

# **A46 Newark Bypass**

**TR010065/APP/6.3**

## **6.3 Environmental Statement**

### **Appendix 7.4 Arboricultural Impact Assessment**

#### **Part 5**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and  
Procedure) Regulations 2009

Volume 6

April 2024

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning  
(Applications: Prescribed Forms  
and Procedure) Regulations 2009**

A46 Newark Bypass

Development Consent Order 202[x]

---

**ENVIRONMENTAL STATEMENT**

**APPENDIX 7.4 ARBORICULTURAL IMPACT ASSESSMENT**

**PART 5**

---

<b>Regulation Number:</b>	Regulation 5(2)(a)
<b>Planning Inspectorate Scheme Reference</b>	TR010065
<b>Application Document Reference</b>	TR010065/APP/6.3
<b>Author:</b>	A46 Newark Bypass Project Team, National Highways

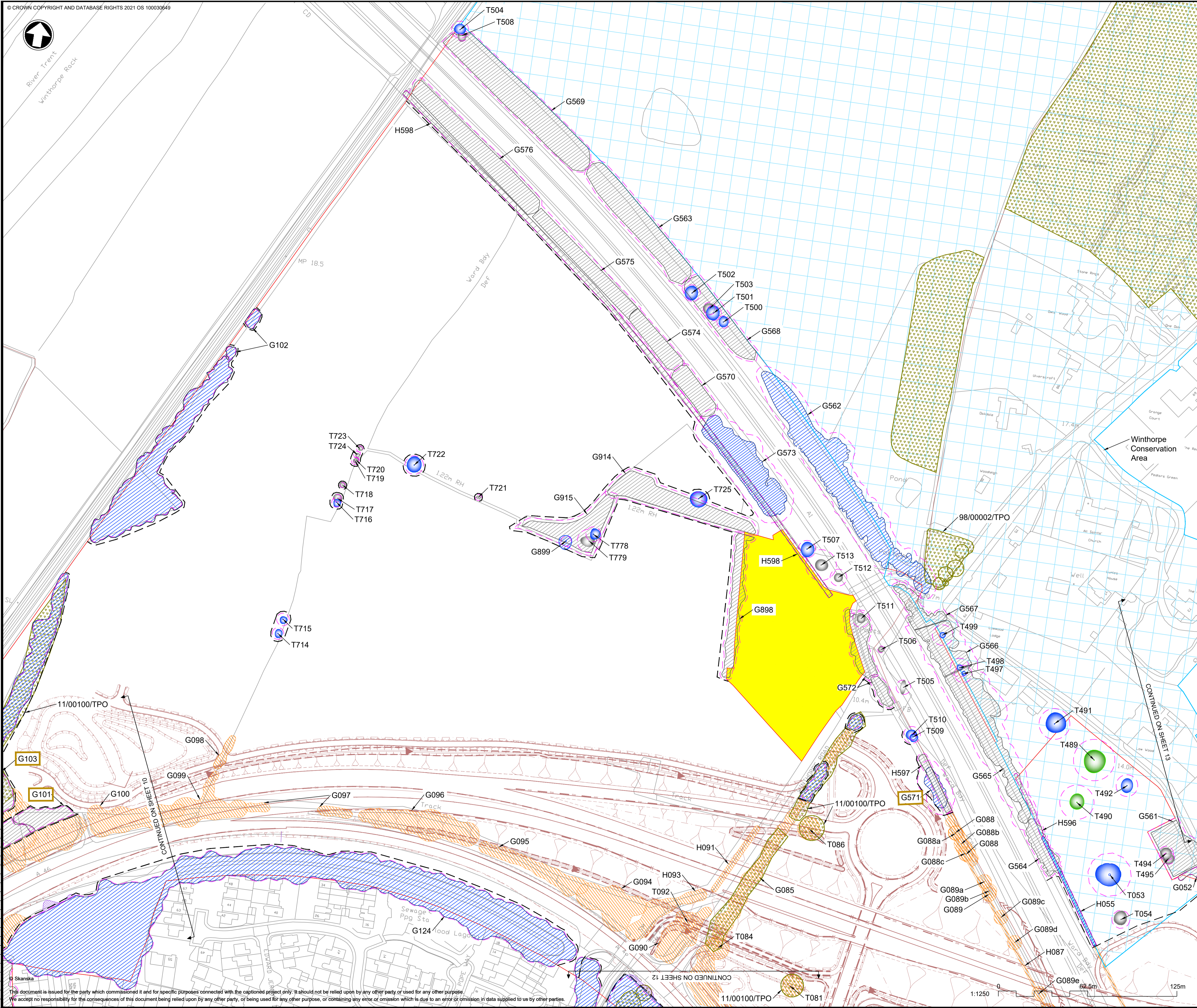
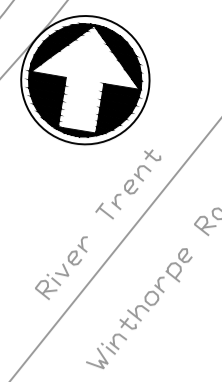
<b>Version</b>	<b>Date</b>	<b>Status of Version</b>
Rev 1	April 2024	DCO Application

## Contents

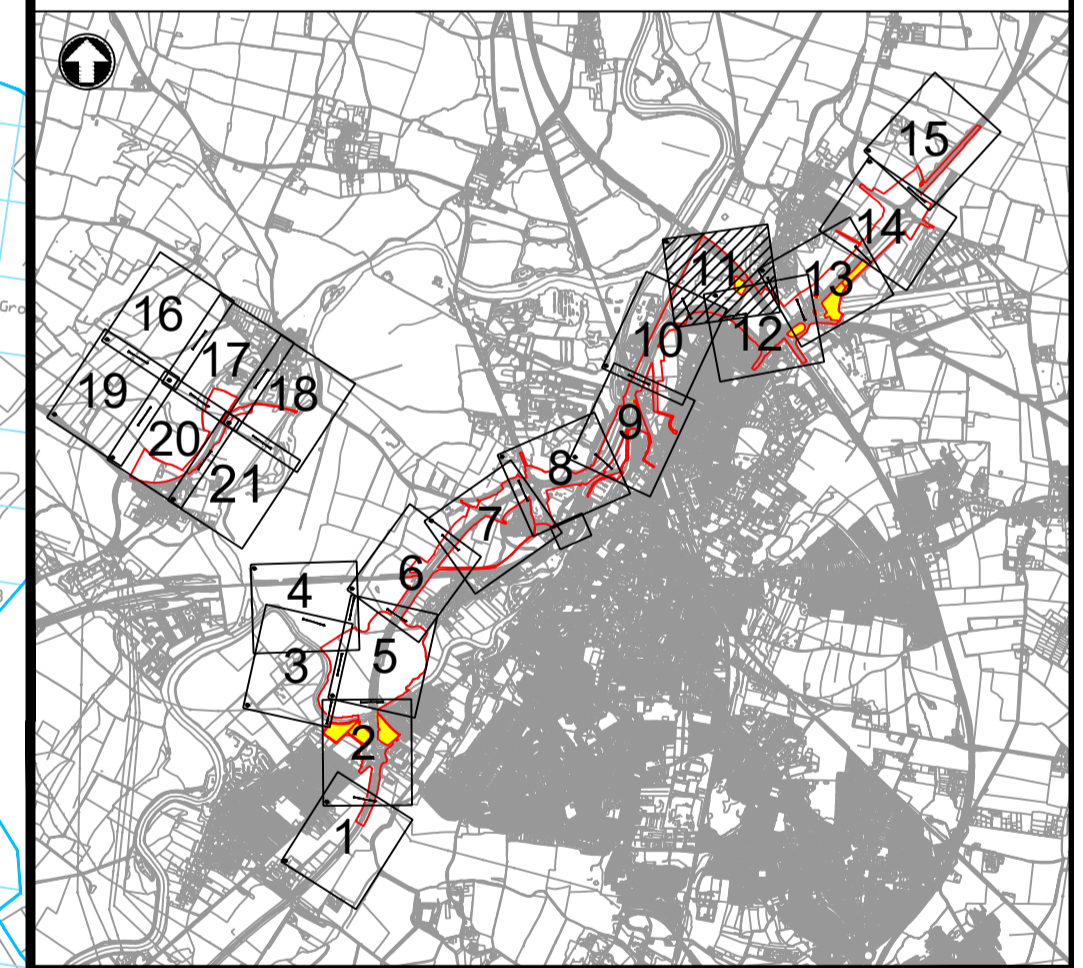
### **E. Appendix: Drawings**

E.2 Tree protection plans (sheet 11-21)

### **F. Appendix: Tree protection measures**



- NOTES
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).

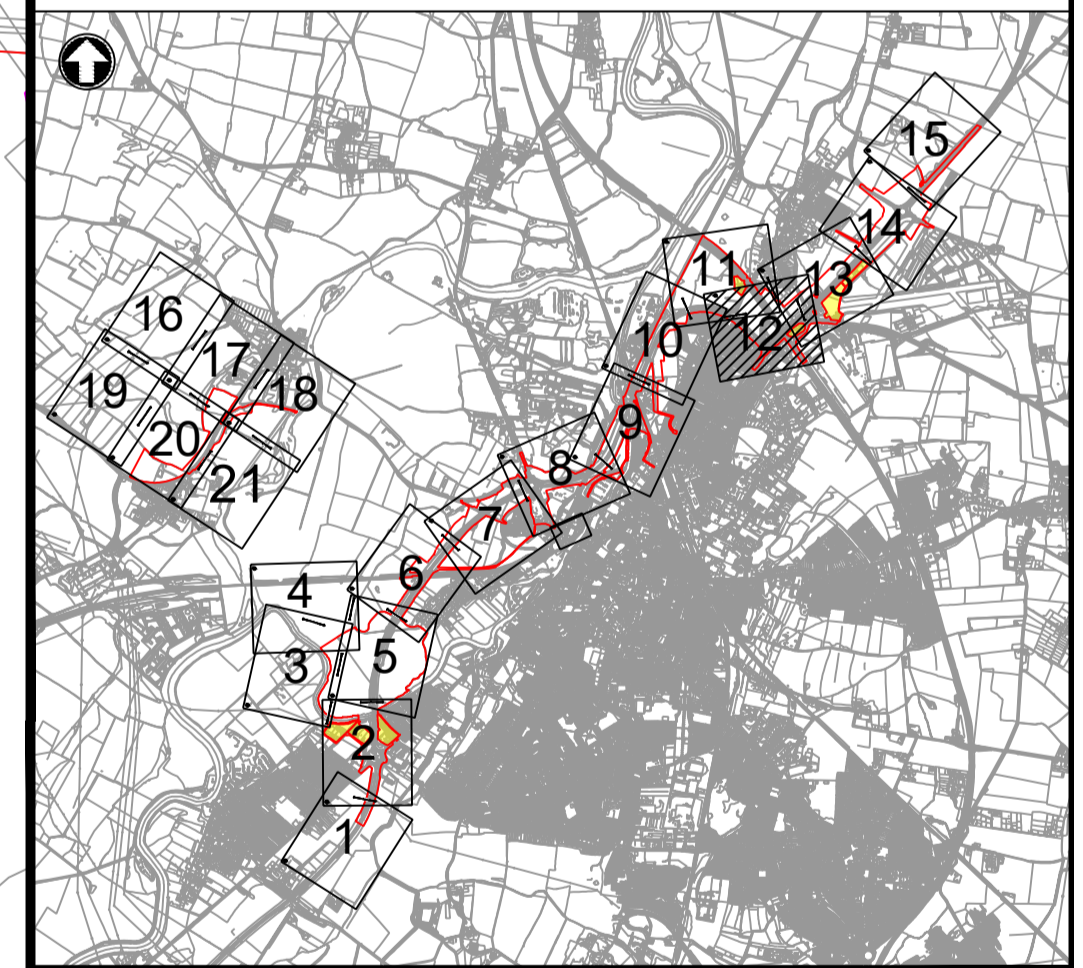
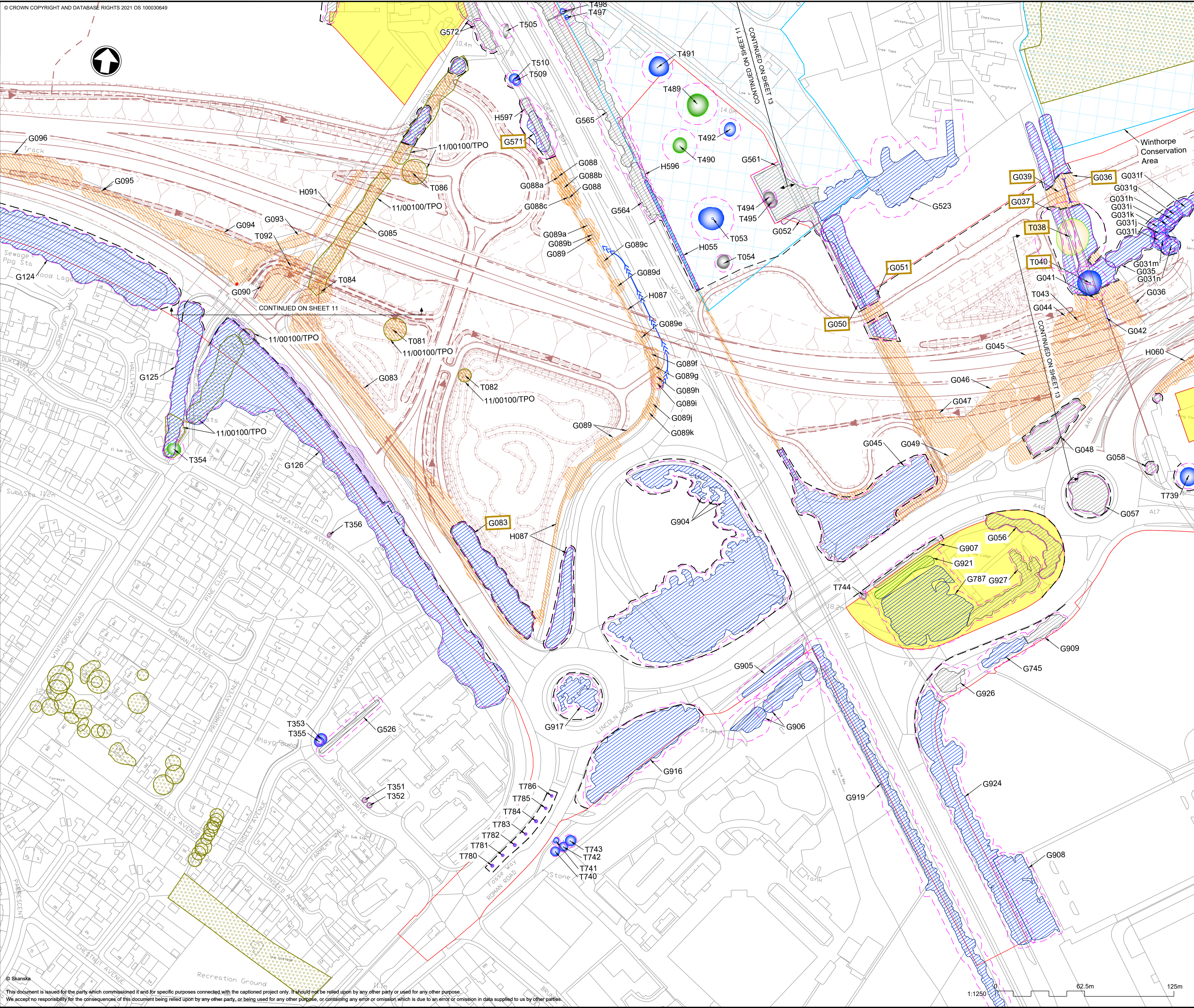


REV. C01	DATE 15/02/24	DCO APPLICATION	DL	RL	HF
AMENDMENT DETAILS			ORIG	CHK'D	APP'D
CLIENT 					
PURPOSE OF ISSUE DCO APPLICATION					
DEVELOPMENT CONSENT ORDER NUMBER TR010065					
PROJECT TITLE A46 NEWARK BYPASS					
DRAWING TITLE Appendix E.2 Tree Protection Plan Sheet 11 of 21					
ORIGINAL SIZE A1			SCALE 1:1250		
DRAWING NUMBER HE551478		ORIGINATOR SKAG		VOLUME ELS	
CONWI_CONW		DR LS		30211	
LOCATION		TYPE		NUMBER	
PROJECT REF NO. HE551478				REVISION C01	

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.



- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

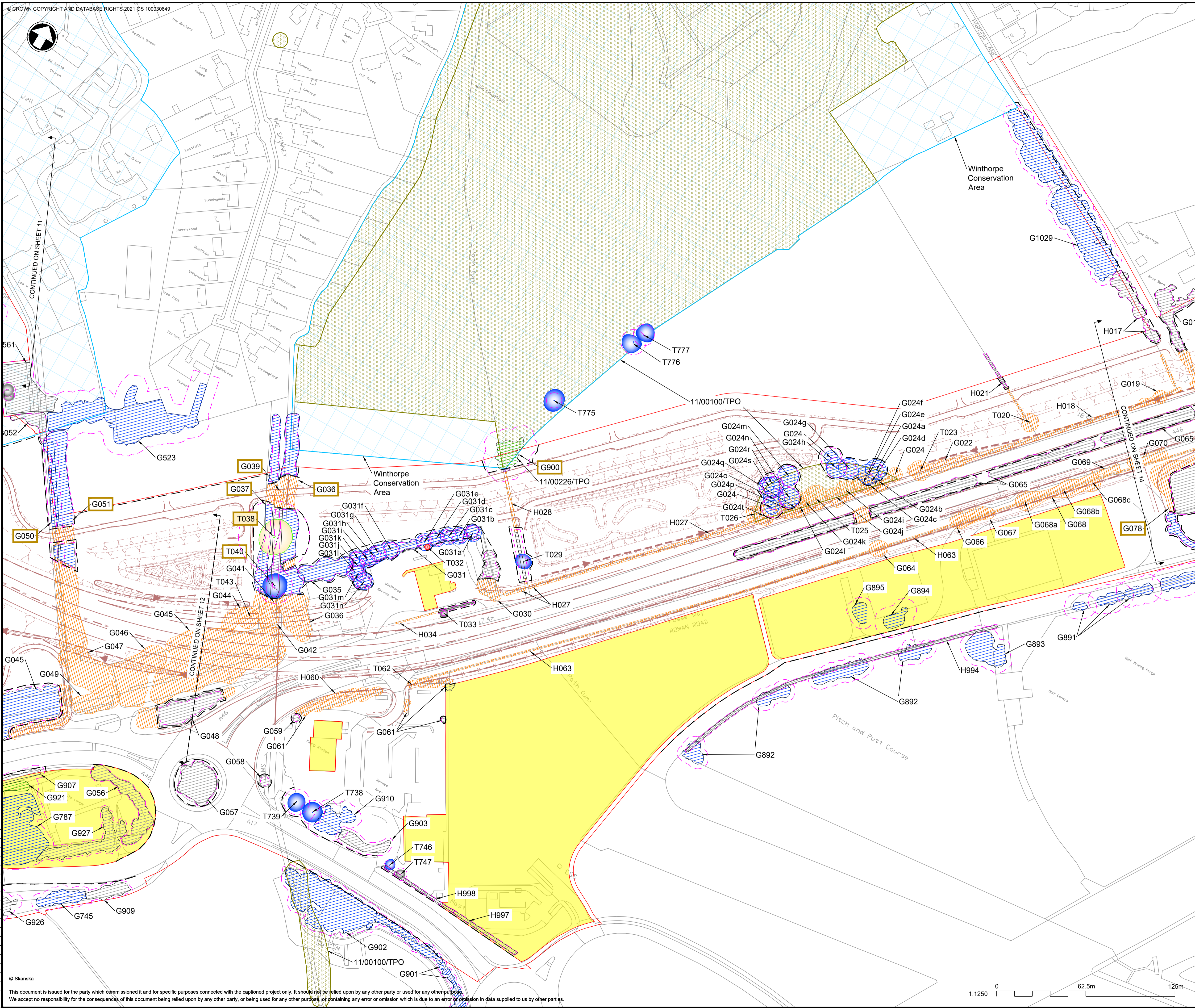
CLIENT  
**national highways**

PURPOSE OF ISSUE  
**DCO APPLICATION**

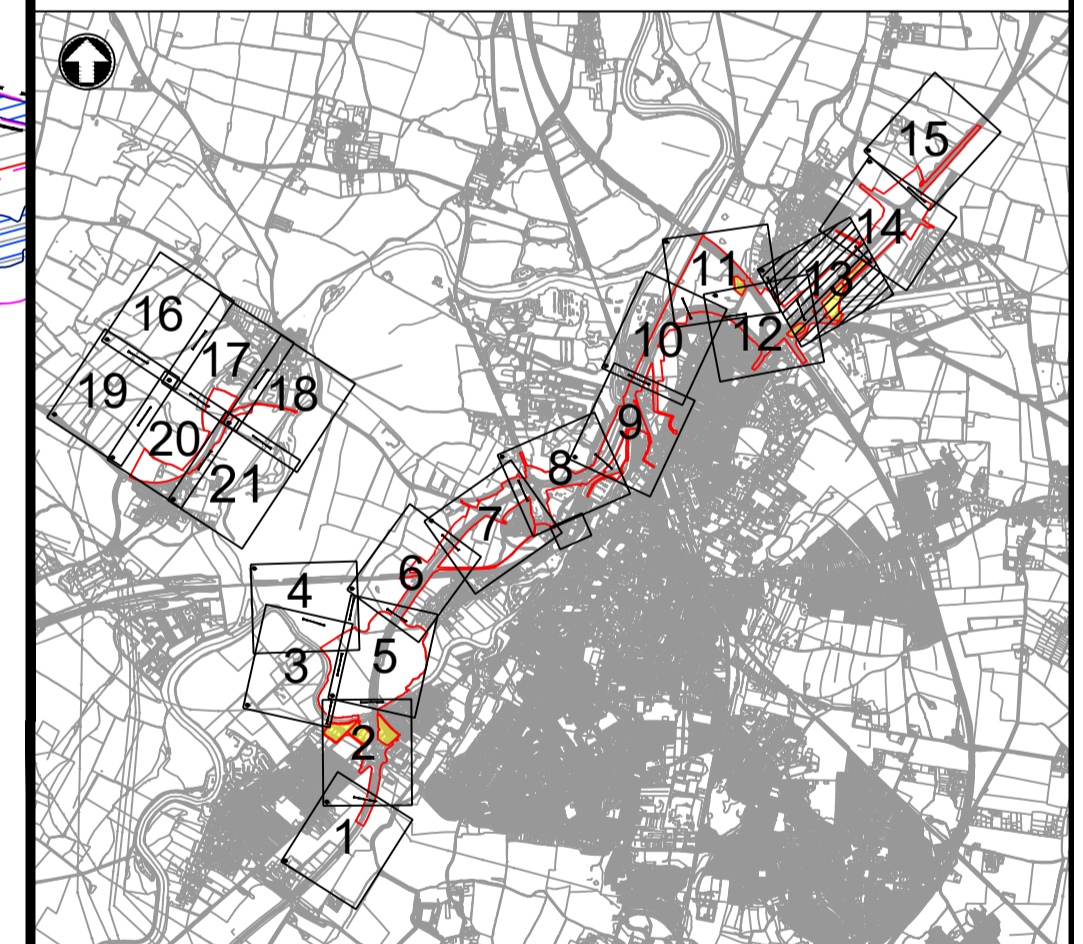
DEVELOPMENT CONSENT ORDER NUMBER  
**TR010065**

PROJECT TITLE  
**A46 NEWARK BYPASS**

ORIGINAL SIZE	A1	SCALE	1:1250
DRAWING NUMBER	HE551478	ORIGINATOR	SKAG
HE PIN	HE551478	VOLUME	ELS
CONWI_CONW	DR	LS	30212
LOCATION	DR	TYPE	ROLE
		NUMBER	
PROJECT REF NO.	HE551478	REVISION	C01



- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



REV.	DATE	DCO APPLICATION	DL	RL	HF
		AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT  
 national highways

PURPOSE OF ISSUE  
 DCO APPLICATION

DEVELOPMENT CONSENT ORDER NUMBER  
 TR010065

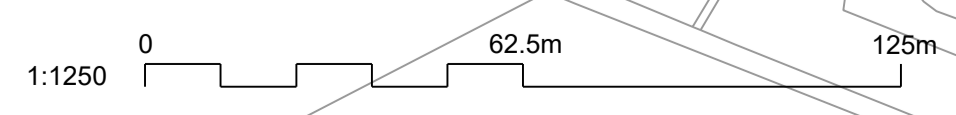
PROJECT TITLE  
 A46 NEWARK BYPASS

DRAWING TITLE  
 Appendix E.2  
 Tree Protection Plan  
 Sheet 13 of 21

ORIGINAL SIZE	A1	SCALE	1:1250
DRAWING NUMBER	HE551478	ORIGINATOR	SKAG
HE PIN	ELS	VOLUME	30213
CONWI_CONW	DR	LS	30213
LOCATION	TYPE	ROLE	NUMBER
			C01

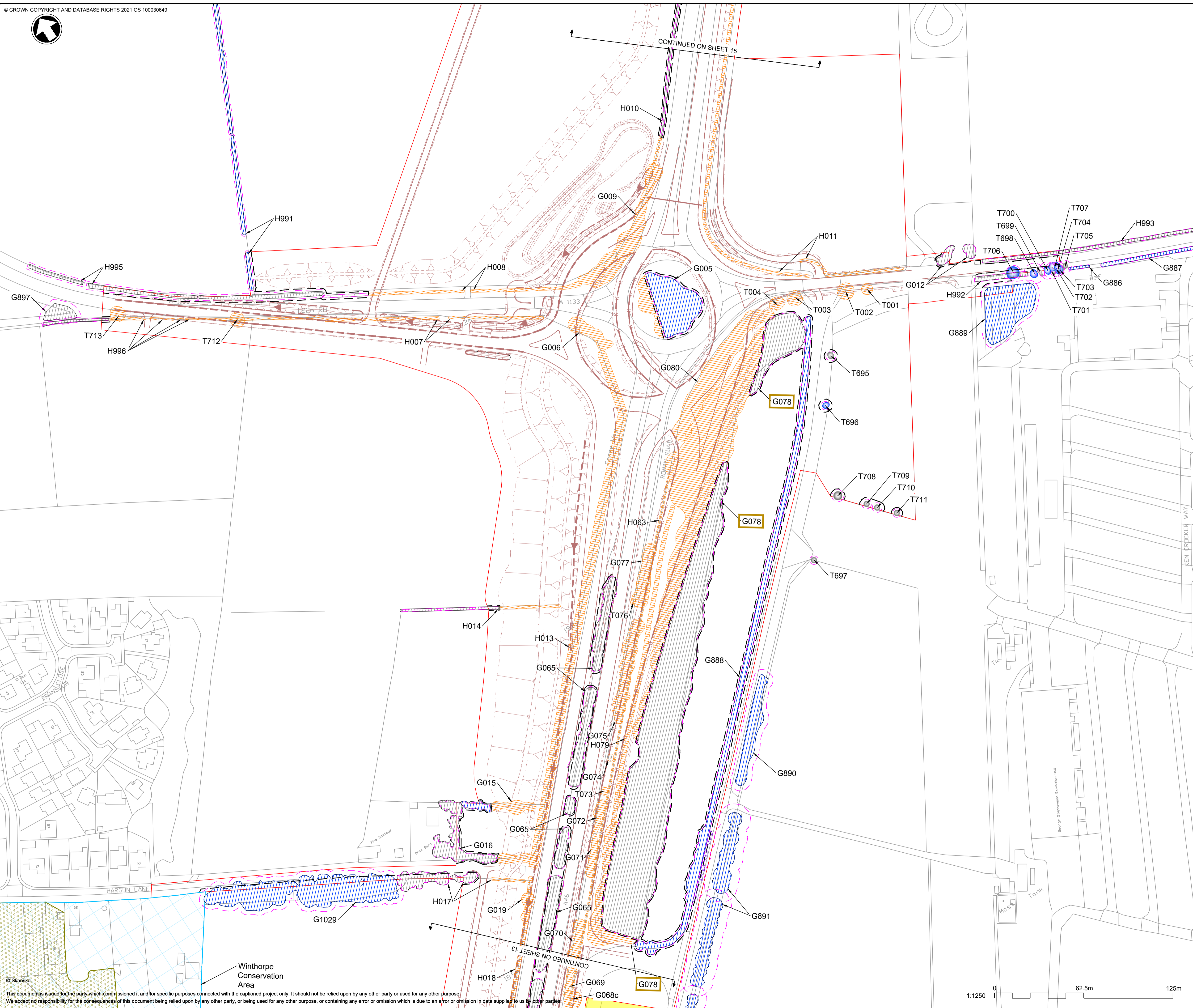
PROJECT REF NO.  
HE551478

REVISION  
C01





CONTINUED ON SHEET 15



**NOTES**

- Do not scale from this drawing.
- Dimensions are in metres unless stated otherwise.
- Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
- To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).

C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT

PURPOSE OF ISSUE: DCO APPLICATION

DEVELOPMENT CONSENT ORDER NUMBER: TR010065

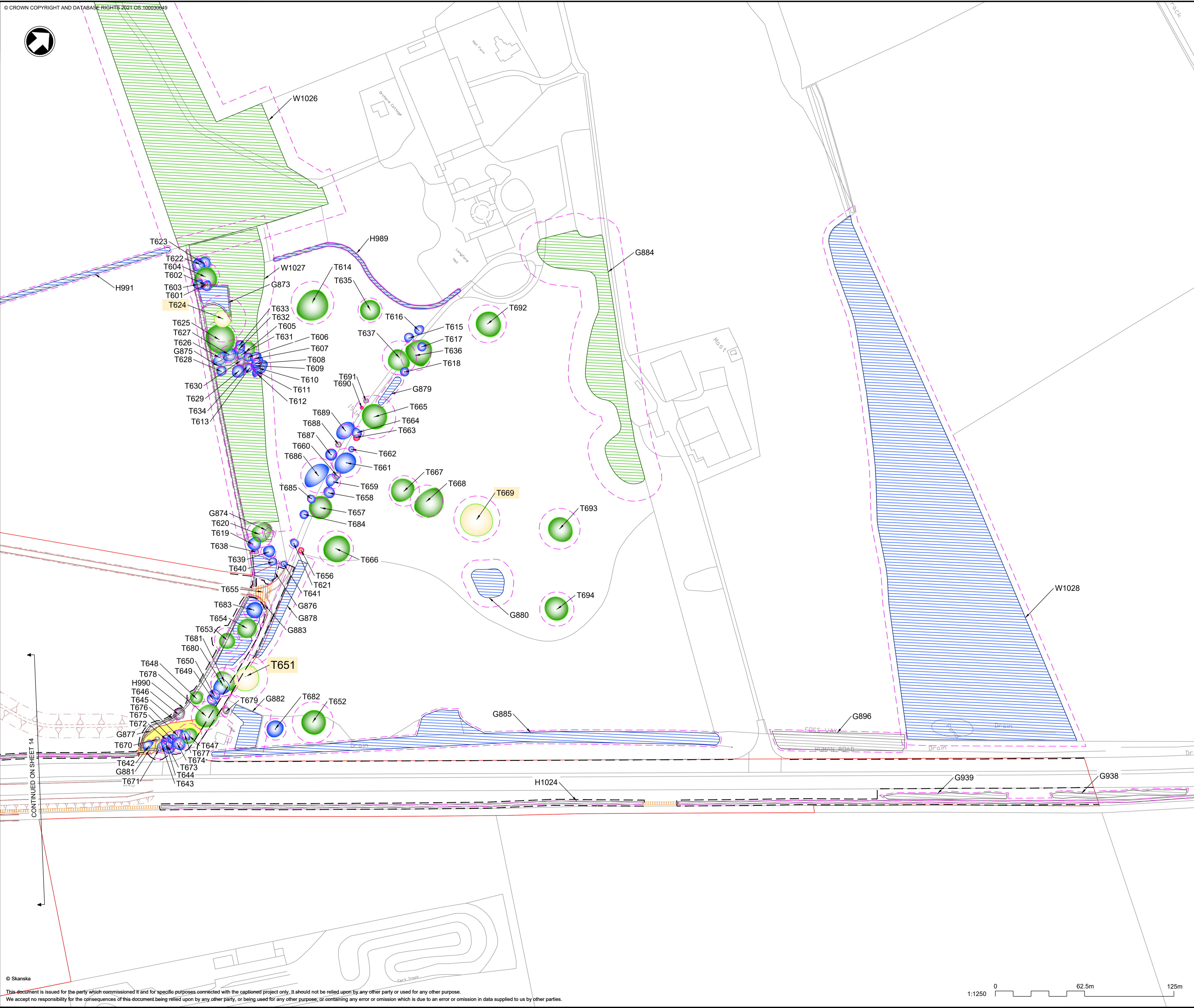
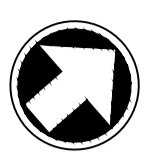
PROJECT TITLE: A46 NEWARK BYPASS

DRAWING TITLE: Appendix E.2 Tree Protection Plan Sheet 14 of 21

ORIGINAL SIZE	A1	SCALE	1:1250
---------------	----	-------	--------

DRAWING NUMBER	HE PIN	ORIGINATOR	VOLUME	PROJECT REF NO.
HE551478	SKAG	ELS		HE551478
CONWI_CONW	DR	LS	30214	REVISION
LOCATION	TYPE	ROLE	NUMBER	C01

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.



- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



REV.	DATE	DCO APPLICATION	DL	RL	HF
		AMENDMENT DETAILS	ORIG	CHK'D	APP'D

**CLIENT**

**PURPOSE OF ISSUE**  
DCO APPLICATION

**DEVELOPMENT CONSENT ORDER NUMBER**  
TR010065

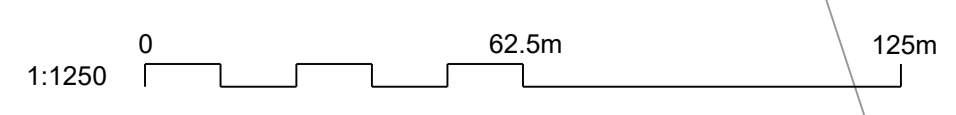
**PROJECT TITLE**  
A46 NEWARK BYPASS

**DRAWING TITLE**  
Appendix E.2  
Tree Protection Plan  
Sheet 15 of 21

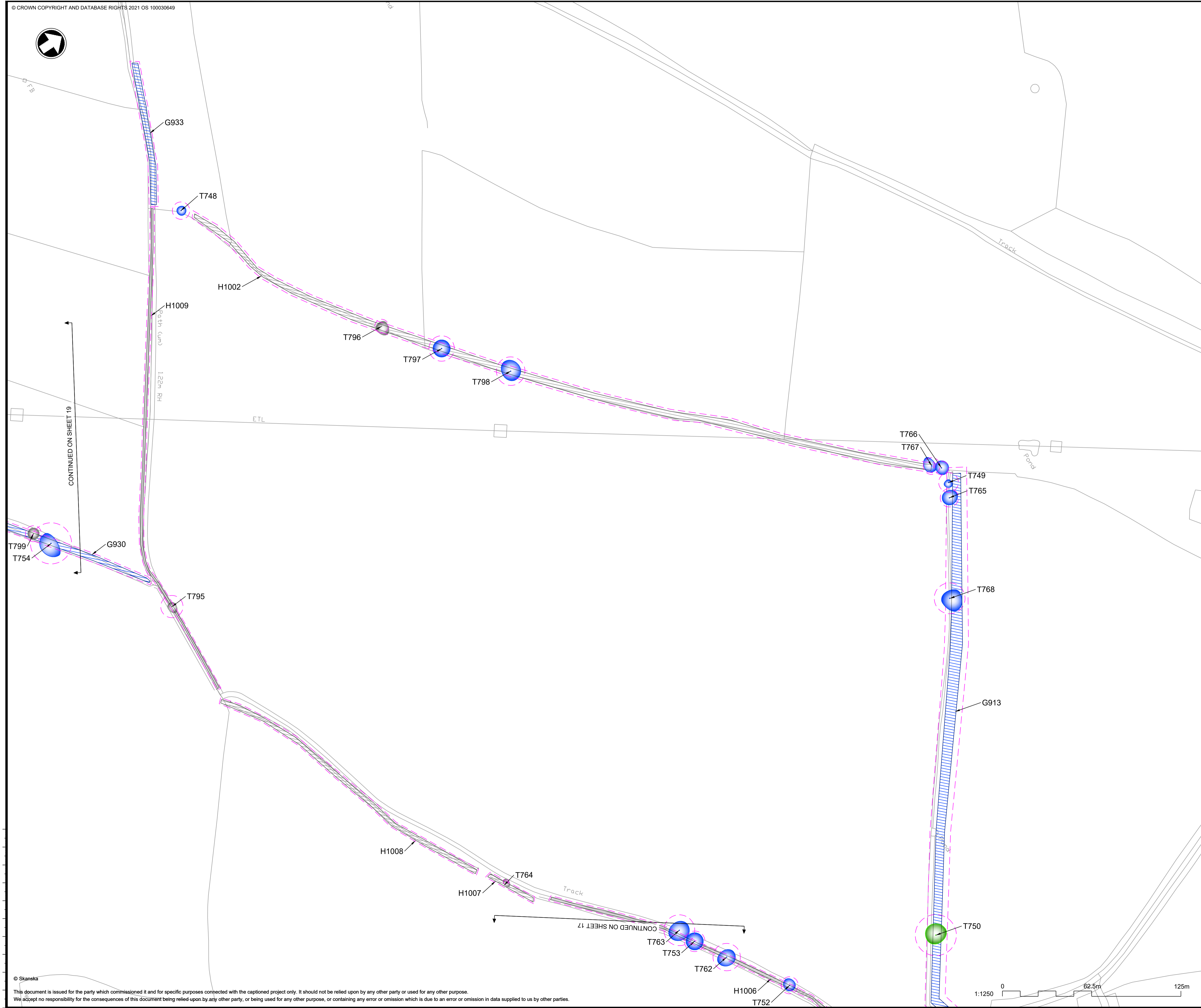
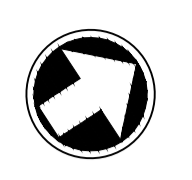
ORIGINAL SIZE	A1	SCALE	1:1250
DRAWING NUMBER	HE551478	ORIGINATOR	SKAG
HE PIN	ELS	VOLUME	30215
CONWI_CONW	DR	LS	30215
LOCATION	TYPE	ROLE	NUMBER

**PROJECT REF NO.**  
HE551478

**REVISION**  
C01



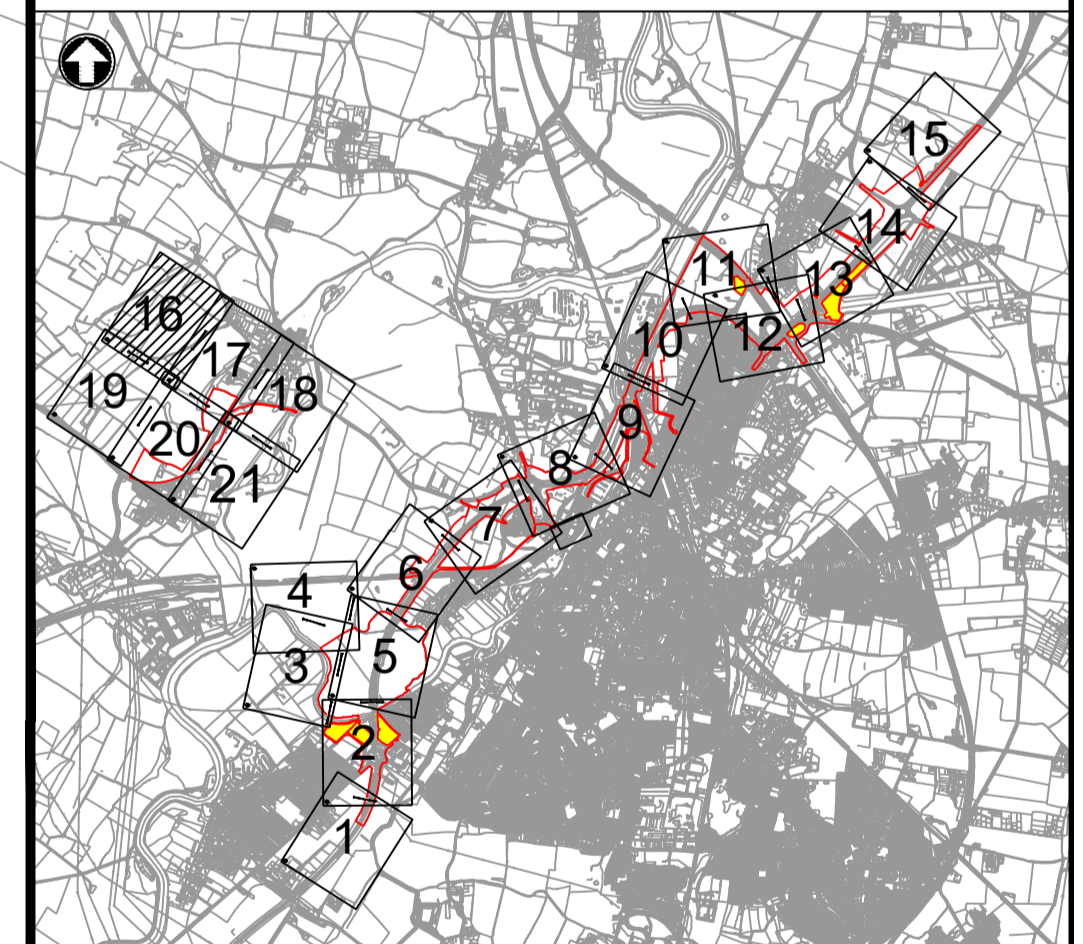




- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).

CONTINUED ON SHEET 19

CONTINUED ON SHEET 17



C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT

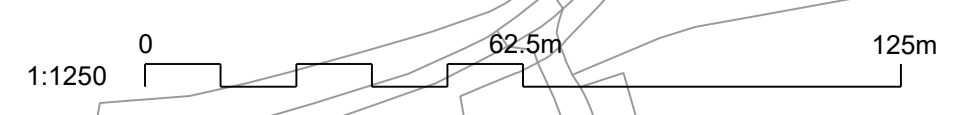
PURPOSE OF ISSUE  
 DCO APPLICATION

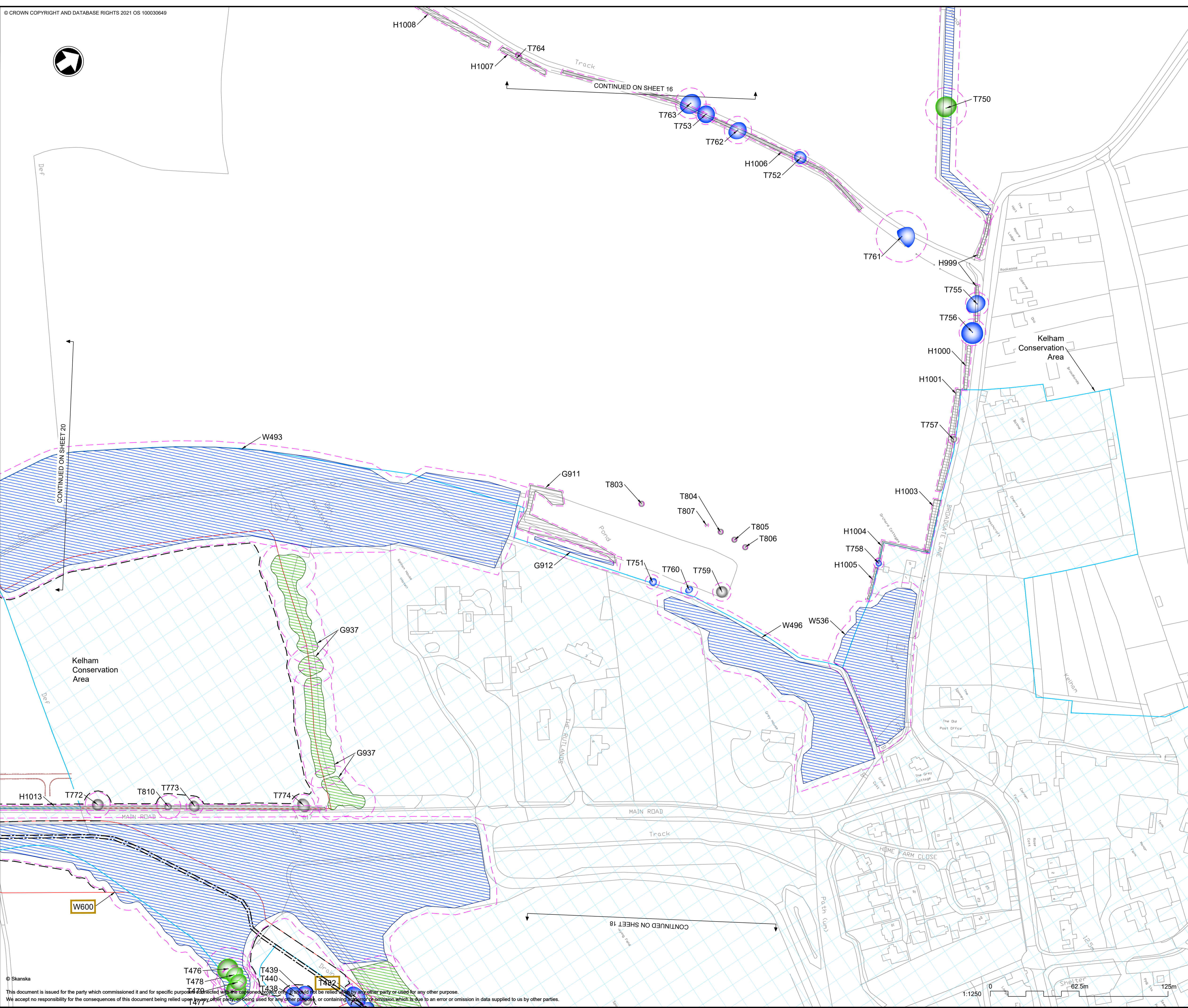
DEVELOPMENT CONSENT ORDER NUMBER  
 TR010065

PROJECT TITLE  
 A46 NEWARK BYPASS

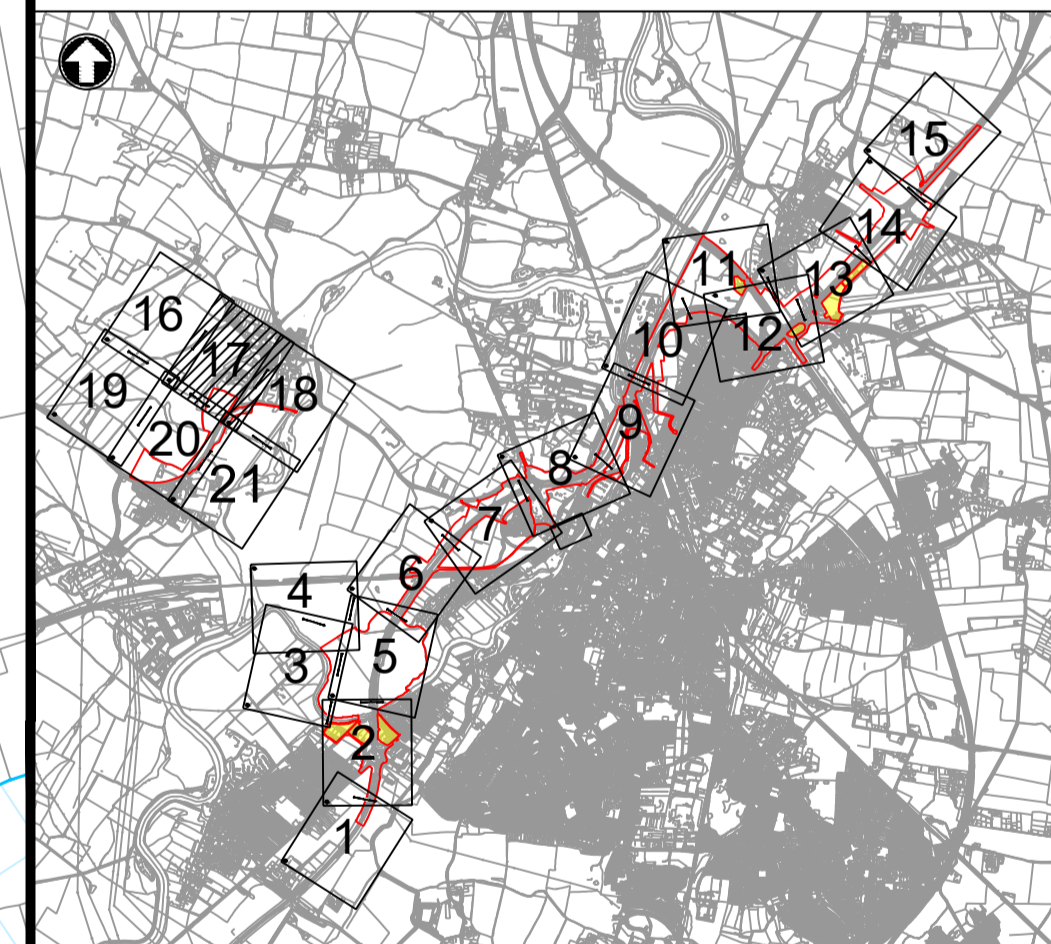
DRAWING TITLE  
 Appendix E.2  
 Tree Protection Plan  
 Sheet 16 of 21

ORIGINAL SIZE	A1	SCALE	1:1250	PROJECT REF NO.	HE551478
DRAWING NUMBER	HE551478	ORIGINATOR	SKAG	VOLUME	ELS
CONWI_CONW	DR	LS	30216	REVISION	C01
LOCATION		TYPE	ROLE	NUMBER	





- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT

PURPOSE OF ISSUE  
 DCO APPLICATION

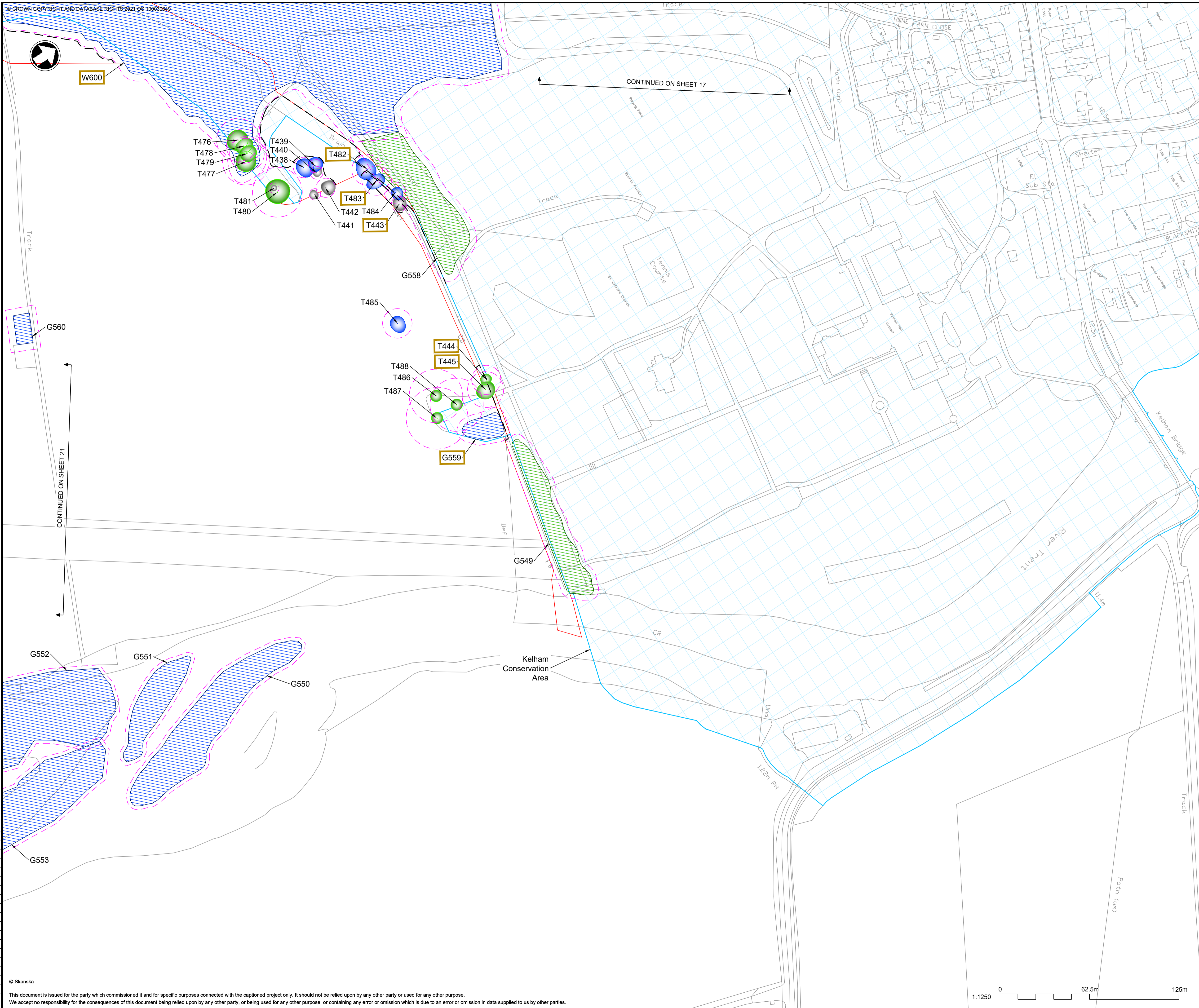
DEVELOPMENT CONSENT ORDER NUMBER  
 TR010065

PROJECT TITLE  
 A46 NEWARK BYPASS

DRAWING TITLE  
 Appendix E.2  
 Tree Protection Plan  
 Sheet 17 of 21

ORIGINAL SIZE	A1	SCALE	1:1250
---------------	----	-------	--------

DRAWING NUMBER	HE551478	ORIGINATOR	SKAG	VOLUME	ELS	PROJECT REF NO.	HE551478
CONWI_CONW	DR	LS	30217	NUMBER		REVISION	C01



**NOTES**

- Do not scale from this drawing.
- Dimensions are in metres unless stated otherwise.
- Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
- To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).

C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT

**national highways**

PURPOSE OF ISSUE: DCO APPLICATION

DEVELOPMENT CONSENT ORDER NUMBER: TR010065

PROJECT TITLE: A46 NEWARK BYPASS

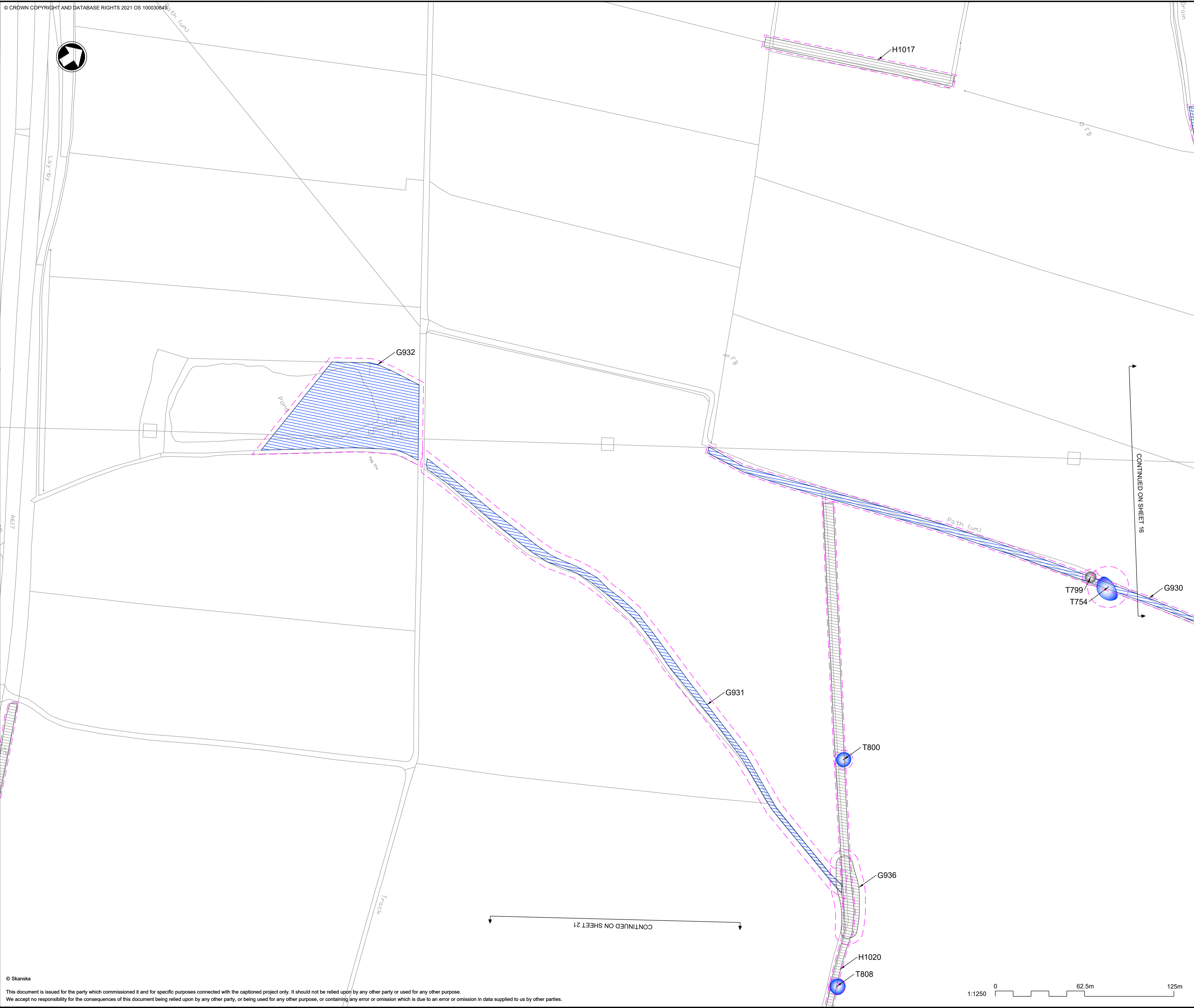
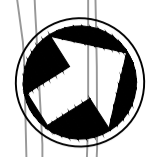
DRAWING TITLE: Appendix E.2 Tree Protection Plan Sheet 18 of 21

ORIGINAL SIZE: A1	SCALE: 1:1250
-------------------	---------------

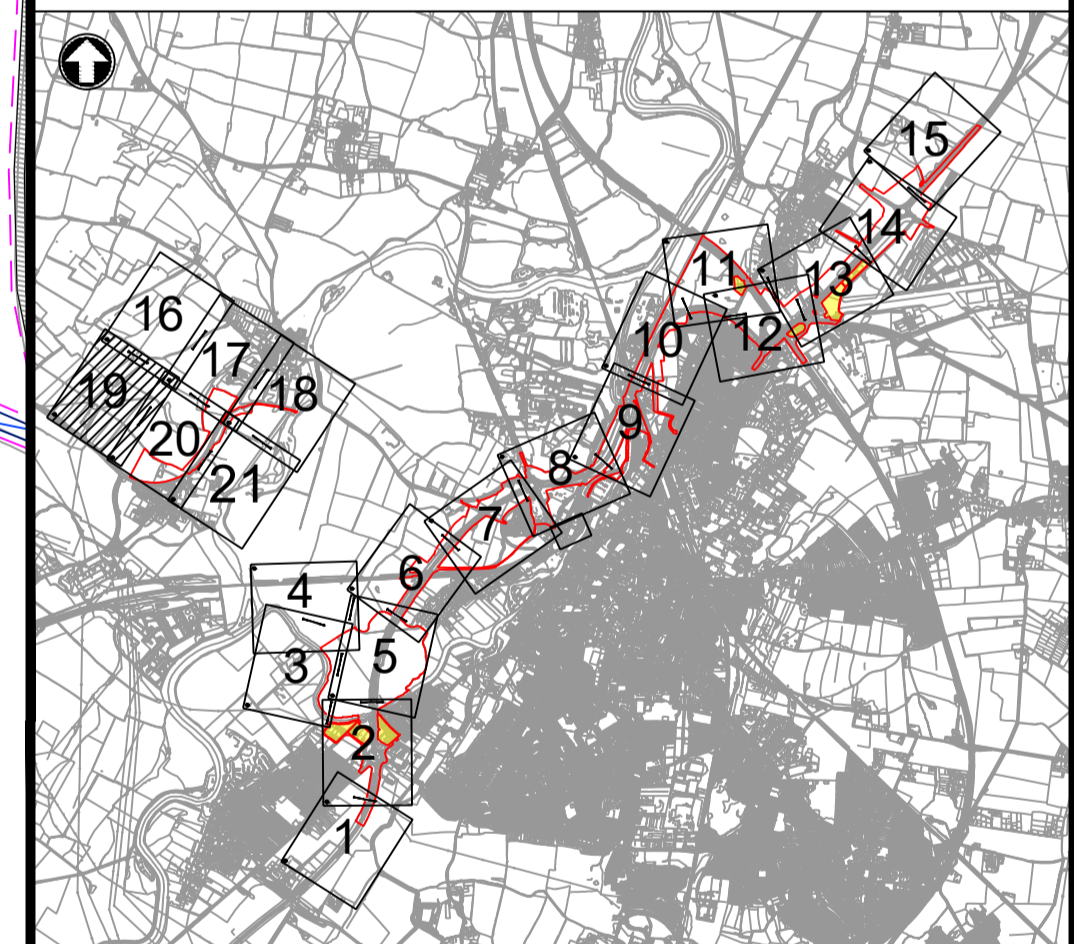
DRAWING NUMBER: HE551478	ORIGINATOR: SKAG	VOLUME: ELS	PROJECT REF NO.: HE551478
CONWI_CONW	DR LS	30218	REVISION: C01
LOCATION	TYPE	ROLE	NUMBER

© Skanska

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.



- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT  
 national highways

PURPOSE OF ISSUE  
 DCO APPLICATION

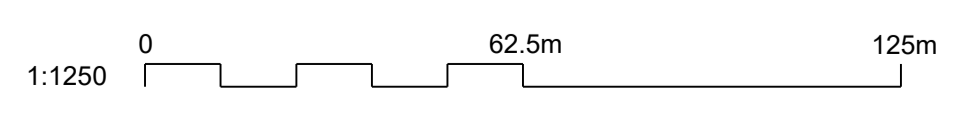
DEVELOPMENT CONSENT ORDER NUMBER  
 TR010065

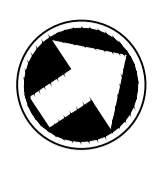
PROJECT TITLE  
 A46 NEWARK BYPASS

DRAWING TITLE  
 Appendix E.2  
 Tree Protection Plan  
 Sheet 19 of 21

ORIGINAL SIZE	A1	SCALE	1:1250
---------------	----	-------	--------

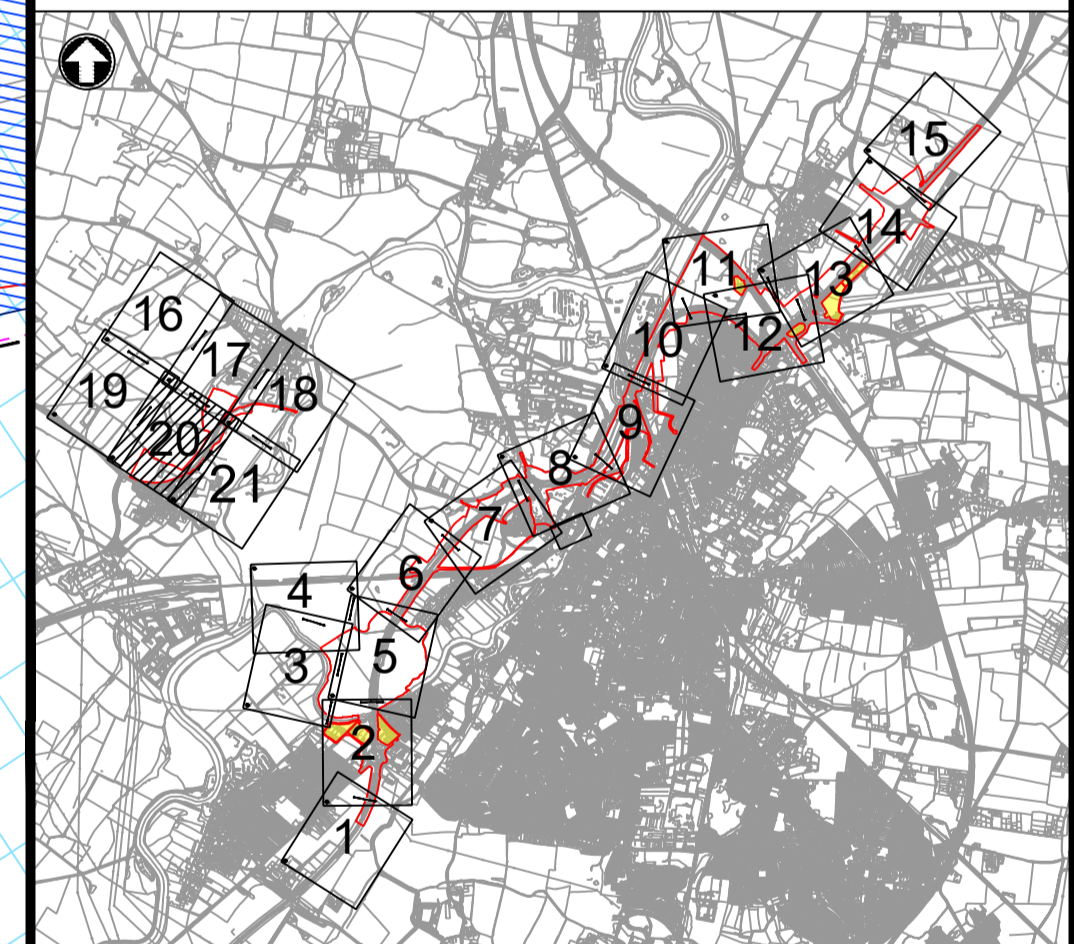
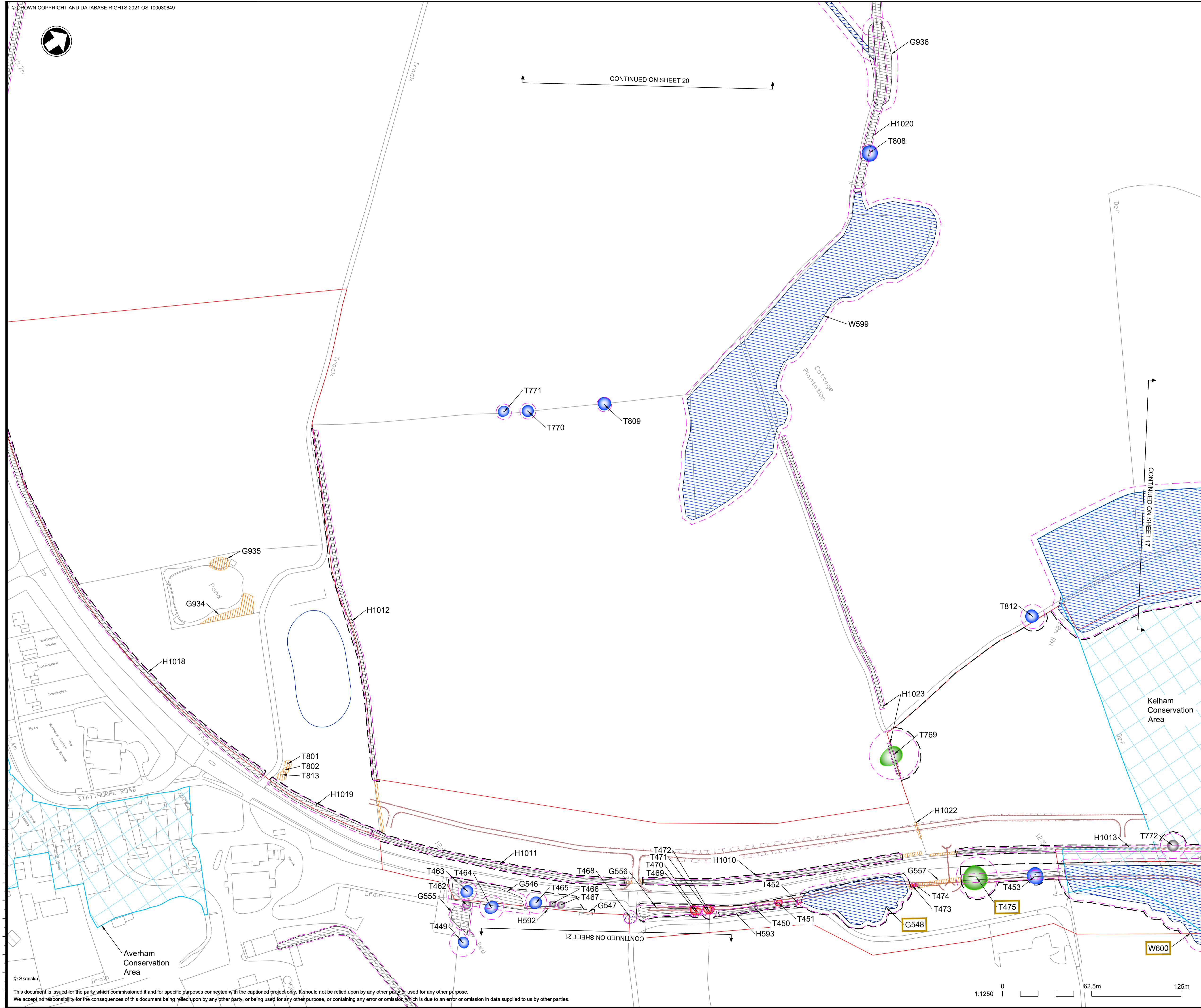
DRAWING NUMBER	ORIGINATOR	VOLUME	PROJECT REF NO.
HE551478	SKAG	ELS	HE551478
CONWI_CONW	DR	LS	REVISION
LOCATION	TYPE	ROLE	NUMBER
			C01





CONTINUED ON SHEET 20

- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

CLIENT

PURPOSE OF ISSUE  
 DCO APPLICATION

DEVELOPMENT CONSENT ORDER NUMBER  
 TR010065

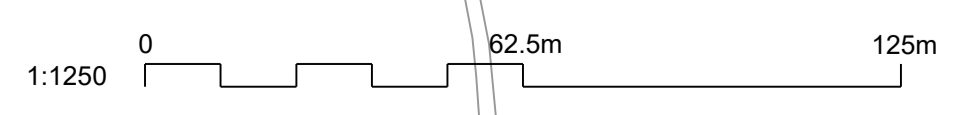
PROJECT TITLE  
 A46 NEWARK BYPASS

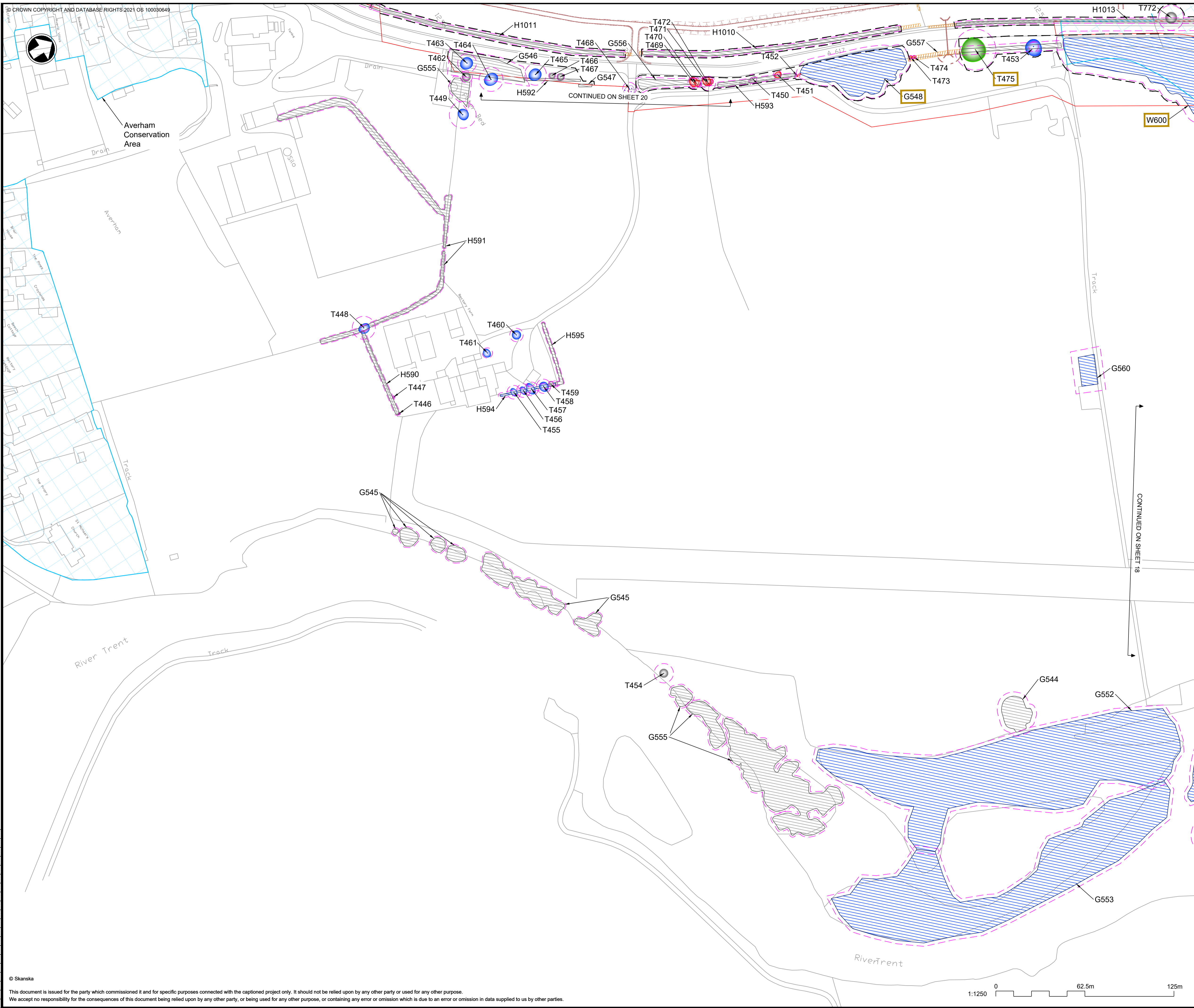
DRAWING TITLE  
 Appendix E.2  
 Tree Protection Plan  
 Sheet 20 of 21

ORIGINAL SIZE	A1	SCALE	1:1250
---------------	----	-------	--------

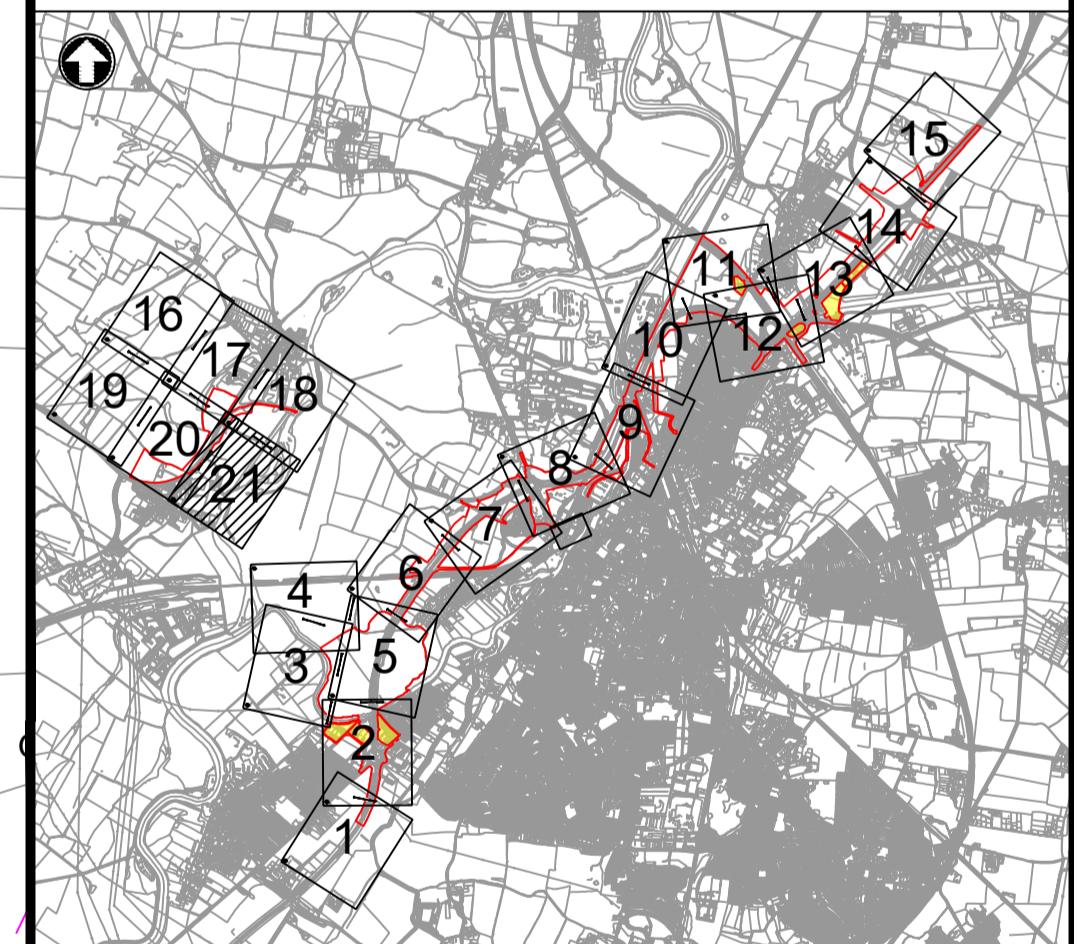
DRAWING NUMBER	ORIGINATOR	VOLUME	PROJECT REF NO.
HE551478	SKAG	ELS	HE551478
CONWI_CONW	DR	LS	REVISION
LOCATION	TYPE	ROLE	NUMBER
			C01

© Skanska  
 This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.





- NOTES**
1. Do not scale from this drawing.
  2. Dimensions are in metres unless stated otherwise.
  3. Arboricultural key symbols are shown on drawing: HE551478-SKAG-ELS-CONWI\_CONW-DR-LS-30200.
  4. To be read in conjunction with the Arboricultural Impact Assessment (TR010065/APP/6.3), the Environmental Statement (TR010065/APP/6.1) and the Draft DCO (TR010065/APP/3.1).



C01	15/02/24	DCO APPLICATION	DL	RL	HF
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

**CLIENT**  
 national highways

**PURPOSE OF ISSUE**  
DCO APPLICATION

**DEVELOPMENT CONSENT ORDER NUMBER**  
TR010065

**PROJECT TITLE**  
A46 NEWARK BYPASS

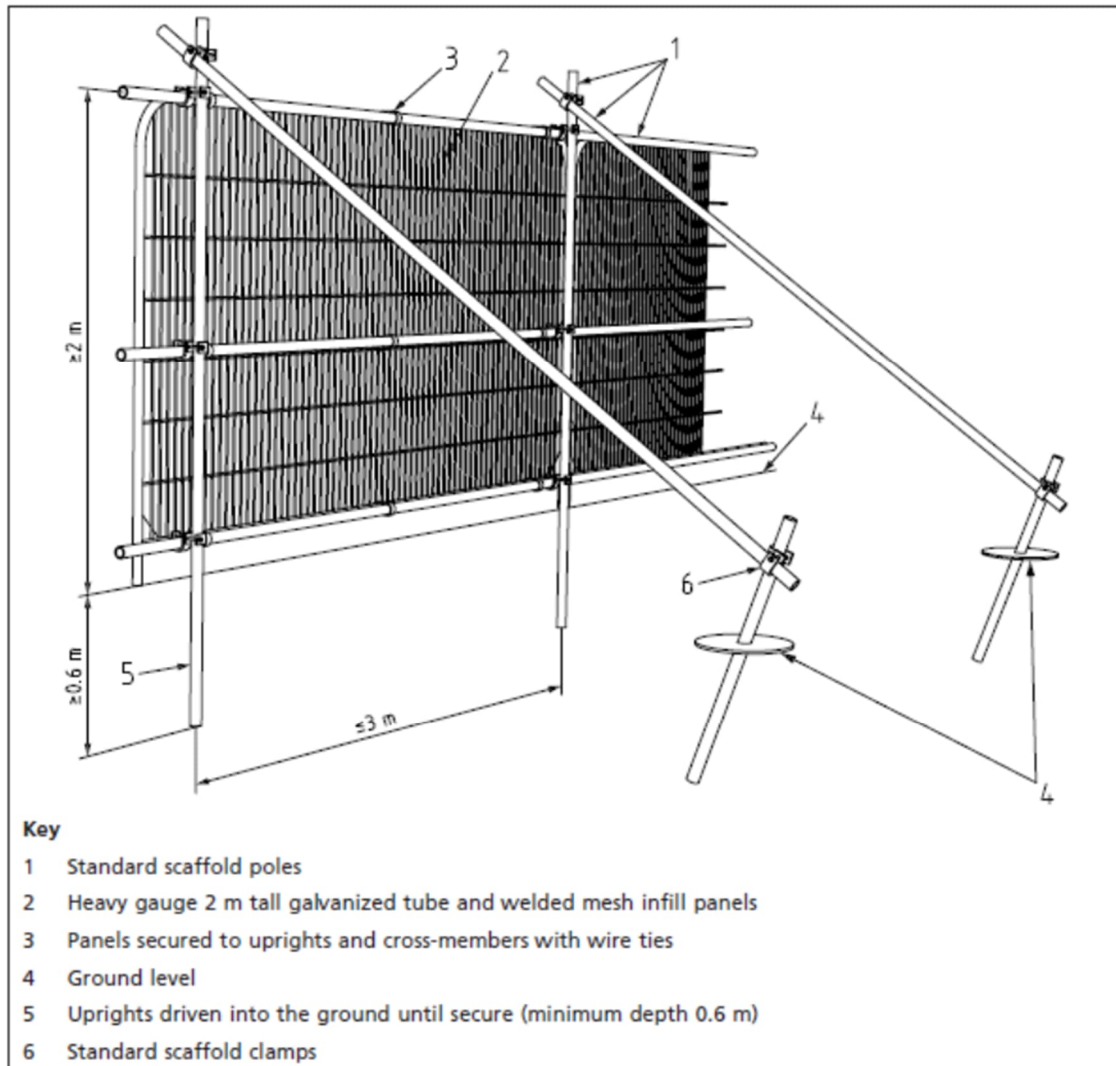
**DRAWING TITLE**  
Appendix E.2  
Tree Protection Plan  
Sheet 21 of 21

ORIGINAL SIZE	A1	SCALE	1:1250
DRAWING NUMBER	HE551478	ORIGINATOR	SKAG
HE PIN	ELS	VOLUME	30221
CONWI_CONW	DR	LS	30221
LOCATION	DR	LS	30221
TYPE	DR	ROLE	30221
NUMBER	DR	NUMBER	30221
PROJECT REF NO.	HE551478	REVISION	C01

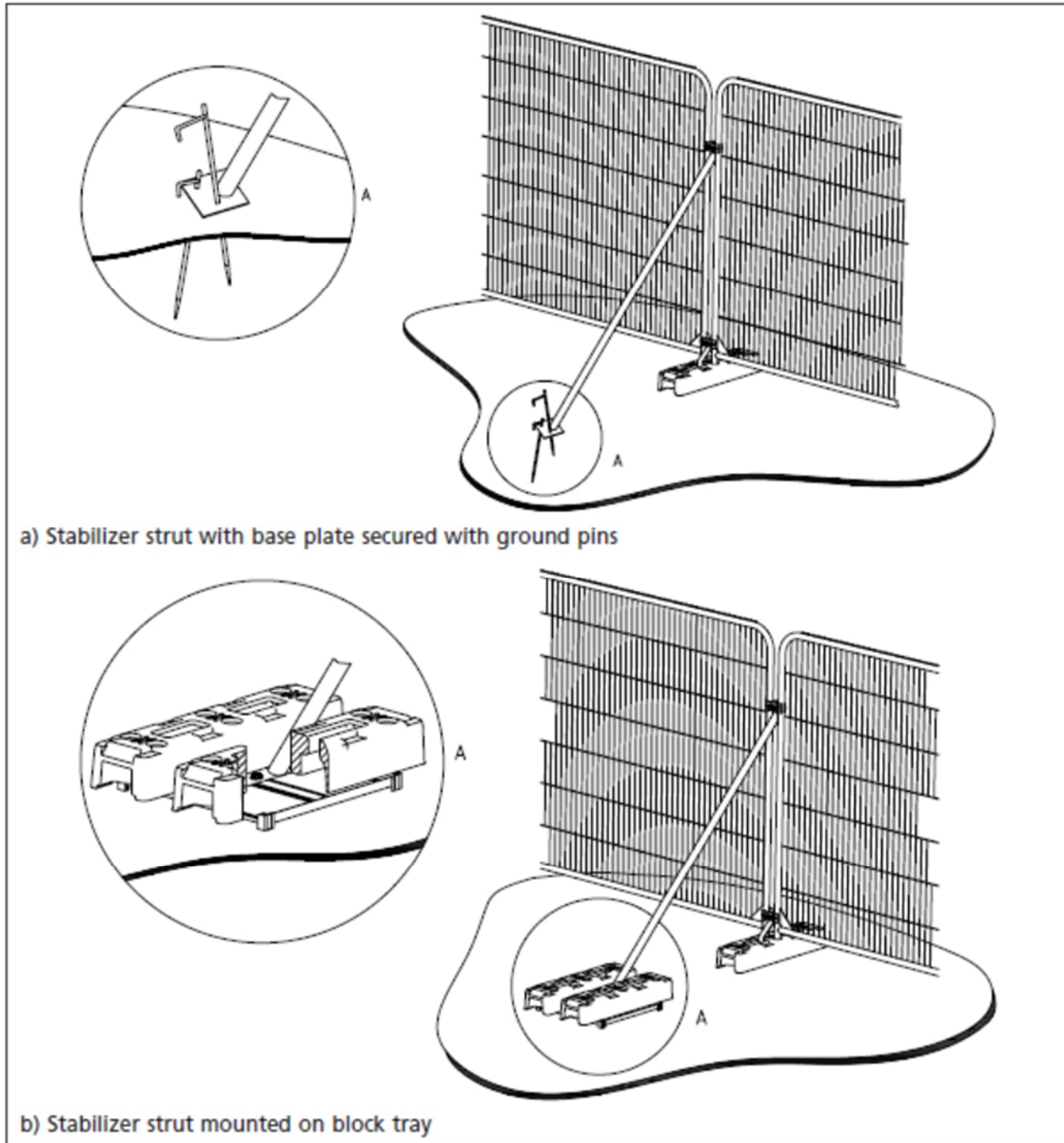
## F. Appendix: Tree protection measures

F.1.0.1 Figures F-1, F-2, and F-3 provide an illustrated specification of the tree protection barriers and a written specification of the ground protection measures, as recommended in *BS 5837:2012*.

### Appendix Figure F-1: Extract from BS5837:2012 Default specification for protection barrier



**Appendix Figure F-2: Extract from BS5837:2012 Examples of ground stabilising systems**





### Appendix Figure F-3: Extract from BS5837:2012 Ground protection during demolition and construction

**6.2.3.2** Where the set-back of the tree protection barrier would expose unmade ground to construction damage, new temporary ground protection should be installed as part of the implementation of physical tree protection measures prior to work starting on site.

**6.2.3.3** New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

*NOTE* The ground protection might comprise one of the following:

- a) *for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;*
- b) *for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;*
- c) *for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.*

**6.2.3.4** The locations of and design for temporary ground protection should be shown on the tree protection plan and detailed within the arboricultural method statement (see 6.1).

**6.2.3.5** In all cases, the objective should be to avoid compaction of the soil, which can arise from the single passage of a heavy vehicle, especially in wet conditions, so that tree root functions remain unimpaired.