



KRONOSPAN, CHIRK

**NORTH ACCESS ROAD INTO THE KRONOSPAN
FACILITY, LORRY PARK, WEIGHBRIDGES AND
WEIGHBRIDGE BUILDING, WEIGHBRIDGE CAR PARK
AND FACILITIES BLOCK, ROUNDWOOD STORAGE
AREAS, 132KV SUBSTATION, AND ANCILLARY
WORKS**

ENVIRONMENTAL STATEMENT CHAPTER 3.0 – ALTERNATIVES

REV A - JULY 2023

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3.0 ALTERNATIVES

3.1 Introduction

- 3.1.1 This chapter of the Environmental Statement (ES) sets out the alternatives that have been considered during the evolution of the Proposed Development and design process as presented in **ES Chapter 4.0 (Description of the Proposed Development)**.

Requirement for Consideration of Alternatives

- 3.1.2 The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (The EIA Regulations) states at Regulation 17 that an ES must include '*a description of the reasonable alternatives studied by the applicant or appellant, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the significant effects of the development on the environment*'.
- 3.1.3 The EIA Regulations states at Schedule 4 information for inclusion in ES documents '*a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the applicant or appellant which are relevant to the proposed development and its specific characteristics and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects*'.

3.2 Initial Design Considerations

Location of the Proposed Development

- 3.2.1 The relative density of the existing Kronospan Facility and the presence and nature of the immediate surrounds (including Mondelez immediately south, the railway line, canal, woodland to the immediate west, and Holyhead Road and the residential areas of Chirk to the immediate east), means that the land to the north of the existing Kronospan Facility is the only practicable location for the Proposed Development. It is only by using the land to the north that the intended benefits of diverting heavy goods vehicles (HGV) movements away from the main settlement would be realised.

- 3.2.2 As described in the **Planning Statement**, although the Proposed Development Site is outside of the settlement limit/employment area, its location immediately adjacent the settlement limit/employment area (the existing Kronospan Facility) would mean that it would be seen as a logical extension to the settlement limit/employment area and would not have a detrimental impact on the setting of the immediate land uses.

Pre-Application Consultation

- 3.2.3 As described in **Section 1.6 of ES Chapter 1.0 (Introduction)**, a request for pre-application advice was submitted by the Applicant to Wrexham County Borough Council (WCBC) for the development of a new private road leading from Holyhead Road to the existing Kronospan Facility.
- 3.2.4 A subsequent request for pre-application advice was submitted by the Applicant to WCBC for several development proposals to develop and improve the existing industrial facility at Kronospan Limited, Holyhead Road, Chirk. The development proposals subject to the second pre-application advice request included the Proposed Development plus other development proposals that have either had planning applications submitted or granted (covered loading yard, engineering stores, and raw materials silos and chip preparation building extension).
- 3.2.5 After the submission of the first request for pre-application advice (for a private road), a high-level indicative design was developed to demonstrate how it could be achieved in practice and to ensure that a safe and effective connection between it and the existing Kronospan Facility could be achieved.
- 3.2.6 As a result of this process, it became evident that the access road in isolation would not work as a solution for a modified access to the north. The reasoning for this is as follows.
- 3.2.7 As with all major manufacturing and industrial operations which rely on HGV transport there is a requirement for a reception and weighbridge at the entrance to the operational area of the site to record incoming and outgoing HGVs and direct them to the relevant area of the site. This is essential to control and record deliveries and materials export, ensure safe operation of

the site and maintain security. On this basis it is essential that a weighbridge is provided prior to entering the main operational site.

- 3.2.8 Where there is a high turnover of HGV traffic, there is a requirement to provide parking for arriving HGVs to ensure there is no backing up onto public highway. The parking is also required to temporarily store trailers prior to being loaded and tractor units picking up the loaded trailers (to maximise driving hours) and enable drivers to take their legally entitled breaks.
- 3.2.9 The current parking area and weighbridge facilities are at the southern extent of the existing Kronospan Facility and so need to be relocated to allow a north access road solution to be delivered.
- 3.2.10 The Applicant examined the potential for an access through the site to the existing weighbridge and parking area, but this introduced unacceptable safety and security issues and there was insufficient space available to deliver an acceptable access through the operational areas of the site.

Proposed Lorry Park

Operation of Existing and Proposed Lorry Park

- 3.2.11 The Proposed Development has been designed to maintain the current levels of activity and operations at the existing Kronospan Facility i.e., there are no provisions in place to increase the number of HGVs accessing and egressing. However, the Proposed Development would enable the benefits as described at **Section 1.4 of ES Chapter 1.0 (Introduction)** and **Chapter 3.0 of the Planning Statement** to be realised whilst ensuring that site operations are effectively and efficiently managed.
- 3.2.12 The Kronospan Facility adopts a shunting loading/unloading operation to manage out-bound HGVs and a timed (slotted) operation for in-bound timber deliveries only. The HGV shunting operation is undertaken on-site and has significant operational benefits by maximising HGV driver hours on the public road network and minimising the distance and duration of HGV shunting movements. This process is summarised at **Section 4.3 of ES Chapter 4.0 (Description of the Proposed Development)**.

Location of Proposed Lorry Park

- 3.2.13 Consultation with Cadw during the pre-application process raised the question as to why an off-site lorry park (to hold HGVs prior to unloading) outside of the Pontcysyllte Aqueduct and Canal World Heritage Site Buffer Zone would not be feasible as an alternative to the Proposed Development.
- 3.2.14 From a logistical perspective, an off-site lorry park would be required to be as close as possible to the existing Kronospan Facility and close to the strategic road network to minimise impacts on the local highway network and to avoid or minimise the requirement to build further highway infrastructure to the off-site lorry park. Therefore, only sites adjacent the A5/A483 east of the existing Kronospan Facility would be practicable in this regard.
- 3.2.15 Adopting the existing HGV shunting operation using an off-site lorry park would increase the coverage required from approximately 400m (on-site) to approximately 12-20km (depending on the off-site location) for each worst-case scenario HGV shunting movement (four separate movements between the existing Kronospan Facility and the off-site lorry park). This would result in a requirement for a greater number of HGV shunting vehicles and would increase the number of HGV movements to and from the Kronospan Facility. Although there is no data to suggest the surrounding highway network is badly congested, an increase in HGV numbers would represent an unnecessary increase in traffic demand.
- 3.2.16 In addition, an off-site lorry park would require significant infrastructure which is already available or easy to extend at the existing Kronospan Facility, such as CCTV, security, operational IT systems, driver facilities and services.

Parking Congestion Relief

- 3.2.17 For in-bound timber deliveries only, Kronospan manages the HGV flow into the site using relatively constrained time windows to ensure HGV queuing is limited and that adequate short-term parking is available. As such vehicles which arrive in the local area in advance of their predefined time slots are required to use parking facilities on the trunk road network. Improved HGV parking facilities at the Proposed Development Site (which would remain

short term) would enable wider delivery slots to be created which would help reduce congestion of existing parking areas on the local trunk road network.

Footprint of Proposed Lorry Park

- 3.2.18 The proposed lorry park would cover an area of approximately 1.78ha and would include spaces for 45 HGVs; this is approximately 15% smaller footprint than the existing lorry park and approximately 40% fewer spaces. The proposed lorry park has been designed so that vehicles can enter and exit the proposed parking spaces in forward gear, without the need for reversing (no reversing alarms), thereby reducing the potential for accidents to occur and improving air quality and noise through fewer and more efficient movement; a forward gear only approach is not able to occur on the existing lorry park. This design means that more space is required for the proposed lorry park. Delivering a parking solution which matches the current footprint / parking availability would perpetuate an undesirable arrangement which would not deliver some of the benefits achieved by the current design.

Road Design

- 3.2.19 In 2021, an indicative road access design (from the B5070), together with an indicative layout design for the proposed lorry park, internal access roads, and 132kV substation were developed. The proposed access road consisted of a roundabout off the B5070 that would replace the existing Holyhead Road/Old Black Park Road/Afon Bradley Farm access road staggered junction at the north-east corner of the Proposed Development Site (similar in principle to the Proposed Development).
- 3.2.20 Kronospan undertook a feasibility analysis of the above indicative design to ensure provision of a design compliant with the relevant highways design standards. The following items of work were undertaken:
- Obtain highway boundary extents and land ownership details.
 - Obtain baseline traffic flow data.
 - Forecast changes to traffic flow resulting from forecast usage of the lorry park.
 - Prepare preliminary roundabout design in CAD.

- Undertake swept path analysis.
- Undertake junction capacity assessment modelling.

3.2.21 An initial assessment of the indicative design highlighted the following:

- The roundabout would result in the removal of several mature trees which would also contribute to screening the site on the southbound approach on the B5070.
- The roundabout would result in the removal of at least one bus stop which would need to be accommodated elsewhere on the B5070.
- Further detailed design would be required to ensure compliance with highway design standards, particularly with regards HGV swept paths.

3.2.22 A junction access analysis was undertaken in accordance with Figure 2.3.1 on CD123 of the Design Manual for Roads and Bridges (DMRB) which uses two-way annual average daily traffic (AADT) for minor and major roads to identify appropriate junction solutions. The junction analysis identified that a ghost island right turn (GIRT) junction and roundabout solution would potentially be acceptable junction options.

3.2.23 An assessment of the operation of an indicative GIRT design was undertaken (using B5070 traffic flows, peak periods, future year traffic flows via TEMPro (trip end model presentation program), modelling of assessment scenarios using industry standard JUNCTIONS 10 PICADY modelling software); the assessment demonstrates that the GIRT would operate satisfactorily. Self-evidently, a roundabout junction (which has a greater potential capacity than a GIRT), would also work from an operational capacity perspective.

3.2.24 The roundabout solution was selected as the preferred access arrangement as it would offer the following benefits:

- Whilst acknowledging that a GIRT solution could still potentially accommodate up to 5,000 two-way trips from the access road per day, a roundabout would provide significant future proofing as it would be able to accommodate a significantly larger amount of traffic, accounting for any reasonable increase in future traffic levels such as any future

development of the field east of the B5070 designated for residential use in the emerging Local Development Plan.

- The roundabout design allows the internal layout to be positioned further to the north of the Proposed Development Site and therefore represents a more efficient use of space. The GIRT would need to be positioned further to the south and would require a greater amount of land to accommodate safe manoeuvres.
- The introduction of a roundabout on the B5070 in advance of entering the residential area of Chirk will help reduce vehicle speeds. It is understood that at present this section of road experiences relatively high vehicle speeds, which are anecdotally often in excess of the speed limit of 50 mph in this location.
- The introduction of a compact roundabout (instead of a standard roundabout design) is sufficient for the Proposed Development and necessitates a reduction in the speed limit along the B5070 from 50 miles per hour (mph) to 40mph to ensure compliance with the Design Manual for Roads and Bridges.
- The GIRT would have a finite stacking capacity within the lane (approximately nine cars) whereas the roundabout would operate in free-flowing conditions with little to no queuing. In the event that the GIRT was full, HGVs would have to wait on the mainline B5070 and stop traffic from passing southbound.

Substation Siting

3.2.25 The siting of the proposed 132kV substation has been carefully considered. Five potential indicative locations (where sufficient space was available and a connection to the 11kV network possible) were identified as follows:

- Site 1 – Existing Lorry Park.
- Site 2 – Reception Area (adjacent the proposed covered loading yard).
- Site 3 – Rear Farmhouse (now the site of the proposed engineering stores – planning permission granted).
- Site 4 – North Site 1 (in existing Kronospan Facility).
- Site 5 – North Site 2 (outside of existing Kronospan Facility).

- 3.2.26 The above sites can be viewed at **Figure 3.1**.
- 3.2.27 The sites were appraised against the following criteria:
- Distribution Network Operator (DNO) requirements including access/egress and vehicular restraints, landscaping and external finishes, 2m wide perimeter maintenance access footpath and clear 5m visibility beyond the substation fence line, no existing utilities to be within or underneath the substation.
 - Noise.
 - Landscape and visual impact.
 - Effects on Kronospan operations.
 - Technical feasibility.
 - Fire risk rating.
 - Flood risk.
 - Collision risk.
- 3.2.28 Except for Site 3 (access through restricted existing plant), all sites were considered equal from an accessibility perspective either using the existing Kronospan access or the proposed north access road as part of the Proposed Development.
- 3.2.29 From a road and vehicular constraints perspective, no issues were perceived for Sites 2 and 5; however, Sites 3 and 4 have medium-high collision risk due to lack of space and corner location/visibility. Site 1 would reduce the capacity of the existing lorry park by approximately 25% which would not be problematic in the event the Proposed Development is granted planning permission as the new lorry park would be to the north and the existing lorry park no longer used as such.
- 3.2.30 Tree maintenance and clearance works would be required for Sites 1, 2, and 4; however, no such issues in relation to Sites 3 and 5.
- 3.2.31 To obtain an additional 5m visibility beyond the substation, Sites 1, 2, and 4 would require a larger footprint and further modifications to the noise abatement in the substation. No such issues identified for Sites 3 and 5.

3.2.32 Site 1 has electricity cables close by. Site 2 has several services on it including a gas reduction station, high pressure gas pipe and communications. Site 4 is adjacent to a high-pressure gas main and has a main water feed pipe beneath it. No issues identified for Sites 3 and 5.

3.2.33 Initial noise modelling was undertaken to ascertain likely noise levels (a-weighted decibel (dB(A) which is an expression of the relative loudness of sounds as perceived by the human ear) at five receptor locations. Noise modelling was high-level and indicative and does not take into consideration mitigation measures such as noise source attenuation (e.g., within the grid transformers) and acoustic barriers.

3.2.34 The indicative results of the noise modelling are shown in **Table 3.1** below.

Table 3.1: Substation Siting and Likely Noise Levels

Substation Site	Indicative Noise Level (dB(A)				
	Receptor 1 - Mondelez	Receptor 2 – Chirk Court (Residential)	Receptor 3 – West View/George Street (Residential)	Receptor 4 - West View/Duke Street (Residential)	Receptor 5 – Wern (Residential)
1 – Existing Lorry Park	5.0	9.6	-1.3	2.9	-5.6
2 – Reception Area	2.8	11.3		8.7	
3 – Rear Farmhouse	11.0	3.2		1.6	
4 – North Site 1	-4.1	-1.6	9.8	3.2	8.1
5 – North Site 2		-4.3	3.9	-0.6	9.8

- 3.2.35 Sites 2 and 4 are anticipated to have the greatest noise impact on residential receptors (when considered collectively) but would have minimal noise impact at Mondelez. Sites 1 and 5 would have a lesser impact on residential properties (when considered collectively) than Sites 2 and 4 whilst Site 1 would have a marginally greater impact at Mondelez than Sites 2 and 4. Site 3 would provide the least impact on residential properties but would have the greatest impact at Mondelez. Noise mitigation at source (e.g. attenuating transformer noise output) could be provided in all scenarios at detailed design stage. Sites 1 and 4 provide better opportunities for suitable noise attenuation screening than Sites 2 and 3 whilst Site 5 has the greatest opportunities to position the substation to minimise noise impacts and to incorporate noise mitigation measures
- 3.2.36 Slightly greater visual impacts are expected for Sites 2 (more visible from the B5070, very limited space/opportunities for additional screening) and 3 (more visible from land to the south – Mondelez, very limited space/opportunities for additional screening, and its location adjacent the Rear Farmhouse would be visually contrasting); Sites 1 and 4 would be able to be screened by existing buildings or vegetation whilst Site 5 has the greatest opportunities to position the substation to minimise visual impacts and to incorporate landscape screening.
- 3.2.37 From a fire risk perspective, Sites 2 and 3 are high risk (proximity to gas compound and dust filtration plant respectively), Sites 1 and 4 are medium risk (proximity to vehicles/containers containing combustible materials), whilst Site 5 is low risk.
- 3.2.38 On balance, Site 5 is the preferred location for the proposed 132kV substation. The proposed 132kV substation (and the proposed weighbridge building) have been carefully sited at the southwestern extent of the Proposed Development Site, close to the existing sewage treatment works to group the more prominent Proposed Development buildings with existing built infrastructure at the northern extent of the existing Kronospan Facility to minimise its visual impact.
- 3.2.39 Since the completion of the substation siting appraisal described above, the potential substation sites (including the preferred location Site 5) have been reviewed by an Independent Connection Provider (ICP) licenced to work on

Scottish Power Energy Networks (SPEN) infrastructure (SPEN is the local distribution network operator (DNO) – see **ES Chapter 4.0 (Description of the Proposed Development)** for further details).

- 3.2.40 The ICP confirmed in correspondence dated 27 April 2023 that *“the location chosen is suitable for purpose and presents good access and security advantages, as well as being close to the proposed load centre. While other locations exist, it is our opinion that the site proposed facilitates the best overall location. As an accredited independent connections provider with many similarly complex projects successfully completed, we believe that, as currently proposed, this project presents a low risk of failure.”*

Roundwood Storage Areas

- 3.2.41 The roundwood storage areas did not form part of the original pre-application submission, the decision was made to include additional storage following the significant driver and HGV shortage in Quarter 4 of 2021.
- 3.2.42 Following the shortage, Kronospan reviewed its current and future haulage operations to allow it and its hauliers to maximise their driving efficiencies.
- 3.2.43 If an unplanned production occurs, the additional storage areas would allow a buffer of planned deliveries to still come onto The Kronospan Facility whilst minimising impacts to the supply chain. It also provides additional storage for the holiday haulage periods with the reduced labour pool.
- 3.2.44 The proposed roundwood storage areas (together with the proposed 132kV substation and the proposed weighbridge building) have been carefully sited at the southwestern extent of the Proposed Development Site, close to the existing sewage treatment works to group the more prominent Proposed Development buildings and land uses with existing built infrastructure at the northern extent of the existing Kronospan Facility to minimise its visual impact.

3.3 Further Design Considerations

- 3.3.1 The Proposed Development has evolved through an iterative design process where the design has been progressed in parallel with the environmental assessment process through consideration of engineering feasibility, environmental constraints and consultation responses. The continued evolution of the design is set out below.

Kronospan Liaison Group Meeting

- 3.3.2 Draft proposals (of the Proposed Development) were presented to the members of the Kronospan Liaison Group Meeting on 25 May 2022. The main comment with respect to design was to ensure, wherever possible, that the proposed road layout was designed to minimise excessive speed along the B5070. An additional comment was made about the potential to position the lorry park further to the north (closer to the proposed roundabout) to ensure that it would not encroach further south than the residential properties at 'Offa' and would be immediately opposite the field immediately north of Offa. This change was implemented prior to an initial design freeze prior to the commencement of the environmental assessment work.

Early Environmental Assessment Outcomes

- 3.3.3 The early stages of the environmental assessment work identified the following:
- A mature Category A tree along the embankment of the proposed southern wetland area as set out in the **Flood Consequence Assessment and Surface Water Drainage Strategy (Planning Statement Appendix B)**. The proposed southern wetland area was re-designed to bring the embankment in slightly and the depth of the wetland increased to compensate for the decrease in surface area) to enable the Category A tree to be retained.
 - Options to screen potential views from Chirk Castle via the use of planted bunds within the Kronospan landholding west of the Site were explored. Given the height difference between the Castle and the Site, and the location of the Site on a west-facing slope, this screening would not have been effective. Instead, the approach taken is to break up

views through planting at the western edge of the Site rather to try and provide total screening.

- Options to plant the entirety of the bund along the eastern perimeter of the Site were considered. As part of regular community liaison, residents in properties east of the B5070 expressed concerns to the Applicant that planting in this location would intrude upon views from their properties to the hills west of the Site. As such, the section of bund west of the properties has been left unplanted. Tree planting is proposed west of the bund, which would frame views from the properties and help break up views of the Proposed Development, whilst maintaining the longer view to the hills.
- The Illustrative Landscape Masterplan for the Proposed Development Site (as shown on **Figure 4.3a**) was amended to include more areas of wildflower grassland and slightly less woodland planting to ensure biodiversity net gain can be achieved (see **ES Chapter 7.0 Biodiversity and Nature Conservation** for further details of biodiversity net gain).
- As described at the end of **Section 3.2** above, the proposed 132kV substation and weighbridge building have been carefully sited at the southwestern extent of the Proposed Development Site, close to the existing sewage treatment works to group the more prominent Proposed Development buildings with existing built infrastructure at the northern extent of the existing Kronospan Facility to minimise its visual impact. Moving the weighbridge further to the north (closer to the roundabout) would have reduced the buffer between it and the proposed roundabout (resulting in a less efficient site for HGV movements and increasing the potential for blockages at the proposed roundabout), and resulted in the proposed lorry park moving further south which would have conflicted with the preference to ensure that it would not encroach further south than the residential properties at 'Offa' (see 'Kronospan Liaison Group Meeting' above).
- Alternative designs for the weighbridge – The proposed weighbridge building could have been single storey; however, this would have required two separate buildings, one at the same height as the proposed weighbridge building to serve the quality checking function, and a separate double storey building to serve the weighbridge, logistics and timber buying functions. The proposed design makes more efficient

use of the land and would result in a reduced visual impact. A flat roof design was considered; however, the proposed pitched roof is preferred for maintenance purposes and provides better opportunities for future solar installation.

- For the proposed lorry park lighting design, two lighting compliant options were considered. Option 1 was for 12m high lighting columns at 40m spacing; Option 2 was for 8m high lighting columns at 30m spacing. Although Option 2 would result in more lighting columns (than Option 1) and the loss of a HGV parking space to accommodate the required positioning of the lighting columns, Option 2 was selected as it would provide greater benefits from a landscape and visual perspective due to the shorter column heights.
- Drainage - as set out in the **Flood Consequence Assessment and Surface Water Drainage Strategy (Planning Statement Appendix B)**, infiltration has been discounted as the geology beneath the Site is considered to not have sufficient permeability to support drainage to ground. Furthermore, if it did then groundwater would likely be in connectivity with the River Bradley and there would not be sufficient unsaturated zone between the base of the infiltration features and the water table.

Site Meeting with Landscape and Heritage Stakeholders

- 3.3.4 A meeting to discuss the principle of the Proposed Development was held on 07 October 2022 with representatives from Cadw, National Trust, and the Canal and River Trust (CRT). Representatives from the AONB Joint Committee and from WCBC were unable to attend.
- 3.3.5 The focus of discussions (aside from general discussion about the need, benefits, alternatives and clarification of aspects of the Proposed Development) centred on the potential for further consideration of off-site landscaping works to further minimise visual impact and provide sensitive linkages (where appropriate) with notable landscape and heritage features including but not limited to Chirk Castle, and the Registered Park and Garden of Whitehurst.

- 3.3.6 These matters were expanded upon by the stakeholders referred to above and other statutory consultees during the subsequent statutory pre-application consultation stage (see text below for a summary of the pre-application consultation process). Further detail (including a summary of comments received and the Applicant's responses) is provided in the Pre-Application Consultation (PAC) Report and in each topic chapter (**ES Chapters 5.0 to 8.0 (Topic Chapters)**).

Pre-Application Consultation

- 3.3.7 In accordance with the Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2012 (DMPO 2012), and subsequently amended in 2016 (DMPO 2016), the Applicant has undertaken the necessary public consultation procedures prior to submitting a Major planning application.
- 3.3.8 Article 4 of the DMPO 2016 provides that, where an applicant has been required to carry out pre-application consultation, and submits an application for planning permission, that application must be accompanied by a PAC Report.
- 3.3.9 The National Trust requested that the Applicant considers the provision of further planting within the lorry park itself to provide additional mitigation. This would require the footprint of the Proposed Development to extend further westwards into the floodplain of the Afon Bradley and would potentially impact directly upon land within Flood Zones 2 and 3, or upon the watercourse itself. SuDS cannot be located within Flood Zones 2 and 3, to ensure they would remain operational during large storm events. Additional engineering works would therefore be likely to be necessary to address any potential impacts related to an increased risk of flooding, and these themselves may give rise to additional environment effects. As such and given the relatively narrow width of views from Chirk Castle, which are framed by existing vegetation, and the relatively limited degree to which these would be likely to change, this option was not considered any further.
- 3.3.10 The key Proposed Development design changes (implemented and committed) resulting from the pre-application consultation process are summarised below:

- Provision of off-site landscape enhancements on land under the control of the Applicant – see **Figure 4.3b, ES Chapter 4.0 (Description of the Proposed Development)**, and **ES Chapter 5.0 (Landscape and Visual Effects)** for further details.
- Aspirations by stakeholders for further landscape enhancements on third party land. The details of any proposals would be subject to agreement with relevant landholders, and as such cannot be stated with any certainty. Based on discussions to date, the following outline landscape enhancements are proposed:
 - A: Woodland Management Plan along the Llangollen Canal corridor, within CRT land ownership. This is envisaged to comprise:
 - Selective removal of old/decaying tree cover along the canal cuttings.
 - Replacement planting with new native species.
 - Management of the woodland (including any new planting) to maintain existing levels of visual screening, to enhance biodiversity, to ensure the safety of canal users, and to maintain the stability of the canal structures and earthworks.
 - B: Heritage Enhancements, described in greater detail in **ES Chapter 4.0 (Description of the Proposed Development)** and **ES Chapter 6.0 (Historic Environment)**, would be provided via a Conservation Management Plan and would offer enhancement measures in relation to the WHS (and its Buffer Zone) through the setting out of relevant positive management proposals on land within the Applicant's ownership.
- The proposals would be delivered by a combination of suitably worded planning conditions and a Section 106 Agreement or Unilateral Undertaking.
- The targeted field evaluation (**Appendix 6.6**) confirmed the likely remains of a lime kiln of possible medieval/post-medieval origin at the eastern extent of the Proposed Development Site between the proposed weighbridge car park access road and the landscape bund. Subject to further archaeological archiving works, this feature has the potential to be of National significance and would subsequently require preservation

in situ. A suitable buffer (to be agreed with Cadw) would be enforced around the lime kiln feature to ensure the construction works would not cause damage. These measures will be set out in the detailed design stage.

Post-Submission Statutory Consultation Responses

Overview

- 3.3.11 During the statutory post-submission consultation stage undertaken by WCBC, several consultation responses have been received by WCBC and subsequently issued to the Applicant for further consideration and comment.
- 3.3.12 All consultation responses have been collated together and submitted via separate cover to WCBC – they detail how account has been taken of each response (including points of further clarification, where the Proposed Development design was amended, or further information provided in the planning application documents).

Alternatives

- 3.3.13 Some of the consultation responses received were with respect to further consideration of alternatives to minimise impact on the surrounding landscape and historic environment; the most notable of which were provided by Cadw.
- 3.3.14 The Applicant and Cadw held a meeting on 20 April 2023 to discuss alternatives in greater detail. The discussion included further clarification of the key design parameters considered (of the various components) during the development of the Proposed Development and the desire to achieve, on balance, a proposal that has the least environmental impact, with particular regard given to consideration of the historic environment, the landscape and visual impacts, local amenity (noise, vibration and air quality), and impacts on the local highway network.
- 3.3.15 The discussion continued to understand the extent to which it would be possible to amend the design of the Proposed Development to reduce impacts on the historic environment, with a particular focus on

reducing/removing the extent of new development located towards the northern extent of the red line boundary. An outline sketch of an alternative Proposed Development layout was produced to address this objective, which Cadw later agreed would likely assist with reducing the impact of the Proposed Development on the historic environment. This sketch was subsequently looked at in greater detail by the Applicant to develop a workable alternative layout for subsequent formal submission to WCBC. The key changes implemented during the development of the alternative layout are discussed in more detail at **ES Chapter 3.0 (Alternatives)** but are summarised below.

- Weighbridges, weighbridge building, and weighbridge car park moved approximately 20m to the south.
- Lorry park footprint reduced by approximately 50% (previously 91 HGV spaces, now 45 HGV spaces) and moved further south.
- Area at the northern extent of the Proposed Development Site now vacated by the reduced lorry park is proposed as further wildflower grassland.
- Roundwood storage areas reduced in size (around 21% collectively) to accommodate the above.
- Additional land on the western boundary of the western roundwood storage proposed for new woodland planting.
- The bund along the eastern boundary of the Site amended to a height of approximately 4m adjacent to the proposed lorry park, and to a height of approximately 7m north of the proposed lorry park (when measured from the adjacent internal platform/road level of the Proposed Development) to provide appropriate noise mitigation for the residential receptors at Offa/Wern. This would provide similar noise effects to the original (and now superseded) Proposed Development layout.
- The 5m high acoustic screen along the eastern boundary of the lorry park extended further south to also run adjacent the weighbridge car park area.

3.4 The Do Nothing Alternative

- 3.4.1 The do-nothing alternative would mean that the benefits of the Proposed Development as described at **Section 1.4 of ES Chapter 1.0 (Introduction)** and **Chapter 3.0 of the Planning Statement** would not be able to be realised. In particular, the provision of the north access road is something which has been requested by the local community for several years. The constraints which previously prevented the delivery of this have now been removed and Kronospan has developed a proposal which would remove approximately 750 two-way HGV movements from the residential section of Holyhead Road over a 24-hour period (approximately 600 two-way movements during the daytime period, and approximately 150 two-way movements during the night-time period). This will have a variety of amenity and social benefits to the local community as well as improving the logistics arrangement at the Site which would not be achieved in a do-nothing scenario.
- 3.4.2 The do-nothing approach would jeopardise Kronospan's Vision 2025 whereby the Proposed Development would provide enhanced facilities which would help maintain the future viability of the business at the site in Chirk. The investment would ensure the business can continue meet customer demands in a competitive manufacturing environment, as well as delivering numerous environmental and social benefits. This investment would help to safeguard the significant direct and indirect employment opportunities supported by the business and the wider local and regional economic benefits which result from a major manufacturing business such as Kronospan.