



The London Resort

**Appendix 11.2:
Preliminary
Arboricultural
Impact Assessment**

Prepared by:
**The Environmental
Dimension
Partnership Ltd**

On behalf of:
**London Resort
Company Holdings
Limited**

July 2020
Report Reference
edp5988_r014

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	Author	Formatted	Peer Review	Proofed by/Date
r014	LT	AV	TC	JM 220720

Section 1

Introduction

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been commissioned by The London Resort Company Holdings Ltd to undertake a BS 5837:2012 *Trees in Relation to Design, Demolition and Construction* compliant survey of trees in relation to the proposed development of London Resort (hereafter referred to as 'the Study Area').
- 1.2 The Study Area is two parcels of land, one situated on the Swanscombe Peninsula, and the Ebbsfleet Valley, on the south side of the River Thames (referred to as 'the Kent Project Site'), and one to the east of the A1089 Ferry Road and the Tilbury Ferry Terminal (referred to as 'the Essex Project Site'). Collectively these two parts of the entire Development Consent Order (DCO) boundary are referred to as 'the Study Area'. It comprises approximately 523.1 hectares (ha) of land.

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Section 2

Methodology and Limitations

- 2.1 The methodology adopted for this survey is based on guidelines set out in BS 5837:2012 *Trees in Relation to Design, Demolition and Construction*, especially Section 4.4, 'Tree Survey'. Site trees and other significant vegetation are as noted on the Tree Constraints Plan and this data has been derived from Aerial photography. All surveyed items are detailed in **Annex EDP 2**. No other trees are covered by this survey.
- 2.2 All trees have been visually inspected from ground level unless otherwise stated, with no climbing or further detailed investigative tests being undertaken. The comments on their condition are based on observable factors present at the time of inspection. All measurements are metric and have been recorded in accordance with the measurement conventions set out in Section 4.4.2.6 of BS 5837:2012.
- 2.3 The schedule in **Annex EDP 2** provides information about the following factors in accordance with Section 4.4.2.5 of BS 5837:2012.
- 2.4 Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a 24-month period from the survey date. Any alterations to the Study Area could change the current circumstances and may invalidate this report and any recommendations made.
- 2.5 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer damage under average conditions. Regular inspections can help to identify potential problems before they become acute.
- 2.6 A lack of recommended work does not imply that a tree is safe and likewise, it should not be implied that a tree will be made safe following the completion of any recommended work.
- 2.7 The subject trees have not been tagged for identification purposes.

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Section 3

Summary of Tree Stock

- 3.1 The survey has identified 93 individual trees, 93 groups of trees and 13 woodland areas, totalling 199 items. Of these 199 items, two have been graded as category A, of high quality; 131 have been graded as category B, of moderate quality; and 60 have been graded as category C and are of low quality. In addition, six items have been graded as category U and are considered unsuitable for retention irrespective of development.
- 3.2 All surveyed items are as noted on the Tree Constraints Plan (**Annex EDP 1**) and detailed in the Tree Survey and Schedule at **Annex EDP 2**.
- 3.3 An illustrative summary of the species diversity, age distribution and grading categorisation for the Study Area is provided in **Annex EDP 3**.

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Section 4

Statutory Protection

Tree Preservation Orders and Conservation Areas

- 4.1 There are four Tree Preservation Orders (TPO) registered on, or adjacent to the Study Area. These are named:
- TA48 - Dartford District Council T.P.O. No.5 1975 (Varied 07/04/1989);
 - TF02 - Borough of Dartford T.P.O. No.2 1995;
 - TC32 - Borough of Dartford T.P.O. No.3 1983 (As varied 07.04.89);
 - TA29 - D.R.D.C. T.P.O. No.9 1971 (As varied 07.04.89); and
 - TD39 - Borough of Dartford T.P.O. No.3 1990.
- 4.2 The locations of the TPOs are depicted on Tree Constraints Plan (**Annex EDP 1**) with a yellow outline.
- 4.3 The Study Area is not within a designated conservation area.

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Section 5

Preliminary Arboricultural Impact Assessment

- 5.1 This Arboricultural Impact Assessment (AIA) has been prepared following site-based observations, a desktop study of the baseline survey data and consideration of the Proposals.
- 5.2 Assessment of the impact of the proposals has been determined following consideration of the constraints each surveyed item poses by virtue of its position, branch spread and designated root protection area (RPA).
- 5.3 The assessment focuses on the main part of the proposals the Swanscombe Peninsula, and the Ebbsfleet Valley and land to the east of the A1089 Ferry Road and the Tilbury Ferry Terminal. The Bean Lane junction, A2 slip road and A296 are not included in not this preliminary assessment as the area is subject to a separate planning application.

Groups of Trees Impacted by Development Proposals

- 5.4 Assessment of the proposals determines that a number of tree groups are impacted by the development proposals; these are detailed in **Table EDP 5.1** below, in hectares.

Table EDP 5.1: Tree Groups Impacted by Development Proposals

Category	Existing Tree Cover (ha)	Proposed Tree Cover for Removal (ha)	Retained Tree Cover (ha)
A	21.25	0	21.25
B	86.06	13.08	72.98
C	105.75	64.45	41.30
U	2.24	1.54	0.69

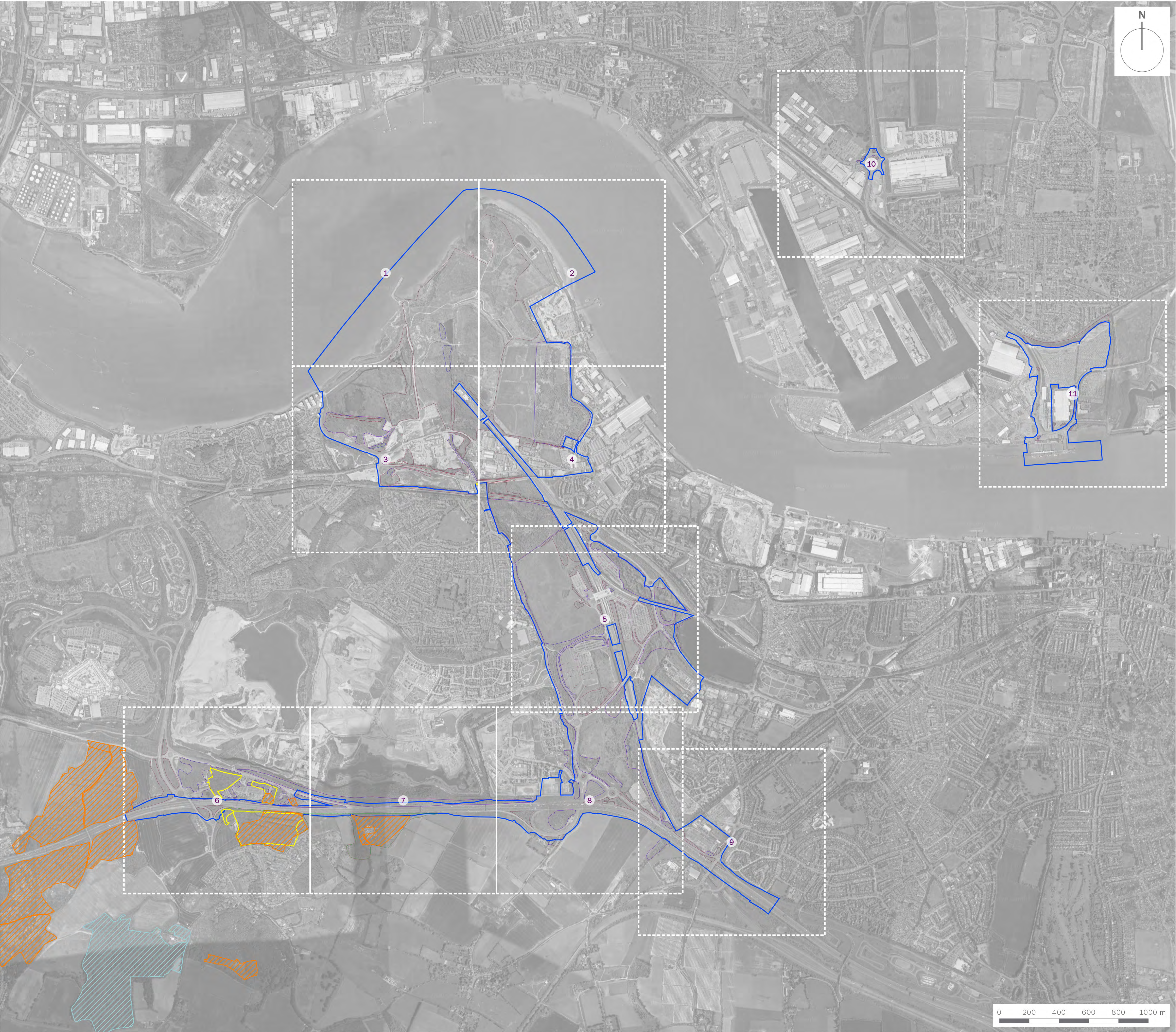
Individual Trees Impacted by Development Proposals

- 5.5 Assessment of the proposals determines that two individual items are impacted by the development proposals. One of the items is category B, of moderate quality; and the other is category C, of low quality.

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Annex EDP 1
Tree Constraints Plan
(edp5988_d046a 23 July 2020 TC/LT)

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T1

Study Area

Tree/Group Number

Tree/Group Canopy

Tree Stem

Root Protection Area

Category A: Trees of high quality and value

Category B: Trees of moderate quality and value

Category C: Trees of low quality and value

Category U: Trees of poor quality and value

TPO Trees

Ancient Semi-natural Woodland

Plantation on Ancient Woodland Site

To conform to BS 5837:2012 and planning validation requirements, this plan should be reconciled with topographical survey data once it is available.

client	The London Resort Company Holdings Ltd		
project title	The London Resort		
drawing title	Plan EDP 1: Tree Constraints Plan Overview		
date	23 JULY 2020	drawn by	TC
drawing number	edp5988_d046a	checked	LT
scale	1:12,500 @ A1	QA	JTF

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Study Area

T1

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Tree/Group Canopy
Tree Stem
Root Protection Area

Category A: Trees of high quality and value

Category B: Trees of moderate quality and value

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TPO Trees

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Plantation on Ancient Woodland Site

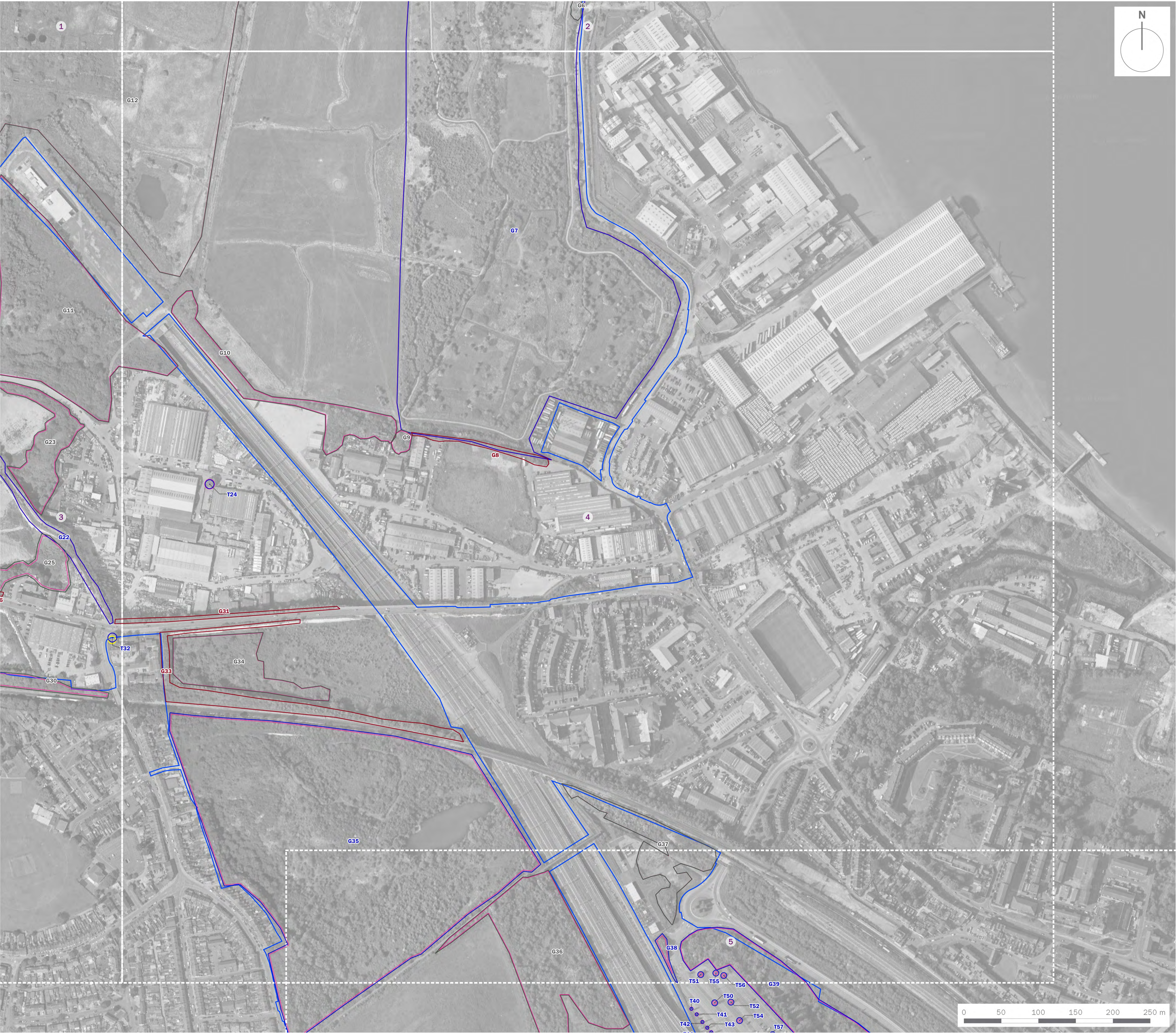


To conform to BS 5837:2012 and planning validation requirements, this plan should be reconciled with topographical survey data once it is available.

client	The London Resort Company Holdings Ltd		
project title	The London Resort		
drawing title	Plan EDP 1: Tree Constraints Plan (Sheet 3 of 11)		
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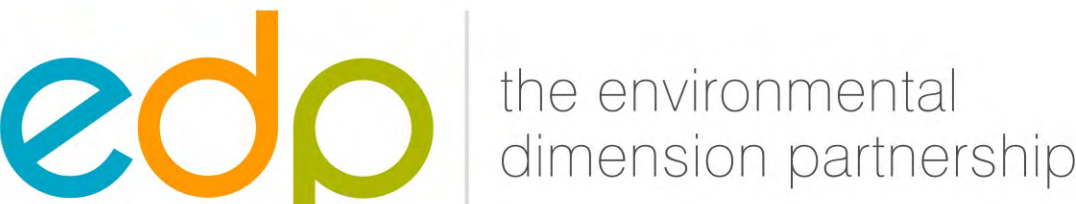
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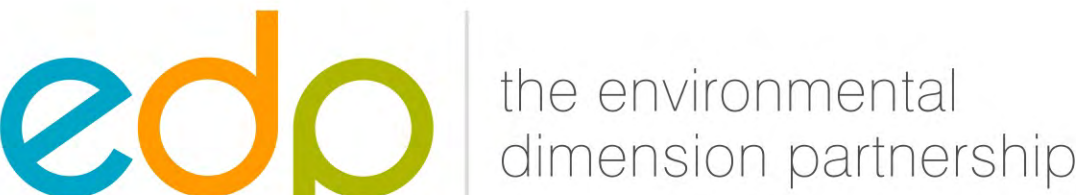
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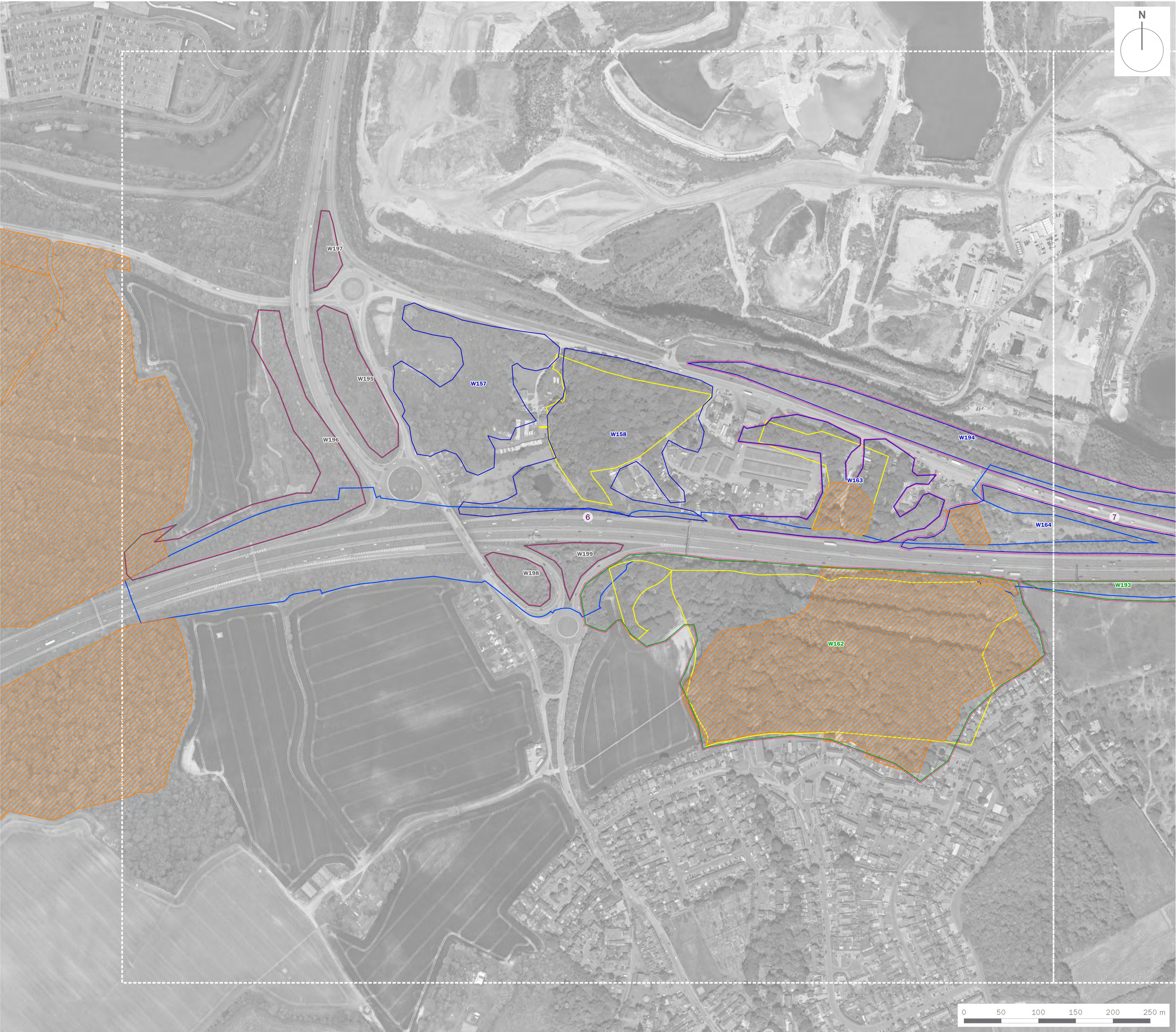


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project title	The London Resort		
drawing title	Plan EDP 1: Tree Constraints Plan (Sheet 5 of 11)		
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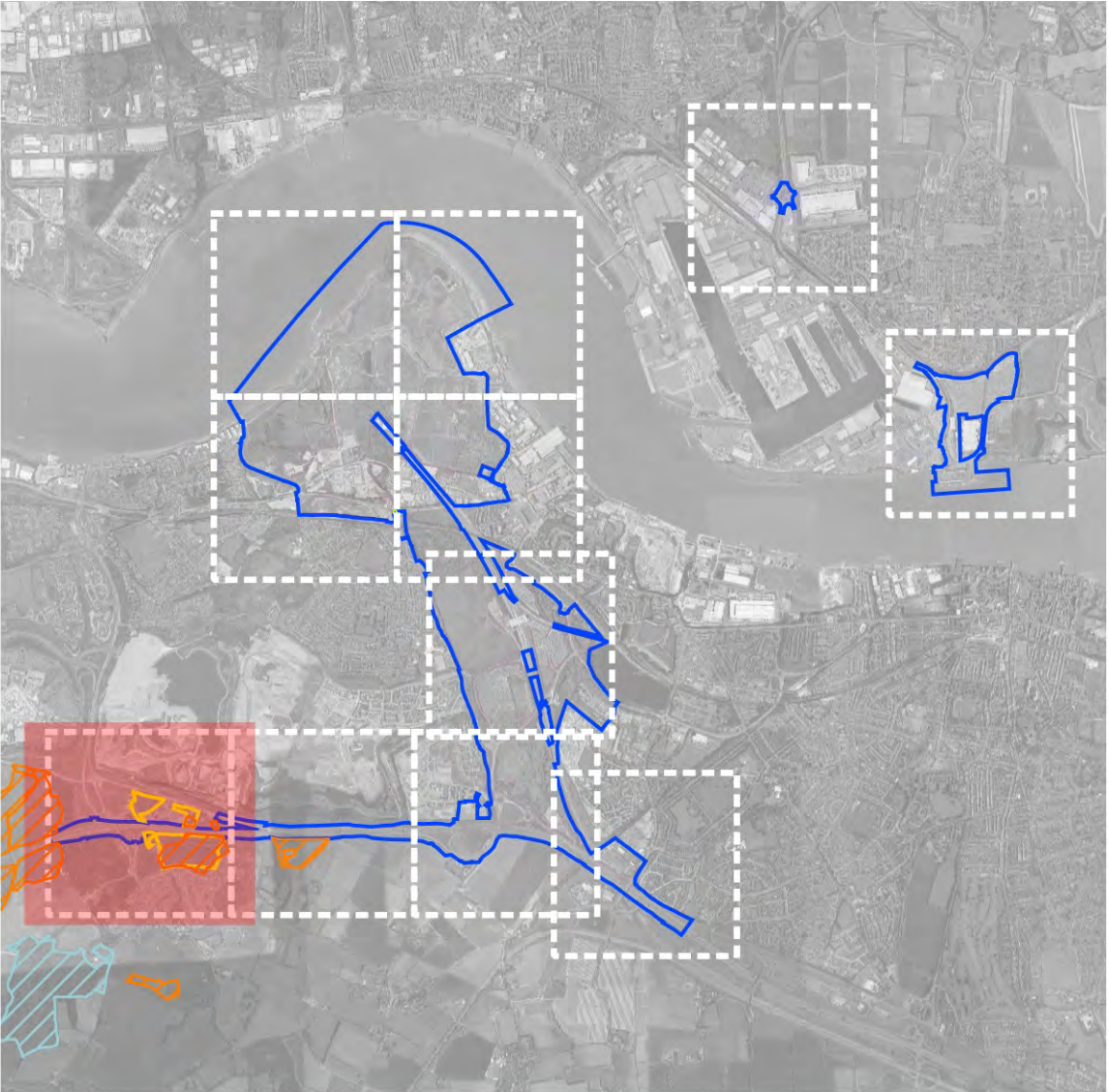
Category C: Trees of low quality and value

Category U: Trees of poor quality and value

TPO Trees

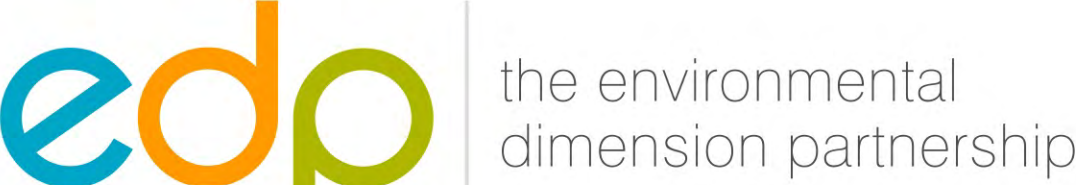
Ancient Semi-natural Woodland

Plantation on Ancient Woodland Site

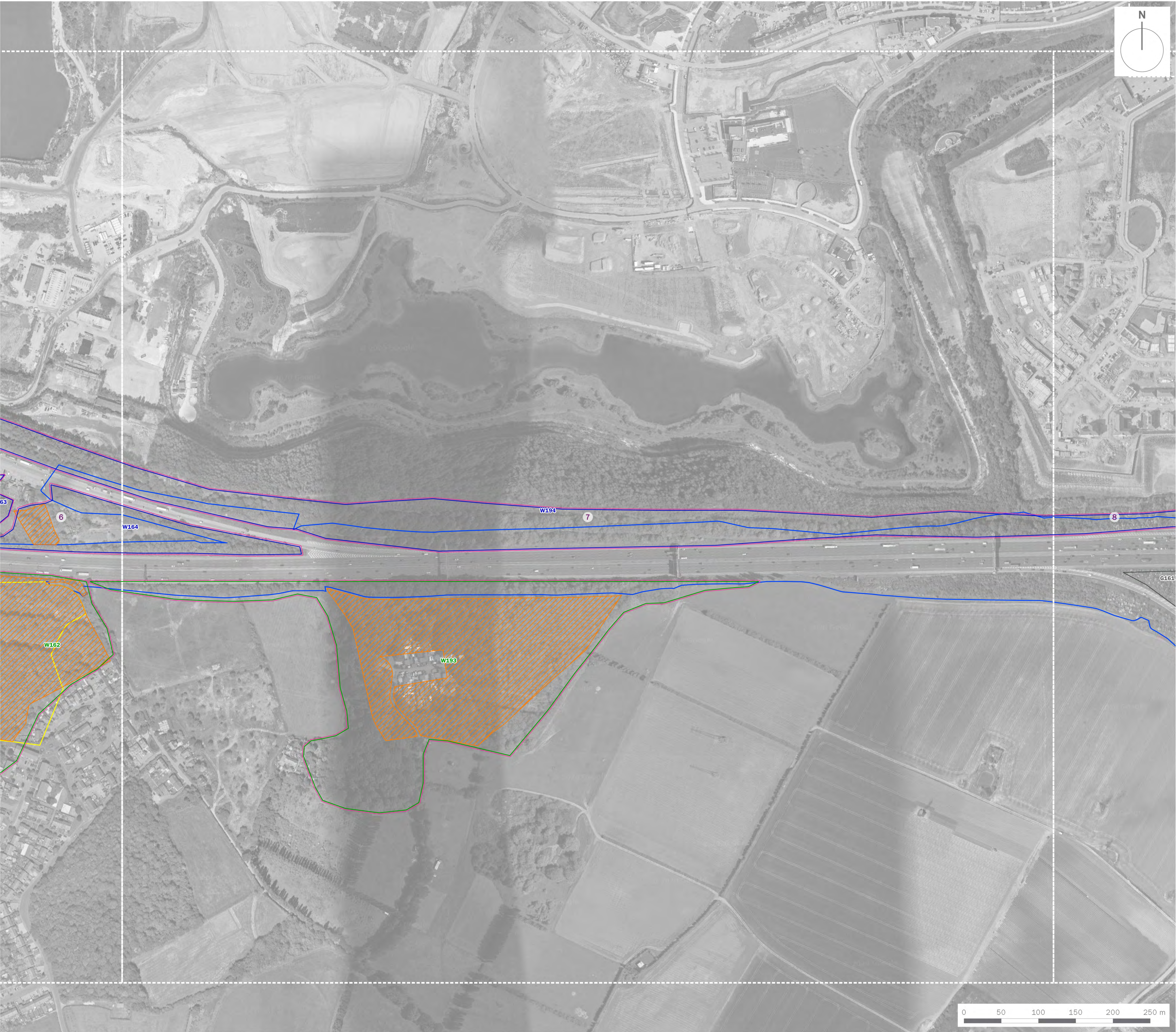


To conform to BS 5837:2012 and planning validation requirements, this plan should be reconciled with topographical survey data once it is available.

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project title	The London Resort		
drawing title	Plan EDP 1: Tree Constraints Plan (Sheet 6 of 11)		
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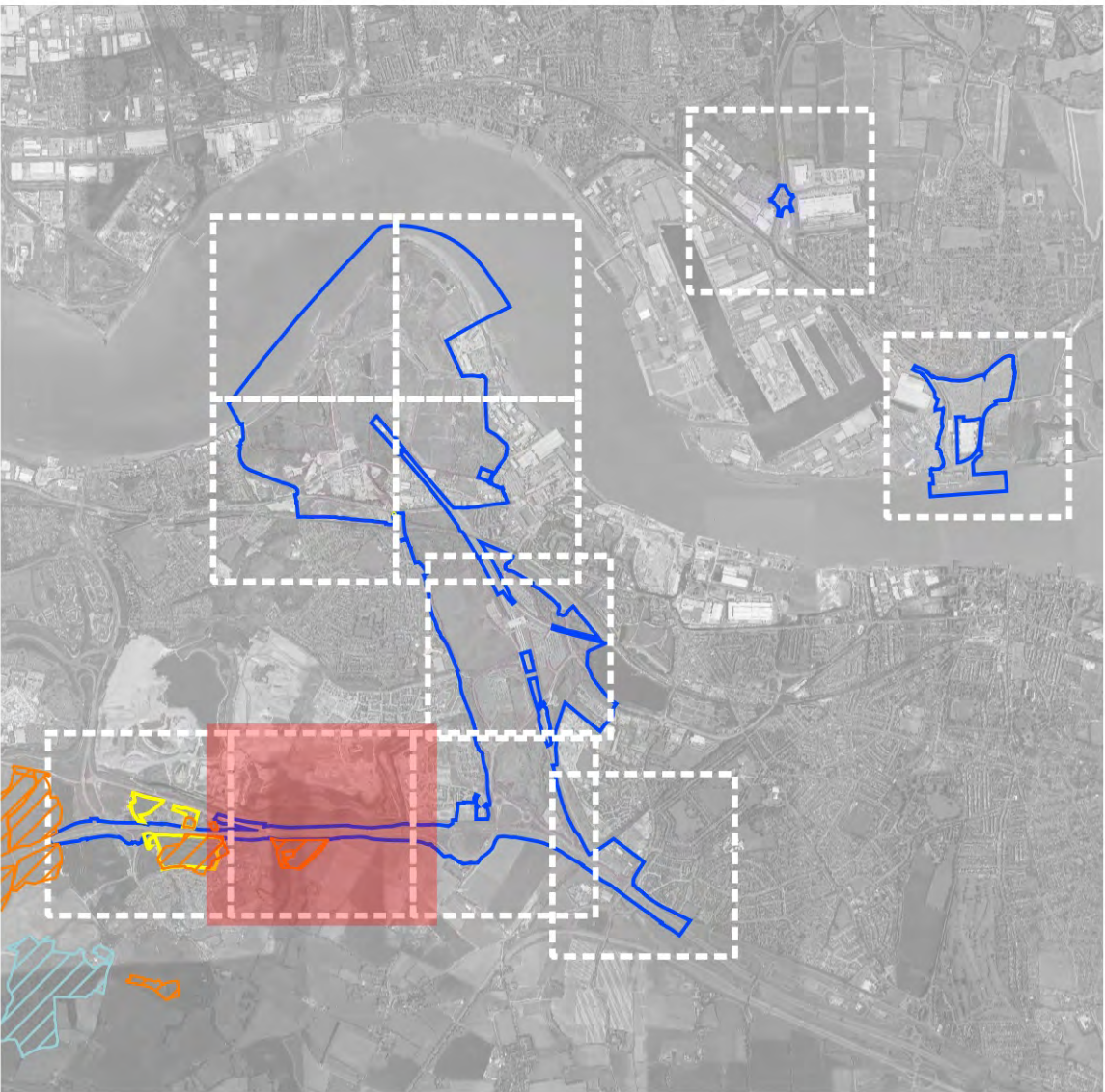
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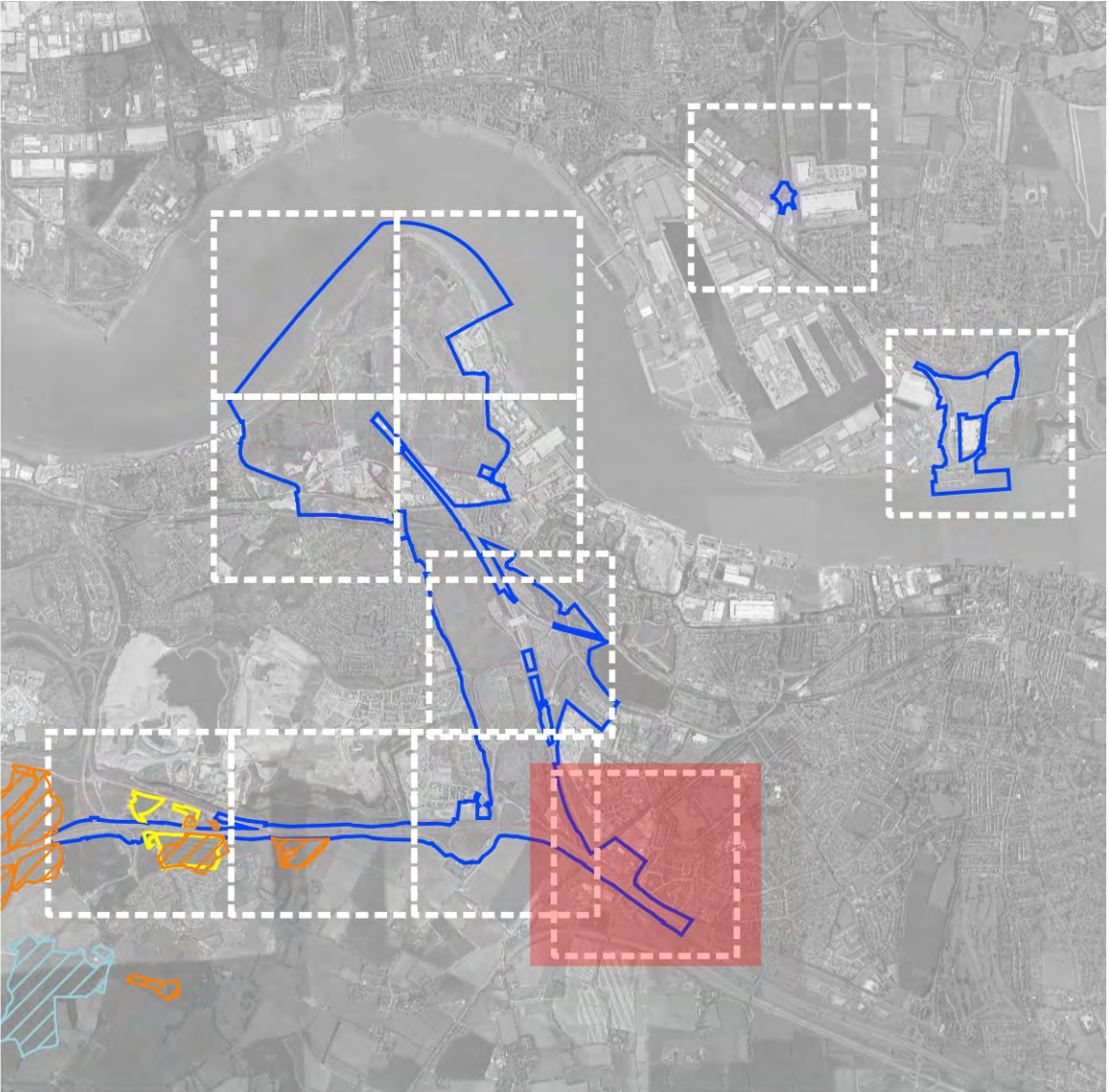
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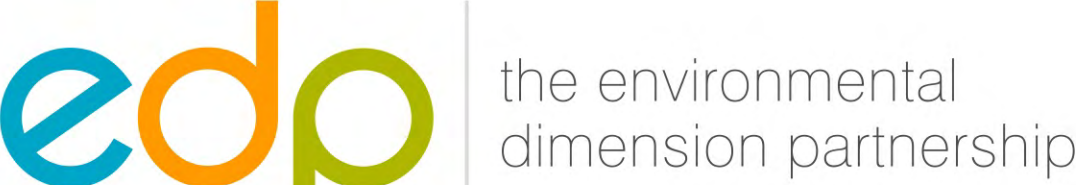
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Annex EDP 2 Tree Survey Key and Schedule

Sequential Reference Number	T - Individual specimen; G - Group of trees that form cohesive arboricultural features either aerodynamically, visually or culturally; H - Linear group of specimens that form a hedge or boundary; and W - A larger group or area of trees that should be regarded as a single woodland unit.
Species	Scientific names and common English names provide, the latter are used wherever possible for simplicity.
Height	An approximation of height (in metres) is provided for the highest point of the tree.
Stem Diameter	This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS 5837:2012 (# is used if estimated).
Branch Spread	This is taken at four cardinal points, with a stated value in metres to enable an accurate representation of the crown.
Canopy Clearance Above Ground Level	An approximation of height (in metres) of crown clearance above adjacent ground level.
Life Stage	There are five classes to which trees are assigned: Young; Early Mature; Mature; Over Mature; and Veteran.
Physiological Condition	An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy density: It should be taken that, unless otherwise stated with each individual entry, the canopy density of the trees is typical of the species; and Leaf size and colouration: It should be taken that, unless otherwise stated with each individual entry, leaf size and colouration is typical of the species.
Structural Condition	An indication of the tree's structural condition is represented and classed as good, fair, poor or dead. This is informed by "the presence of any decay and physical defect¹".

¹ BS 5837:2012 Section 4.4.2.5

Comments/Notes	Observations on structural or physiological condition, historic pruning, any Site-specific constraints etc. noted at the time the survey is undertaken.
Recommendations (and Tree Work Priority)	These are made on the basis of optimising the life expectancy of site trees, given their current situation and that which may result from the development proposals. The survey process pays particular attention to implications for life and/or property; defects recorded under the structural condition have the necessary mitigation measures proposed within this section of the schedule. Priority codes from 1 to 3 have been given for trees requiring work. The definition of the codes used is as follows: Priority 1: Work that should be undertaken urgently due to the identification of a potential hazard; Priority 2: Work that should be undertaken prior to any demolition or construction works commencing on Site; and Priority 3: Work that should be undertaken following the completion of the development.
Estimated Remaining Contribution	The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.
Category Grading	Trees have been assigned either U or category grading A to C in accordance with the cascade chart given in BS 5837:2012.
Root Protection Radius	Measurement (in m) based on the stem diameter and calculated in accordance with BS 5837:2012.

Annex EDP 3

Illustrative Summary of Survey Data

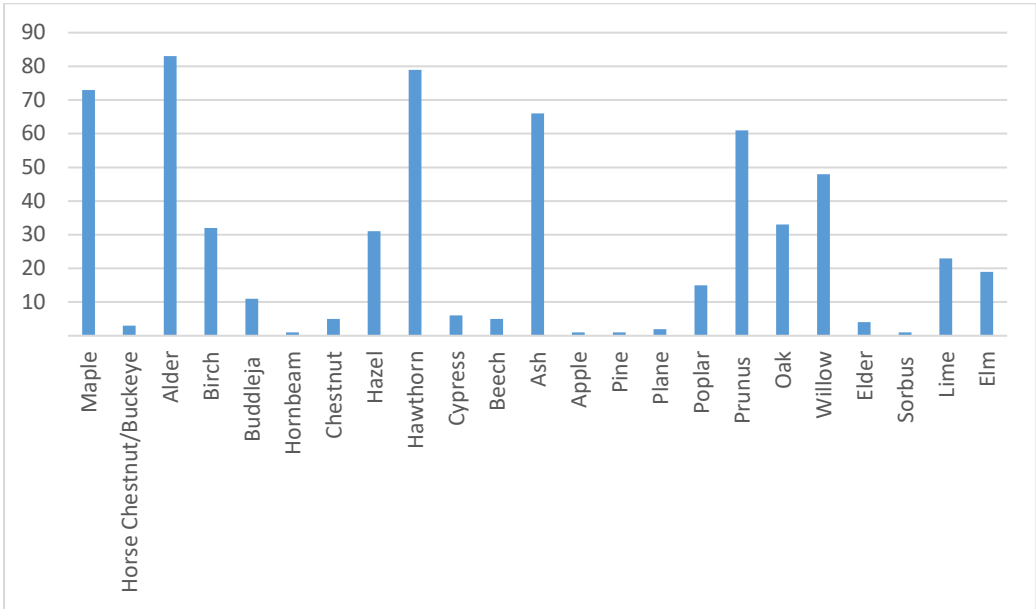


Figure EDP A3.1: Species Diversity.

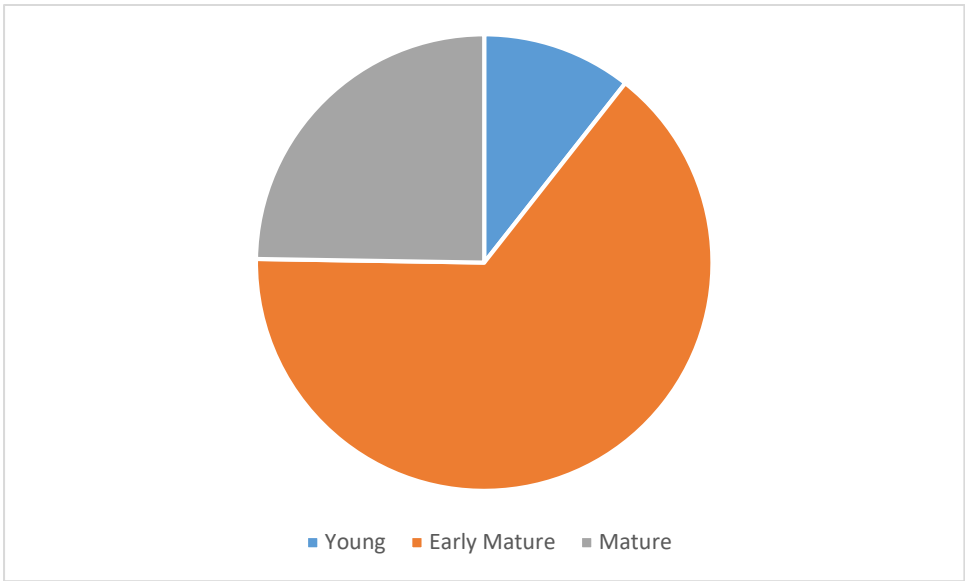


Figure EDP A3.2: Age Distribution.

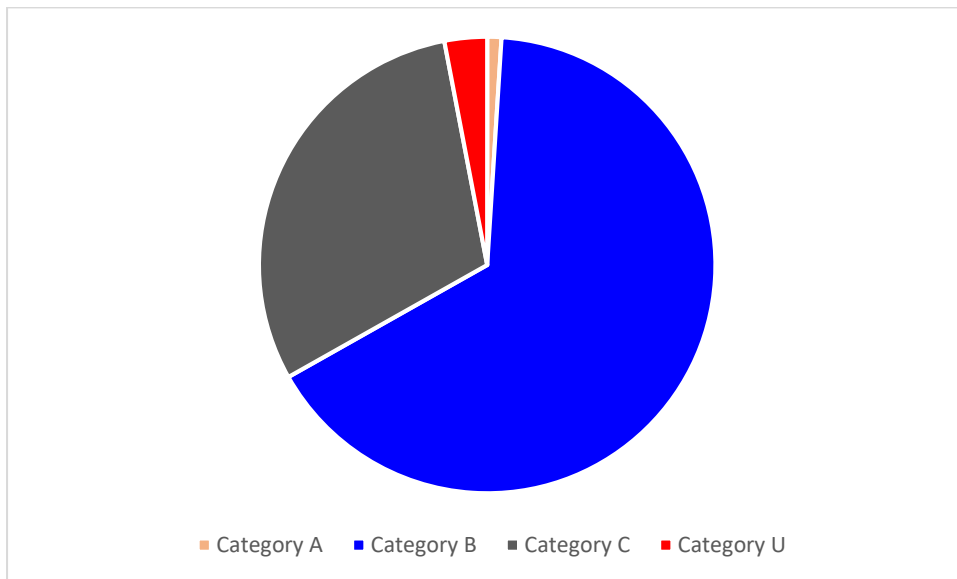


Figure EDP A3.3: Category Grading.



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