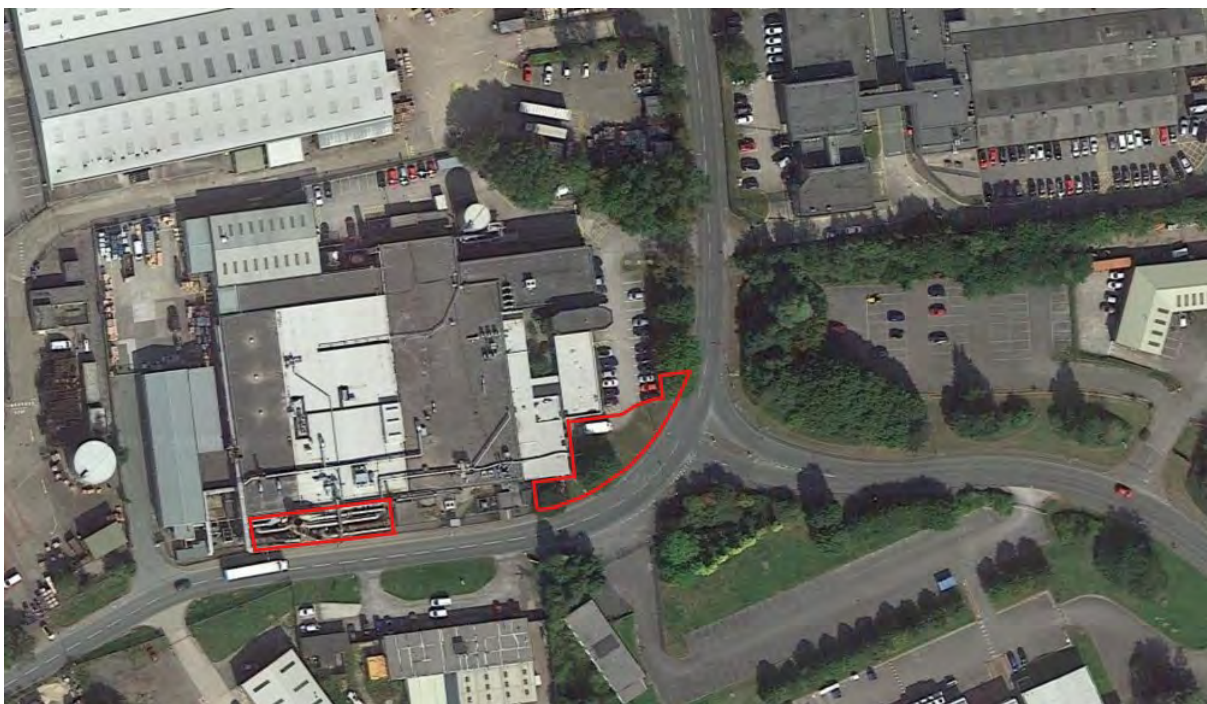


Figure 1.1 - Site red line boundary (Aerial imagery © Google 2023).

- 1.3. This report:
 - Uses available background data and results of the field surveys to describe and evaluate the ecological features present within the likely "Zone of Influence"¹ (Zoi) of the proposed development;
 - Describes the actual or potential ecological issues and opportunities that might arise as a result of the site's development.

¹ Defined by the CIEEM (2018) Guidelines for Ecological Impact Assessment as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries



- Where appropriate, makes commitments for mitigation measures for adverse effects on ecological features as well as ecological enhancements, to ensure conformity with policy and legislation listed in **Appendix 1**; and
- Informs a planning application for the replacement oxidiser.

1.4. This assessment and the terminology used are consistent with the Guidelines for Preliminary Ecological Appraisal² and the Guidelines for Ecological Impact Assessment³.

² CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

³ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.



Section 2: Methodology

Scope of Assessment

- 2.1. This report follows the guidance set out in the Chartered Institute of Ecologists and Environmental Management (CIEEM) Guidance on Ecological Impact Assessment (EclA) and Preliminary Ecological Appraisals.
- 2.2. The extent of potential ecological effects which could arise from the proposed development were determined by undertaking a desk-based assessment of available records and published sources, together with an initial site survey. With this information, the zone of influence (Zoi) of the proposed development was established, together with potential ecological effects, opportunities and any further work, such as detailed surveys, that might be necessary to inform detailed development designs and requirements for mitigation.

Desk Study

- 2.3. A desk-based study was undertaken to identify statutory and non-statutory nature conservation designations and protected species records within 1km of the site and relevant planning policies. The following sources were used:
 - The data search was undertaken in January 2023 for a 10km radius around the site for European statutory sites, a 2km radius for national statutory and non-statutory sites and a 1km radius for protected and priority⁴ species records. The data search was conducted by inspecting the Multi Agency Geographic Information for the Countryside website (www.magic.defra.gov.uk⁵).
 - Records of protected species and other species of nature conservation importance within 2km of the site were requested from Environmental Records Information Centre for the North East (ERICNE) in January 2023; and
 - Local Planning policies from the adopted Development Plan were checked to identify relevant policies which need to be considered as part of the development of the site (see **Appendix 1**).

Extended Phase I Habitat Survey

- 2.4. An 'extended' Phase 1 habitat survey of the site was initially undertaken on 23rd February 2023 by Bethany Phythian (Ecologist, Tyler Grange), an appropriately experienced field ecologist and member of CIEEM. Weather conditions on the day of the survey were optimal: 6°C, no precipitation, 10% cloud cover and wind BFS: 2. An update survey was conducted on 21st November 2023 by Bethany Phythian.

⁴ UK priority species and habitats are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act states that local planning authorities must have regard for the conservation of both SoPIs and HoPIs.

⁵ Accessed March 2023.



- 2.5. The survey broadly followed the methodology set out in guidance from the Joint Nature Conservation Committee (JNCC) for extended Phase 1 habitat survey⁶. This method of survey provides information on habitats and assesses the potential for legally protected or otherwise notable species to occur in and adjacent to the site and allows the ecological value of resources to be determined.

Preliminary Roost Assessment (PRA)

- 2.6. A preliminary roost assessment of all trees and buildings on site was also conducted on 23rd February 2023 alongside the Phase I survey, repeated in November 2023, and was also conducted by Bethany Phythian (Ecologist, Tyler Grange).
- 2.7. The survey followed standard methodologies (Mitchell-Jones, A.J., 2004; Mitchell-Jones, A.J. and McLeish, A.P., 2004; Collins, 2016) which are described below.
- 2.8. The ground-based tree PRA comprised assessing trees on site for any defects (i.e. cracks, broken limbs, knot holes, callus rolls etc.) that would create preliminary roost features (PRFs) or any access points into internal cavities. The assessment also looked for direct signs of bats such as but not limited to droppings or urine stains under potential roost features/access points.
- 2.9. Externally, the building was inspected from both the ground level and roof level at different aspects using binoculars. The external inspection focused on features suitable for bats to gain access to potentially suitable roosting areas. This included features such as soffits and fascias, lifted led flashing, lifted roof tiles and around windows and gaps within stone and brickwork.
- 2.10. Internally, the building was inspected to identify potential roost features and signs of bat activity (i.e. droppings, urine splashes, as well as live or dead bats), and all rooms and walls were visually examined in order to identify potential access points for bats.
- 2.11. An assessment of the immediate surroundings was also undertaken to determine the connectivity of the trees and buildings to the surrounding landscape that would offer commuting and foraging habitats.

The potential of the buildings and trees on site to support roosting bats have been categorised against the criteria described in **Table 2.1** below.

Table 2.1 – Roost Assessment Criteria (Adapted from Collins, 2016).

Suitability	Description of Roosting Habitat
Negligible	Negligible habitat features on-site likely to be used by roosting bats
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).

⁶ Joint Nature Conservation Committee, (2010), Handbook for Phase 1 habitat survey - a technique for environmental audit.



	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for long periods of time due to their size, shelter, protection conditions and surrounding habitat.

Evaluation

- 2.12. The habitats and species in this ecological appraisal were evaluated using published guidance produced by CIEEM⁷. The level of value of specific ecological receptors is assigned using a geographic frame of reference, i.e. international value being most important, then national, regional, county, local and lastly, within the context of the site itself.
- 2.13. Value judgements are based on various characteristics that can be used to identify ecological resources or features likely to be important in terms of biodiversity. These include site designations (such as Sites of Special Scientific Interest (SSSIs)), or for undesignated features, the size, conservation status (locally, nationally or internationally) and the quality of the ecological resource. In terms of the latter, 'quality' can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats), or species populations or assemblages.

Impact Assessment

- 2.14. Impacts can be direct or indirect, permanent or temporary, negative or positive. Impacts may include habitat loss, habitat degradation, fragmentation and isolation of habitats, mortality and disturbance to species.
- 2.15. The significance of an adverse or beneficial impact is the product of the magnitude of the impact and the value or sensitivity of the ecological receptors affected. Current guidance on ecological impact assessment provides a complex framework for the consideration of impacts to ecological receptors and the reader is referred to the actual guidance for full details. The importance of ecological receptors is given a geographical reference and any impacts are assessed accordingly. Where appropriate, details of proposed mitigation measures are considered when determining residual impacts to ecological features.

Quality Assurance

- 2.16. All ecologists at Tyler Grange are members of CIEEM or are working towards membership and act under the direction of members, and abide by the Institute's code of conduct.

⁷ CIEEM (2019) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.



Limitations

- 2.17. The findings of this report are valid at the time of writing. Owing to the dynamic nature of ecological resources, if more than 12 months have elapsed since the report was written, advice should be sought to determine whether update work is required. The findings of the report should not be relied upon without this advice.
- 2.18. This report is also partly based on 3rd party data held by the Local Record Centre, of which Tyler Grange Group Ltd. cannot guarantee the accuracy.



Section 3: Ecological Features and Evaluation

Site Context

- 3.1. The site is 424A Ash Road North, Wrexham Industrial Estate, Wrexham, LL13 9UF. The site is within the existing limits of Wrexham Industrial Estate. The site mainly comprises an existing oxidiser surrounded by hardstanding and buildings, with an area of amenity grassland and mature trees also present in the eastern parcel.

Protected Sites

Statutory

- 3.2. Three internationally designated sites considered to be of international ecological importance are present within 10km of the site:
- Midland Meres and Mosses Phase 2 Ramsar (England & Wales) is situated 3.55km north-west of the site and is designated for its nutrient-rich open water bodies and fringe habitats which support a range of nationally important flora and fauna.
 - River Dee and Bala Lake SAC (England & Wales) is situated 3.92km east of the site and is designated for its plain to montane water courses and extensive inland water bodies which host a number of Annex II species including Atlantic salmon *Salmo salar* and floating water plantain *Luronium natans*.
 - Johnstown Newt Sites SAC is situated 7.44km south-west of the site and is designated for its inland water bodies and terrestrial hibernation habitats which support one of the largest breeding populations of great crested newts *Triturus cristatus* in Great Britain
- 3.3. No other designated sites considered to be of national ecological importance are present within 2km of the site. The site does lie within the SSSI Impact Risk Zone of the River Dee SSSI, and Dee Cliffs, Farndon SSSI, which both lie 3.6km to the east at the closest point. The site however does not fall into any of the risk categories that will affect the site, therefore impacts can be reasonably discounted.

Non-statutory

- 3.4. Cofnod returned records of two local wildlife sites (LWS), considered to be of county ecological importance, within 2km of the site:
- Wrexham industrial estate LWS is situated 0.59km south of the site.
 - Cefn Park LWS is situated 1.17km south-west of the site.

Habitats

- 3.5. Habitats present across the site include:



- Hardstanding
- Buildings
- Amenity Grassland
- Mixed Scrub
- Broad-leaved Woodland
- Scattered trees

3.6. The extent of the above habitats is shown on plans **15581/P02** appended to this report.

Habitats

Hardstanding

3.7. A small area of the eastern part of the site comprises hardstanding access and carparking. This had no value for flora and fauna and is of **negligible ecological importance**.

Buildings

3.8. The existing oxidiser is present in the western parcel of the site. This habitat is of **negligible ecological importance**. B01 was however was identified and assessed further for its value to protected species, as detailed in further sections below.

Amenity grassland

3.9. Short sward grassland was present on the entrance areas to the site in the eastern parcel. Species included: perennial ryegrass *Lolium perenne*, yarrow *Achillea millefolium*, *Fescue* sp., self-heal *Prunella vulgaris*. This habitat was species poor and common within the wider landscape, therefore is of **negligible ecological importance**.

Scattered trees

3.10. Scattered mature trees are along the amenity grass area of the site, at the site frontage, which are of species oak, ash and birch. These trees presented value to potential flora and fauna, and were assessed as holding **local ecological importance**.

3.11. A Portuguese laurel *Prunus lusitanica* tree was present next to B01, which was of **negligible ecological importance**. This tree presents limited value for birds as described in further sections below.





Photograph 3 – Scattered semi/early-mature trees and amenity grassland

Fauna

Amphibians including Great Crested Newt (GCN)

- 3.12. Cofnod returned numerous records of great crested newt *Triturus cristatus* within 2km of the site in the last 20 years, with the closest record being 0.48km north in 2005. Records were also returned for smooth newt *Lissotriton vulgaris*, palmate newt *Lissotriton helveticus*, common toad *Bufo bufo*, and common frog *Rana temporaria*.
- 3.13. The site offers no suitable terrestrial habitat for GCN, and no ponds are present on site. A single pond is present within 250m of the site, but given the lack of any significant terrestrial habitat on site and the physical barriers between the site and this pond (roads, industrial development etc.) it is considered highly unlikely that GCN or other amphibians are present on site.
- 3.14. Overall, the site is considered to have **negligible potential** for this species group and as such they are **not considered any further within this report**.

Badgers

- 3.15. Cofnod returned multiple records of badger *Meles meles* within 2km of the site in the last 20 years, with the closest record being 0.57km east in 2019.
- 3.16. No evidence of badgers was identified during the Phase I survey. It is possible that small areas of scrub on site offer some foraging opportunities for this species group, but the habitats on



site were determined to offer no suitability for badgers to excavate setts, and therefore it is considered highly unlikely that this species group has any presence on site beyond occasionally commuting through site to other territory.

- 3.17. Overall, the site is considered to have **negligible potential** for this species and as such they are **not considered any further within this report**.

Bats

- 3.18. Cofnod returned numerous records of bat species within 2km of the site, including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, pipistrelle sp. *Pipistrelle*, noctule bat *Nyctalus noctula*, natterer's bat *Myotis nattereri*, Daubenton's bat *Myotis daubentonii*, whiskered bat *Myotis mystacinus*, Brandt's bat *Myotis brandtii*, and myotis sp. *Myotis*, brown long-eared bat *Plecotus auritus*, and lesser horseshoe *Rhinolophus hipposideros*.
- 3.19. No buildings are to be removed or affected by the proposed development. All trees identified as being removed or affected by development on-site were inspected for their bat roost potential during the extended phase I survey. All trees assessed were found to be unsuitable for roosting bats, with no PRF's identified.
- 3.20. Limited foraging habitat is present for bat foraging in the mature trees, woodland and scrub on-site, however the site doesn't offer a species rich or diverse range of habitats suitable for bat foraging. Overall, the site is considered to be of **negligible importance** to this species group, but as potential foraging habitat is present, recommendations for this are detailed in **section 4**.

Birds

- 3.21. Cofnod returned records of numerous bird species within 1km of the site in the last 20 years. Notable species based on the habitats available on and surrounding the site include house sparrow *Passer domesticus*.
- 3.22. Areas of scrub, trees and buildings offer some potential shelter and nesting opportunities for bird species. Given the size of the site and nature of habitats present it is only likely to support a small group of common suburban species, and the resources for birds provided by the site are highly unlikely to be of importance for bird populations beyond the immediate environs of the site.
- 3.23. Overall, the site is considered to be of **negligible importance** to this species group, but as potential nesting and foraging habitat is present, recommendations for this are detailed in **section 4**.

Hedgehogs

- 3.24. Cofnod returned multiple records of hedgehog *Erinaceus europaeus* within 2km of the site in the last 20 years, with the closest being 0.2km north-west in 2017.



- 3.25. Areas of scrub around the site could provide some potential foraging and nesting opportunities. As such, sensitive working methodologies should be used during the construction phase of development, detailed in **section 4**.

Reptiles

- 3.26. Cofnod returned records of adder *Vipera berus*, common lizard *Zootoca vivipara*, grass snake *Natrix natrix*, and slow-worm *Anguis fragilis* within 2km of the site in the last 20 years.
- 3.27. Overall, the habitats present on site, and the location of the site (next to a road and within an industrial setting) is considered to have **negligible importance** for reptiles and as such this species group is **not considered any further within this report**.

Water Vole/Otter

- 3.28. Cofnod returned multiple records of otter *Lutra lutra* within 2km of the site in the last 20 years, with the closest record being 0.63km north in 2013. No records were returned for water vole *Arvicola amphibius*.
- 3.29. No ditches or waterways are present within the site area, and all waterways within the surrounding area are separated by significant physical barriers such as roads/industrial development. The site offers no suitable habitat to support otter or water vole species, and as such the site has **negligible importance** for otter and watervole, and therefore they are **not considered any further within this report**.



Section 4: Considerations in Respect of Proposed Development

Proposals

- 4.1. The proposed development seeks to replace and relocate the oxidiser to the south east of the site, which currently comprises hard standing car park and a grassed area with trees. The existing oxidiser is located within a fenced boundary, centred on grid reference SJ 38035 50610. The proposals for the site (see **Appendix 2**) require the removal of 2 x trees and an area of amenity grassland. The impacts of this in relation to nature conservation sites, habitats and species are outlined below.

Protected Sites

- 4.2. All statutory and non-statutory sites are considered to be sufficiently distant from the site and would not be impacted as a result of the proposed works due to the distance between them and the site.

Habitats and Flora

- 4.3. The grassland on-site is of negligible ecological importance. The scattered mature trees are of local ecological importance. From the scattered trees present, 2x semi-early mature trees will be removed. Therefore, 6 no. native broadleaf trees are proposed to be incorporated within the wider site ownership to proportionately compensate for this loss; see Arb report for details (TG Report: **15581_R06_BV**).
- 4.4. The southeastern edge of the site (the grassed verge with scattered trees) is within Wrexham Industrial Estate Strategic Ecological Network⁸, which has identified this area as grassland recommended for improved management. Currently, this area (approximately 0.07 hectares) is highly managed and kept mown short as an amenity grassland area for the site entrance/frontage. This area is currently species poor, and also has low connectivity due to the surrounding hardstanding and adjacent Ash Road North.
- 4.5. Approximately 0.03 ha of this area of this grassland is proposed for removal to accommodate the new oxidiser at the site. Compensation is however proposed, which enhances the grassland verge (0.04 ha) to encourage species richness and more wildflower species, as demonstrated in the landscape plan (see **Appendix 2**). This will help to provide an important nectar resource for invertebrates, and enabling them to complete their life cycles by sensitive cutting regimes.
- 4.6. Wrexham Industrial Estate Ecological Network Strategy also recommends enhancement by adopting the following measures:

⁸ Wrexham Industrial Estate *Towards a Living Landscape* PDF (www.northwaleswildlifetrust.org.uk)



- Cutting the grass on a rotational basis, whereby leaving some areas uncut which will allow for wildflowers to set seed.
- Removing arisings from the site (or piling arisings in designated area as habitat piles), to promote low fertility of the soil, making it suitable for growth of wildflower species.

Biodiversity Net-Benefit

- 4.7. Requirements for Biodiversity Net-Benefit stem from Section 6 of Planning Policy Wales (Edition 11) and Policy 9 (Resilient Ecological Networks and Green Infrastructure) of Future Wales, which encourages proposals to pro-actively maintain and enhance biodiversity and ecosystems with a focus on avoidance, minimisation and mitigation of impacts within the context of the site with offsite mitigation seen as a last resort in considering the resilience of ecosystems, their diversity, extent, condition, connectivity and adaptability.
- 4.8. The proposals include the removal of species poor habitat, however this is off-set by the enhancement of the species poor grassland to a more species rich wildflower grassland, and the provision of native species tree planting. Details of which are provided in the landscape plan (**Appendix 2**). From the implementation of the measures recommended, it is therefore understood that the site will achieve a Biodiversity Net Benefit not only through the increase species richness of the habitats currently on-site, but also providing more resources for a variety of species local to the area, such as invertebrates, hedgehog, birds, bats.

Bats Protected and Notable Species

Bats

- 4.9. All three trees to be removed were found to have negligible potential for bat roosting. Overall, no roosting bats will be impacted by the proposals.
- 4.10. No lighting during construction is proposed, and it is anticipated that lighting levels post-construction will not be greater than current levels. However, any outside lighting should avoid spilling onto retained habitats include retained and newly planted trees.
- 4.11. Through the retention of the trees and new tree and landscape planting, foraging and commuting bats may continue to use the site post-development.

Birds

- 4.12. All birds, their nests and eggs, are protected by law and as such it is an offence to intentionally kill, injure, or take any wild bird; intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built; and intentionally take or destroy the egg of any wild bird.
- 4.13. Clearance of suitable habitat (vegetation, trees) should be timed outside the nesting bird season (generally taken as March to September inclusive, though this is not defined in law and birds may nest outside of this time). If any clearance works to nesting habitats are required during the nesting season, then pre-removal checks for nesting birds must be carried out by a suitably experienced Ecological Clerk of Works (ECoW), no more than 48 hours prior to the works commencing. If any nesting birds are found to be present, an appropriate buffer zone will be implemented, within which works are excluded for the duration of the breeding



attempt. Any active nests will need to be left in situ until a suitably experienced ecologist confirms that the chicks have fledged and the nest is no longer active.

- 4.14. Habitat enhancement of the grassland, and new tree planting is expected to increase foraging opportunities for birds in the area.

Badger/Hedgehog

- 4.15. Hedgehogs are listed as a Species of Principal Importance (SoPI) within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Consequently, they are a material consideration within the planning process, as Section 40 of the NERC Act 2006 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.
- 4.16. Although the proposals would not remove an important resource for hedgehog or badgers in the area, it is possible that these species may utilise the site for dispersal. No specific mitigation is proposed for this site, however measures to safeguard badgers and hedgehogs during the construction phase of the development, sensitive working methodologies should be adopted, including but not limited to:
- No overnight/ nocturnal works;
 - Storing site materials in skips or off the ground using pallets;
 - Ensuring no run-off or pollution enters ponds and ditches; this can be secured through a CEMP;
 - Ensuring any excavations are left ramped or with an exit should any mammals become trapped; and
 - Capping any pipework left open overnight.
- 4.17. Providing the above recommendations are implemented, there are no ecological reasons why the development of the oxidiser should not proceed in accordance with relevant wildlife legislation and planning policy.



Section 5: Conclusion

- 5.1. Development proposals for the site are provided in **Appendix 2** at the end of this report. **Table 5.1** below summarises each ecological receptor considered, the potential impacts, and recommendations for mitigation.

Table 5.1 – Summary of constraints for the site.

Ecological Receptor	Potential Impact	Mitigation/ further assessment
Land Designations	None	All designated sites considered to be sufficiently far from site and not physically or functionally linked.
Habitats	Loss of 3x mature trees, and 0.03ha of grassland.	Compensation will be provided by planting of 4x native broadleaved trees, and the enhancement of 0.04ha of retained grassland. Management of retained habitats will ensure the site achieves a Biodiversity Net Benefit overall.
Amphibians/ GCN/ Reptiles/ Water Vole/ Otter	None	No suitable habitat to be impacted present on site for these species groups.
Badgers/ Hedgehog	Low likelihood of badgers/ hedgehogs crossing site during construction phase.	Adoption of sensitive working techniques.
Bats	Disturbance of commuting/foraging areas.	Retention of dark corridor along the boundary of site, along with production of sensitive lighting plan.
Birds	Loss of habitat, risk of encountering nests during site clearance activities.	Inclusion of native landscaping, along with sensitively timed site clearance works and/or check for nests by an ecologist.

- 5.2. In conclusion, it is considered that development within the site of the scale proposed would be in conformity with both Local and National legislation and planning policy relating to biodiversity. All potential effects on protected/ notable protected species would also be avoided or adequately mitigated.



Appendix 1: Planning and Legislative Context

Legislation

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Countryside and Rights of Way Act 2000;
 - The Natural Environment and Rural Communities Act 2006;
 - The Hedgerows Regulations 1997; and
 - The Protection of Badgers Act 1992.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CROW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.
- A1.5. The NERC Act also places a duty on public authorities to have a regard for biodiversity when considering planning applications.
- A1.6. Under the Town and Country Planning Act 1990 (as amended) the requirement to consider trees as part of development is a material planning consideration and will be taken into account in the determination of planning applications.

National and Local Planning Policy

Planning Policy

Planning Policy Wales (PPW) (Edition 11, February 2021)

- A1.7. PPW sets out guidance with regard to nature conservation under Chapter 6 'Distinctive and Natural Places'. It provides guidance to local planning authorities relating to caring for biodiversity



and safeguarding statutorily designated sites, non-statutorily designated sites and protected species and their habitats. It also recognises the importance of trees, woodlands and hedgerows. This document provides the policy framework for the effective preparation of Local Planning Authorities' development plans.

- A1.8. PPW requires local authorities to fully consider the effect of planning decisions on natural heritage, inclusive of biodiversity and geological conservation in Wales, ensuring that development 'contributes to meeting international responsibilities and obligations for the natural environment' and ensures that appropriate weight is attached to statutory nature conservation designations, protected species and biodiversity within the wider environment.
- A1.9. It also considers the potential biodiversity and geological conservation gains which can be secured within developments, including the use of planning obligations.
- A1.10. The planning policy outlines:
- The need for LPAs to consider proposals where no negative impacts to the environment would result;
 - That LPAs should have regard of designated sites of international, national and local importance as well as other habitats and species of ecological value, including those listed on the UKBAP; and
 - The importance of local authorities consulting with Natural Resources Wales (NRW) in determining applications that could or would have adverse impacts on habitats and species of value.
- A1.11. The Welsh Government sets out the following objectives for the conservation and improvement of the natural heritage:
- Promote the conservation of landscape and biodiversity, in particular the conservation of native wildlife and habitats;
 - Ensure that action in Wales contributes to meeting international responsibilities and obligations for the natural environment;
 - Ensure that statutorily designated sites are properly protected and managed; and
 - Safeguard protected species; and to promote the functions and benefits of soils, and in particular their function as a carbon store.
- A1.12. Planning Policy Wales requires that UDPs set out the locational policy framework for the conservation and enhancement of the natural heritage and seek to conserve and enhance the natural heritage in ways which bring benefits to local communities and encourage social and economic progress.
- A1.13. UDPs should encourage the appropriate management of features of the landscape which are of major importance for flora and fauna in order to complement and improve the ecological coherence of the Natura 2000 network. This encompasses features which, because of their linear or continuous structure or their function as "stepping stones" or "wildlife corridors", are essential for migration, dispersal and genetic exchange. Policies should attach appropriate weight to statutory and non-statutory designations and devise criteria against which development will be assessed.



The conservation and, where appropriate, enhancement of biodiversity outside designated areas, should also be sought.

Future Wales 2040

A1.14. National development framework, setting the direction for development in Wales to 2040. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of communities.

A1.15. Objectives within this framework which relate to Wrexham area and ecology specifically are:

- Policy 9 – Resilient Ecological Networks and Green Infrastructure;
- Policy 15 – National Forest;
- Policy 19 – Strategic Policies for Regional Planning;
- Policy 22 – Green Belts in the North.

Technical Advice Note 5 (TAN 5), Nature Conservation and Planning (2009)

A1.16. The purpose of Technical Advice Note (Wales) 5 (TAN5) is to supplement the information provided in PPW. This provides advice for local planning authorities on:

- The key principles of positive planning for nature conservation;
- Nature conservation and Local Development Plans;
- Nature conservation in development management procedures;
- Development affecting protected internationally and nationally designated sites and habitats; and
- Development affecting protected and priority habitats and species.

Local Planning Policy

A1.17. The site falls within the administrative borough of Wrexham. Wrexham County Borough Council's planning policies are set out in the Unitary Development Plan (UDP) which was adopted in February 2005. It will be replaced by the Local Development Plan (LDP 2, 2013 – 2028), which is currently being prepared. Local Policies relating to ecology and biodiversity that will need to be considered as part of development proposals include:

- Policy PS2: "Policy PS2 Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment."
- Policy PS11: "Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced."



- Policy GDP1: All new development should:
 - o “Ensure the safety and amenity of the public and safeguard the environment from the adverse effects of pollution of water, land or air, hazards from industry and quarrying, and associated noise, odour or vibration arising from development.”
 - o “Safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest.”
- Policy EC4: “Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.”
- Policy EC6: “Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.”

A1.18. Wrexham Council has also produced a new Local Development Plan, which has been examined by an Inspector and found sound and recommended for approval. Whilst it is not yet formally adopted, the policies within it carry material weighting given it has been endorsed by an Inspector. These policies are:

- Policy SP2 Location of New Development - New development is to be directed within defined settlement limits and employment areas as identified on the draft proposals map.
- Policy SP10 Wrexham Industrial Estate - Wrexham Industrial Estate as shown on the proposals map is the County’s Key Business Sector Area and will be the primary focus for new employment development over the plan period for class B1, B2 and B8 employment.
- Policy SP15 Natural Environment - Development will only be permitted where it seeks to protect, conserve, and enhance the natural environment including the strategic ecological network on Wrexham Industrial Estate.
- Policy DM1 Development Management Considerations - Developments must accord with or enhance the character and local distinctiveness of a site in terms of their siting, layout, scale, height, density, and landscaping.
- Policy NE3 Trees, Woodlands and Hedgerows - Development will only be permitted where it does not cause unacceptable harm to trees and hedgerows of significant public amenity, natural or cultural heritage value, or those that provide important ecosystem services.



Appendix 2: Proposed Landscape Plan



PLANTING NOTES

- GENERAL
- Proposals to be read in conjunction with Architects and Engineers Drawings;
 - All landscape operations to be in accordance with all relevant and current BS and BS EN standards including BS 8545: 2014, BS4428: 1989 & BS3936 1990,1992,2007; and all amendments to date.
 - Plant material to conform with the National Plant Specification;
 - No planting shall take place in dry, hot and sunny weather or indeed if frost and snow are present, or in cold east winds, regardless of the stock specified;
 - Plant handling and planting operations to be in accordance with HTA "Handling and Establishing Landscape Plants parts I - III;
 - All planting to be maintained and guaranteed for 12 months to include watering, weeding, litter picking, pest & disease control;
 - The landscape contractor is to take all safety precautions to prevent any injury to any persons. The landscape contractor shall comply with the requirements of the Health and Safety at Work Act 1974 and current Construction, Design and Management Regulations.

- EXISTING TREES:
- Where existing trees and shrubs are to be retained they will be subject to a full Arboricultural inspection for safety;
 - Any surgery required shall be in accordance with BS3998: 2010 'Tree Work - Recommendations' and shall require the prior approval of the Landscape Architect or Arboriculturalist. All works should be undertaken in accordance with the Arboricultural Method Statement;
 - Avoid damage to branches, trunks and roots of trees. All existing trees and hedges to be retained are subject to BS5837 (2005 and all amendments to date) 'Trees in relation to Construction Recommendations', and should be fully fenced off, prior to the commencement of any works. No storage of materials, disposal of rubbish, site fires, spillage of oil and chemicals, ground compaction, excavation or changes in level shall be carried out within existing tree/hedge canopies.

- GRASS SEEDING - WILDFLOWER
- Seeding to be undertaken between September-October;
 - Scarify the soil before seeding
 - Seed in calm weather with seed evenly distributed in 2 directions;
 - Sowing rates as recommended by Emorsgate;
 - Roll seed to ensure contact with the soil;
 - First cuts in accordance with Emorsgate recommendation
 - Once established, to pro-long flowering season and increase seeding of flowers for the following year, avoid cutting between March-August
 - Cuttings to be removed from site

- BULBS:
- To be planted as per packet in instructions in swathes as shown on plan at 3 times their depth. Space the bulbs at least twice the bulbs' width apart. If soil is dry water bulbs after planting

- RHIZOMES:
- Plant rhizomes in September or October
 - Soak dried rhizomes overnight prior to planting
 - Add compost or leaf mould to the soil prior to planting
 - Plant rhizomes 10-15cm apart and 5cm deep

- AMENITY GRASS:
- Areas of amenity grass to be cut on a rotational basis to increase biodiversity value (see areas marked GM on plans)
 - Cutting to be undertaken in late September - October with cuttings gathered and placed in piles within cut areas
 - Other areas to be maintained as cut grass as per current mowing regime

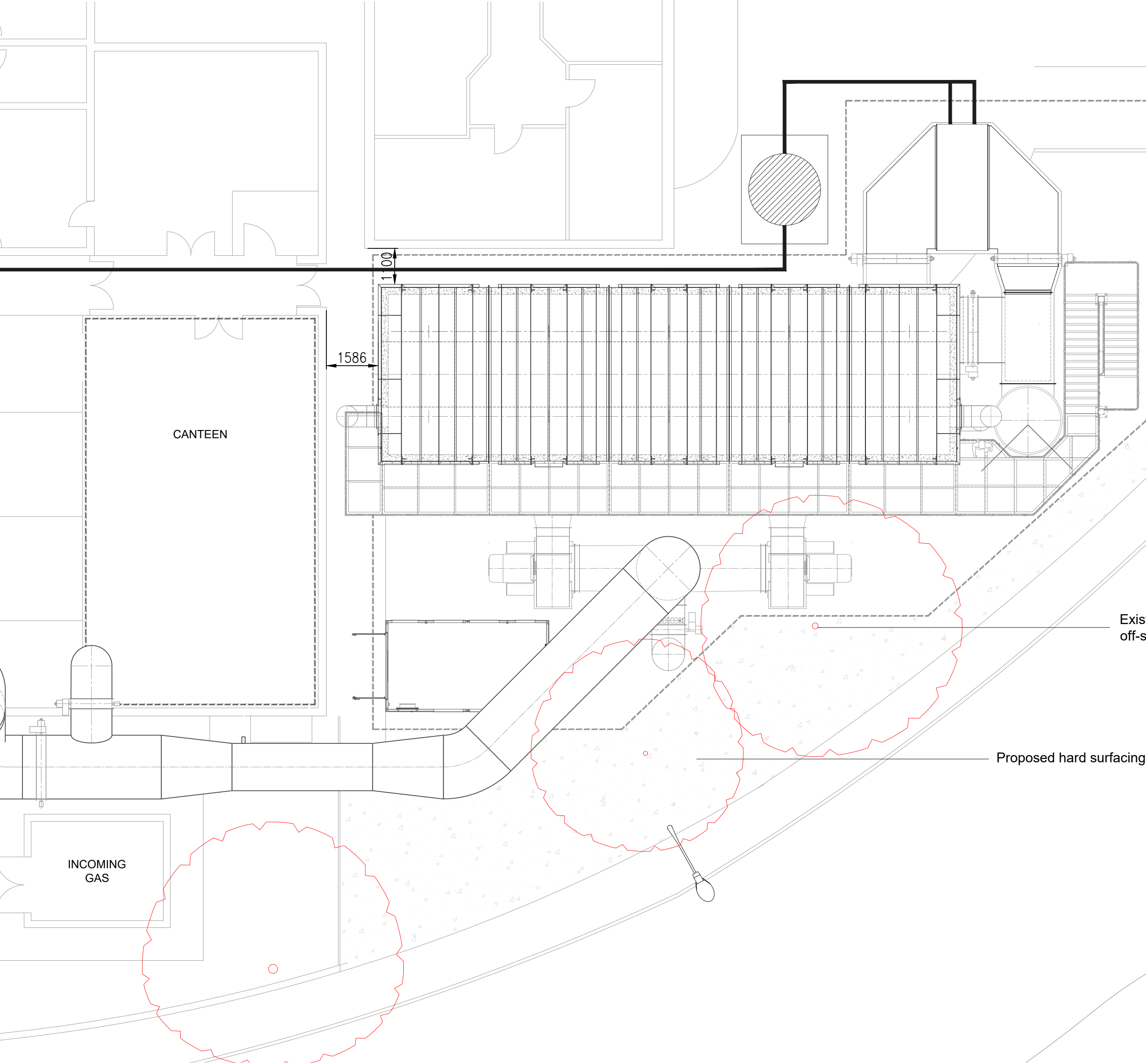
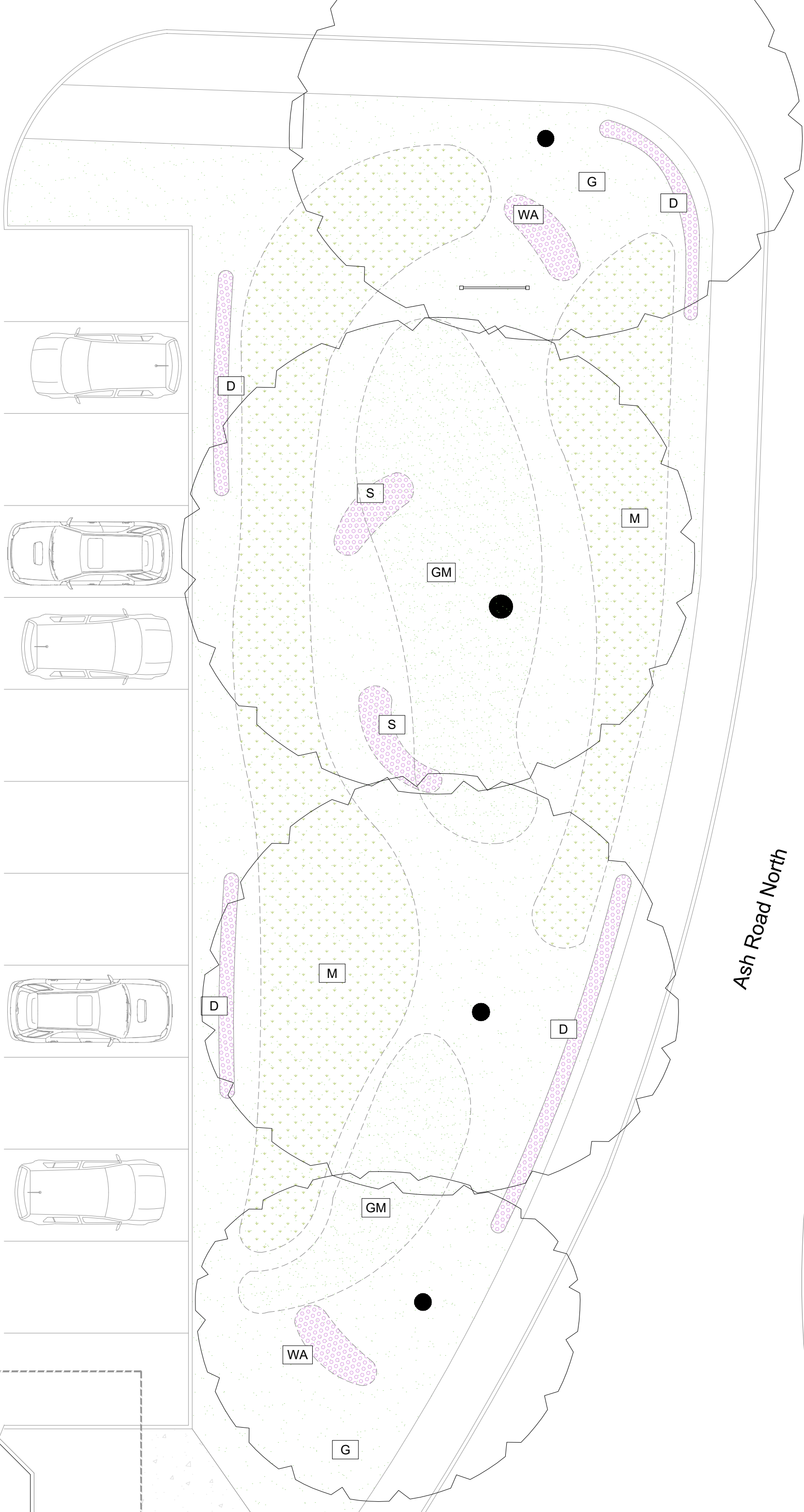
- WATERING
- Planting areas are to be brought up to field capacity on completion of planting and during maintenance visits subject to prevailing conditions.

- WEEDING AND LITTER CLEARANCE
- Planted areas to be maintained weed and litter free during maintenance and management period.

TRANSCONTINENTAL PLANTING LIST

Bulbs / Rhizomes:
D - Daffodil - Narcissus pseudonarcissus: 360
S - Snowdrop - Galanthus nivalis: 250
WA - Wood Anemone - Anemone nemorosa 250

Meadow:
Meadow to be EM3 Special General Purpose Meadow by Emorsgate or similar, sown to manufacturer's recommendations.
Approximate area to be planted = 128sqm



Existing removed trees to be replaced off-site - refer Drawing 231102/02

Proposed hard surfacing

Legend:

Existing tree retained - refer arboricultural information

Existing tree removed - refer arboricultural information

Proposed trees planted off-site

Proposed meadow planting - refer planting schedule

Proposed bulb planting - refer planting schedule
D = Daffodil
S = Snowdrop
WA = Wood Anemone

Existing grass retained

Existing grass retained and cut on rotational basis to increase biodiversity value

P01 DH Issued for Planning 18/12/23
Rev Dn Comments Date

Project Name
Transcontinental Wrexham

Drawing Title
Planting Plan



Scale
1:100 @ A1

Date
Dec 2023

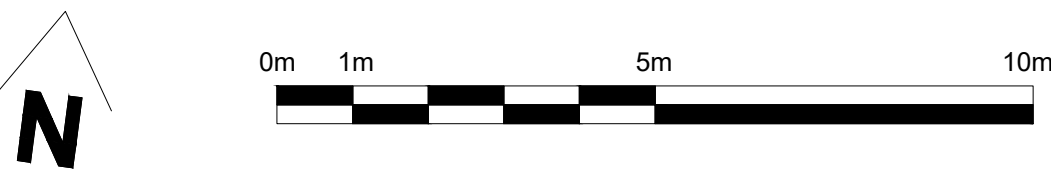
Drawn by
DH

Checked by
BP

Drawing No.
15581-TW-00-L-DR-101

Revision
P01

To be read in conjunction with Drawing 15581-TW-00-L-DR-102 and Arboricultural information



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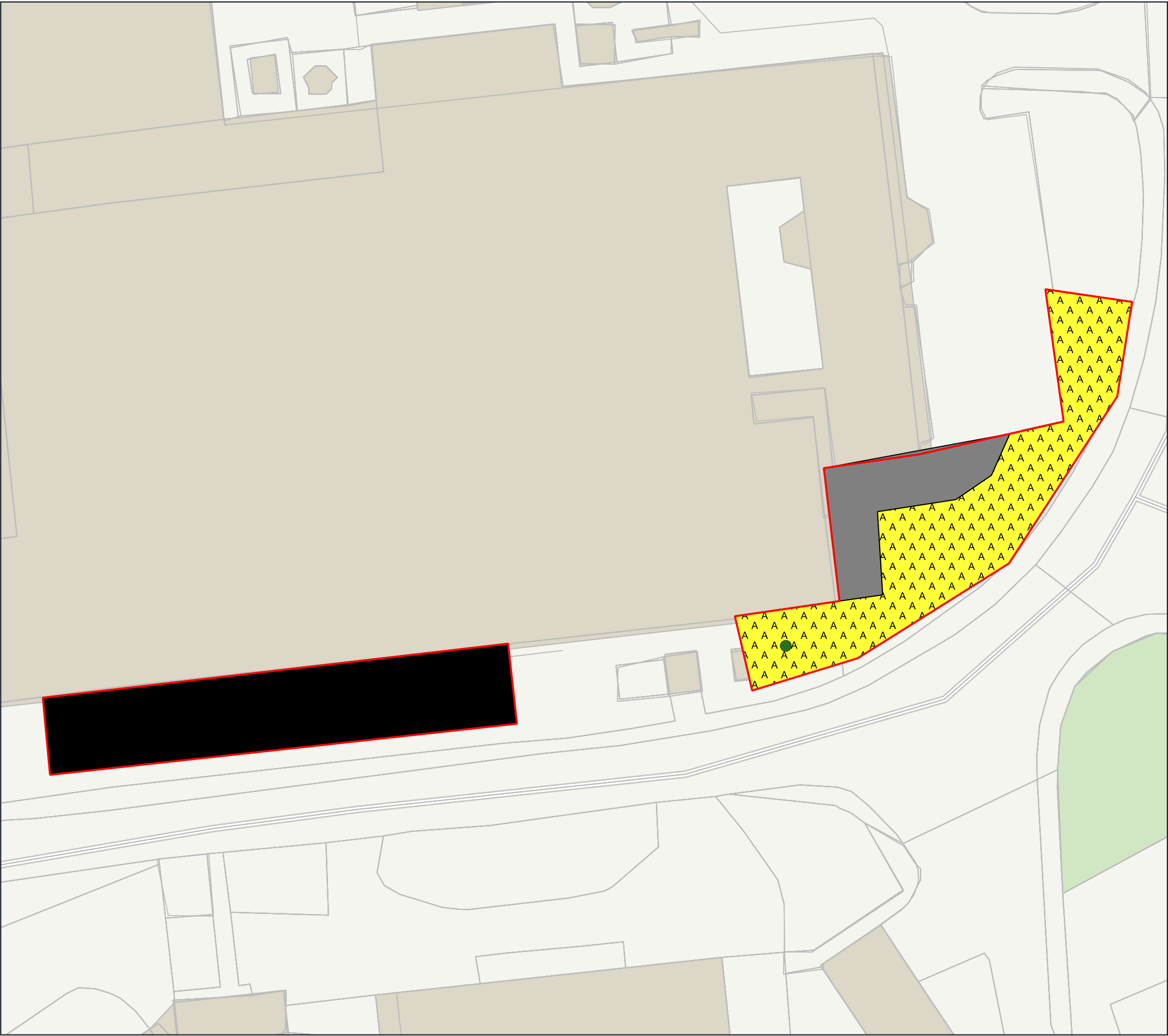
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Plans:

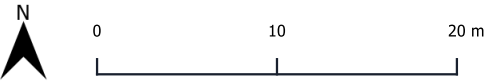
Plan 1: 15581_P02_Habitat Features Plan





Legend

-  Redline Boundary
-  Buildings
-  Cultivated/disturbed land - amenity grassland
-  Hardstanding
-  Baseline - Point Habitats



Project	Transcontinental Advanced Coatings
Drawing Title	Bat Survey Results
Scale	As Shown (Approximate)
Drawing No.	15581/P02a
Date	December 2023
Checked	DP/JD



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