

Our Ref: 10585/EJF

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masterplanning ■
environmental assessment ■
landscape design ■
urban design ■
ecology ■
architecture ■
arboriculture ■
graphic design ■

04 February 2022

Dear Sirs

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Ref: 10585, Knowsley Business Park, Penryn Road, Knowsley – Biodiversity Net Gain Assessment

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Introduction

FPCR Environment & Design Ltd were commissioned by Trinity Property Consultants to conduct a Biodiversity Net Gain (BNG) exercise for a site in Knowsley, known as Knowsley Business Park. The Site has been subject to ecological survey in December 2021 to inform proposed development entailing an industrial unit and associated infrastructure (buildings, car parking, yard space, and landscape planting).

The Site is situated just off Penrhyn Rd, in the town of Knowsley, Merseyside (central OS grid reference SJ 42958 96735). The Site habitats comprise bare ground (resulting from the removal of previous industrial buildings), with a band of woodland to the north, dense scrub and trees to the south-west, some areas of species-poor grassland, trees, patches of ephemeral vegetation and some introduced shrub and hardstanding.

Full details of the habitats and species present are available in the associated Ecological Appraisal¹

Methodology

The overall aim of the biodiversity offsetting initiative is to provide a mechanism by which conservation activities designed to deliver biodiversity benefits in compensation for losses can be quantified and delivered.

Using the biodiversity offsetting approach means that a developer employs a standardised formula to calculate the number of biodiversity 'units' to be lost as a result of their development, based on the habitat(s) affected, their condition and extent. The developer then provides an 'offset' (where necessary) to deliver an equivalent number of biodiversity units on land either onsite or elsewhere by creating new habitat or restoring existing habitat.

¹ FPCR (2022) Knowsley Business Park, Penryn Road, Knowsley – Ecological Appraisal

The most recent Natural England/DEFRA BNG metric has been utilised for this assessment². was used to determine the value of each parcel of distinct habitat to give a combined Site Habitat Biodiversity Value. The existing site habitat value was then compared to the outcome of the proposed Site Habitat Biodiversity Value calculation to give a change in value for the site. This process requires conversion of the Phase 1 Habitat Classifications³ to the UKHab⁴ descriptors for use within the metric calculations table appended to this document.

This requires assessing the current condition of the habitats using standardised criteria⁵ which also factors into the value. The anticipated/proposed value and condition of habitats is also inserted into the metric to calculate the 'score'.

Results and Conclusions (see Figures 1-5 and Appendix 1)

Based on the field survey data and the UKHab conversion, the following table outlines the habitats present and their condition at the time of survey. Full species lists are available within the accompanying report. Full calculations are available in Appendix 1.

Table 1: Existing habitats (see Figures 1, 3 and 4 and Appendix 1)

Phase 1 habitat type (see eco-app)	UKHab habitat type (see BNG metric)	Description	Estimated condition (December 2022)	Proposed impact
Mixed semi-natural woodland	Other woodland - mixed	A block of woodland c.8 to 12m wide was present along the Site's northern boundary and had a mix of broad leaved and coniferous species. Ground flora was typically limited with ground covered with species such as common nettle <i>Urtica dioica</i> , bramble <i>Rubus fruticosus</i> agg. or ivy <i>Hedera helix</i> .	Moderate	Majority to be lost, only a small number of trees on boundary to be retained
Dense scrub	Mixed scrub	An area of dense scrub was present in the south-west of the Site which included a mix of shrubs, as well as ruderal and grass species and areas of bare ground.	Poor	Some to be lost, some retained and enhanced
Species-poor semi-improved grassland	Modified grassland	A band of formerly mown amenity grassland was present along the front/south of the Site, which was species poor with a sward height of around 5cm. Forb interest was very limited.	Poor	Lost
Ephemeral/sh ort perennial	Ruderal/ ephemeral	The marginal and often disturbed areas of Site had some limited coverage of ephemeral vegetation. The thin marginal areas to the west and east (c.1m wide) had a higher proportion of grass and some scattered scrub.	Poor	Lost
Bare ground	Vacant/derelict land/bare ground	The Site was dominated by disturbed bare ground (the remnants of the demolished industrial estate) and its surrounds, there was very little colonisation by plants with only a few species from surrounding habitat being recorded within margins, most of which were ephemeral in character (as above).	Poor	Lost

² The Biodiversity Metric 3.0 (Natural England/DEFRA) [Online]
<http://publications.naturalengland.org.uk/publication/6049804846366720>

³ JNCC. (2010). Handbook for Phase 1 Habitat Survey - A Technique for Environmental Audit. Peterborough JNCC,

⁴ The Biodiversity Metric 3.0 (Natural England/DEFRA) [Online]
<http://publications.naturalengland.org.uk/publication/6049804846366720>

⁵ The Biodiversity Metric 3.0 (Natural England/DEFRA) [Online]
<http://publications.naturalengland.org.uk/publication/6049804846366720>

Phase 1 habitat type (see eco-app)	UKHab habitat type (see BNG metric)	Description	Estimated condition (December 2022)	Proposed impact
Introduced shrub	Introduced shrub	Ornamental species were present along the Sites front. In addition, a handful of small ornamental trees were present along the western boundary of the entrance hardstanding, and an ornamental bed was noted along the Site's south-eastern boundary.	Poor	Lost
Buildings and hardstanding	Developed land: sealed surface	There was the remnants of the tarmac and block paving access road to the south-east of Site, which was used for a site compound, parking and materials storage.	n/a	Lost
Hedgerows and trees	Line of trees	Scattered native and non-native trees were recorded within the dense scrub area to the south-west. In addition, the front of the Site (southern boundary) had a row/double row of trees/shrubs, some of which were non-native/ornamental.	Moderate	Some loss

The proposed landscape measurements were made using the most recent landscape proposals⁶. The table below lists the proposed planting and enhancements to existing planting (where possible) on Site.

Table 2: Proposed habitats (see Figures 2, 3 and 5 and Appendix 1)

UKHab habitat type	Description	Proposed condition
Mixed scrub	Comprises a mix of both the existing scrub to south-west and new native scrub scattered in other areas. A significant band of this habitat will also be planted along the northern boundary (where previously woodland was situated). All areas of scrub to be managed to promote moderate condition through measures such as: • Maintaining a good age range of shrubs • Removal of dead wood (where necessary) • Remove of non-native, invasive (schedule 9 listed) and undesirable species (such as common nettle). • Promotion of well-developed edge habitats and clearings, glades and rides.	Moderate
Other neutral grassland	Species rich grassland to be provided along western boundary, which will be appropriately managed through measures such as: • Mowing to create varying sward heights. • Management of scrub and ruderal species to avoid them becoming dominant in terms of ground cover. • Remove of non-native, invasive (schedule 9 listed) and undesirable species (see scrub section). Given the habitat type and the proposed proximity to active site, condition above moderate is not practical.	Moderate
Modified grassland	Amenity grassland provided along margins to carparking and yard space within Site. This will be subject to a suitable mowing regime (and other management such as that listed for other neutral grassland), but significant management is not practical for such a habitat. Given the habitat type and the proximity to active site, condition above moderate is not practical.	Moderate
Developed land: sealed surface	Comprising the new industrial unit, yard space, pathways and parking. BNG value negligible and no management can be undertaken to increase condition.	n/a
Line of trees	The condition of retained native trees to the south west will be maintained through the following: • Encouraging creation of continuous canopy (where possible). • Promotion of unmown areas around the trees (where at all possible).	Moderate

⁶ FPCR (2022) Knowsley Business Park, Detailed Softworks Plan

UKHab habitat type	Description	Proposed condition
	Monitoring and removal of fallen dead wood (where necessary).	
Urban trees	Urban trees planted throughout the new Site and retained trees (from woodland loss) will have some biodiversity value and through management such as that listed for 'line of trees' habitat should ensure they attain/retain moderate value.	Moderate

Full management regimes would be provided within a Landscape Ecological Management Plan (LEMP) and Habitat Management Plan (HMP).

Overall, the assessment (Appendix 1) concluded that current layout would result in a loss of c.-62% habitat units and c.-19% hedgerow/linear units.

Summary and Interpretation

Whilst it is acknowledged that historically the Site is/was generally of limited ecological value the quantifiable offsetting assessment concludes that a biodiversity loss will occur of which the loss of woodland to the north and scrub to the south-west is the primary factor. In addition, the presence of a restrictive easement associated with an underground culverted water course (under the authority of the Environment Agency) within the Site limits opportunities for planting. The easement which comprises a large portion of available greenspace to the west means that additional woody planting such as woodland and scrub, or other higher value habitats such as a reedbed cannot be implemented in this area limiting the score which can be achieved.

However, where at all possible existing features of value such as scrub and trees will be managed to enhance their condition (where practical). The addition of native scrub within available open space and species rich grassland within the easement area to the west does help contribute towards the biodiversity value of the proposed Site.

Additional enhancement features such as bat and bird boxes but are not counted within the BNG metric, but they do contribute to objectives outlined in the National Planning Policy Framework (NPPF 2019) and as such should be considered within the broader assessment of the sites value.

Please let me know if you require any more information.

Yours sincerely,



Ed Feetham

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FPCR Environment and Design Ltd

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Attached:

Figure 1: Habitat Baseline
Figure 2: Habitat Proposed
Figure 3: Habitat Retention
Figure 4: Baseline Condition Distinctiveness
Figure 4: Proposed Condition Distinctiveness

Appendix 1: 10585 04.02.22 Biodiversity Metric 3.0 Auditing and accounting for biodiversity Calculation tool



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Key

Red Line Boundary

Area Habitats

Developed land; sealed surface

Introduced shrub

Mixed scrub

Modified grassland

Other woodland; mixed

Ruderal/Ephemeral

Vacant/derelict land/ bareground

Hedgerows

Line of Trees (w1g6NE2)





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Key

 Red Line Boundary

Area Habitats

 Developed land; sealed surface

 Mixed scrub

 Modified grassland

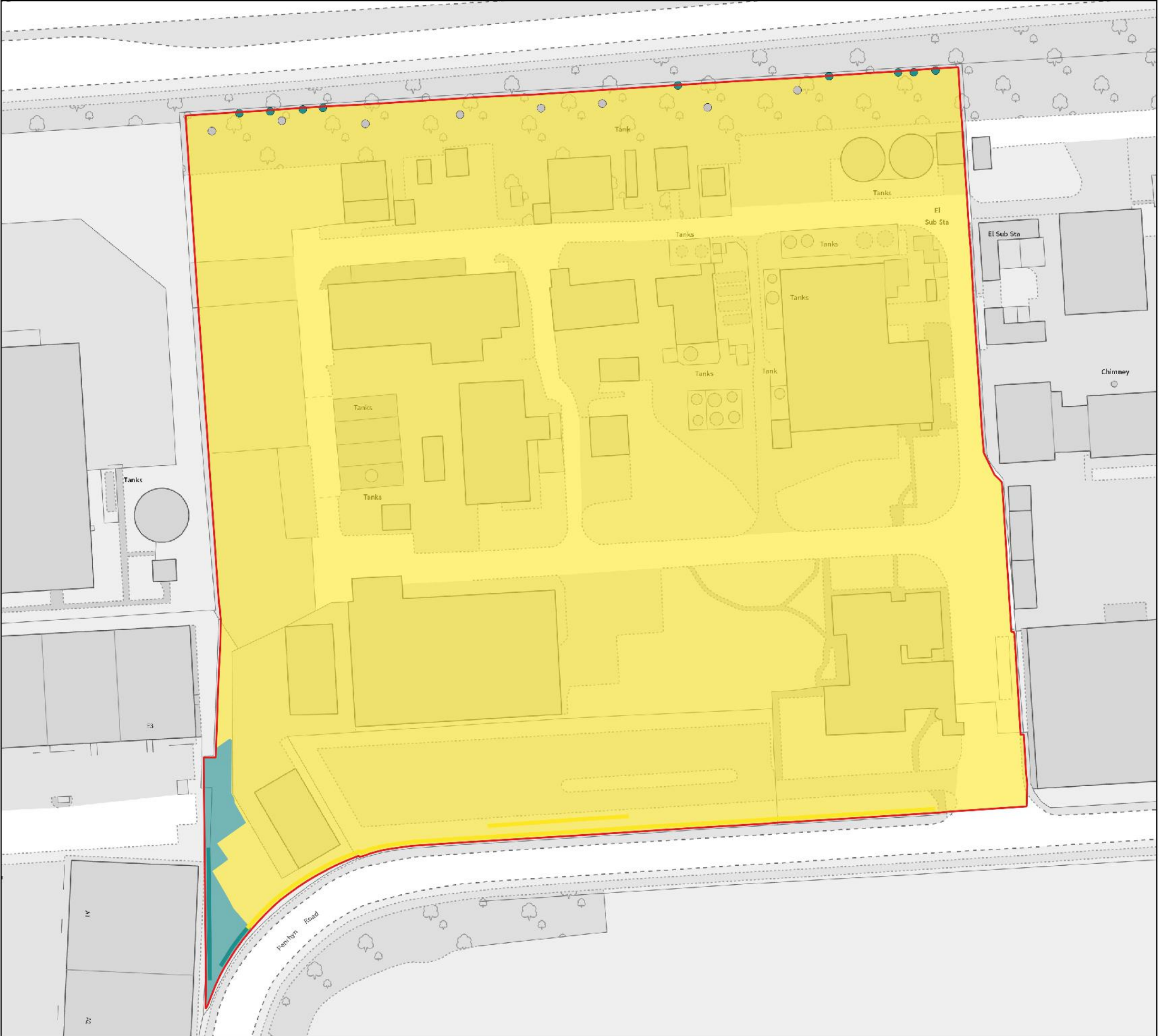
 Other neutral grassland

Hedgerows

 Line of Trees (w1g6NE2)

Urban Trees

 Medium



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Key

Red Line Boundary

Area Habitats

Retained

Lost

Hedgerows

Retained

Lost

Urban Trees

● Created

● Retained



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Key

Red Line Boundary

Area Habitat Condition

Moderate

Poor

N/A - Other

Area Habitat Distinctiveness

Medium

Low

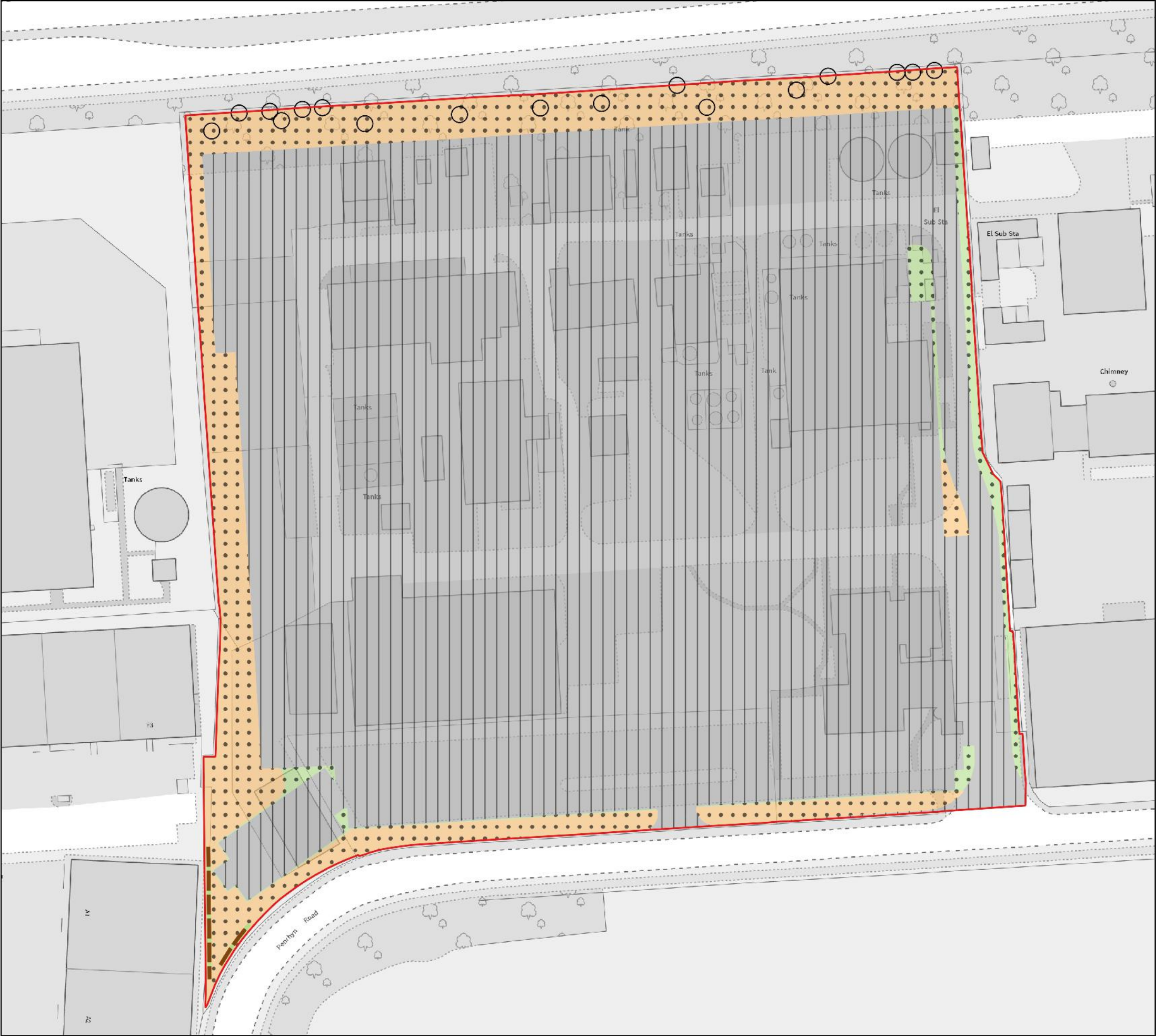
V.Low

Hedgerow Condition

Moderate

Hedgerow Distinctiveness

Low



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Key

Red Line Boundary

Area Habitats Condition

Moderate

N/A - Other

Area Habitats Distinctiveness

Medium

Low

V.Low

Hedgerow Condition

Moderate

Hedgerow Distinctiveness

Low

Urban Trees Condition

Moderate

