

A47 Wansford to Sutton Dualling

Scheme Number: TR010039

Volume 6 **6.8 Environmental Masterplan**

APFP Regulation 5(2)(a)

Planning Act 2008

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

August~~July~~ 2021

Infrastructure Planning

Planning Act 2008

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

A47 Wansford to Sutton Development Consent Order 202[x]

6.8 ENVIRONMENTAL MASTERPLAN

Regulation Number:	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010039
Application Document Reference	TR010039/APP/6.8
Author:	A47 Wansford to Sutton Project Team, Highways England

Version	Date	Status of Version
Rev 0	July 2021	Application Issue
<u>Rev 1</u>	<u>August 2021</u>	<u>Updated following PINS advice</u>

SCHEDULE OF PLANS INCLUDED IN THIS APPLICATION DOCUMENT

Drawing Title	Drawing number
Environmental Masterplan (DCO) – Key Plan	HE551494-GTY-ELS-000-DR-LE-3 3 2008
Environmental Masterplan (DCO) – Plant Schedule	HE551494-GTY-ELS-000-DR-LE-32009
Environmental Masterplan (DCO) – Sheet 1	HE551494-GTY-ELS-000-DR-LE-3 3 2001
Environmental Masterplan (DCO) – Sheet 2	HE551494-GTY-ELS-000-DR-LE-3 3 2002
Environmental Masterplan (DCO) – Sheet 3	HE551494-GTY-ELS-000-DR-LE-3 3 2003
Environmental Masterplan (DCO) – Sheet 4	HE551494-GTY-ELS-000-DR-LE-3 3 2004
Environmental Masterplan (DCO) – Sheet 5	HE551494-GTY-ELS-000-DR-LE-3 3 2005
Environmental Masterplan (DCO) – Sheet 6	HE551494-GTY-ELS-000-DR-LE-3 3 2006
Environmental Masterplan (DCO) – Sheet 7	HE551494-GTY-ELS-000-DR-LE-3 3 2007



Purpose of use	
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FOR DCO SUBMISSION

TR010039/APP/2.4

1. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH OTHER PLANS AND DOCUMENTS IN THE DEVELOPMENT CONSENT ORDER.
2. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.

ORDER LIMITS

DESIGNER

SWECO 



GallifordTry



A47 WANSFORD TO SUTTON DUALLING

PCF STAGE 3

ENVIRONMENTAL MASTERPLAN
KEY PLAN

SUITABLE FOR STAGE APPROVAL

DRAWING NUMBER			

HE551494-GTY-ELS-000-DR-LE-33008

	<u>LE 2.5 Shrubs with Intermittent Trees</u> Shrubs with LE5.1.1 individual trees; to be planted in naturalistic groups Supply size Shrubs: 1+1 450-600mm high transplants Trees: 8-10cm girth standards and 12-14cm girth heavy standard trees Plant spacing Plant in groups at 1.5m centres Plant grouping Plant all species in single species of 3-5		
	Species		
	Latin Name	Common Name	% of mix
	Crataegus monogyna	Hawthorn	30
	Prunus spinosa	Blackthorn	7.5
	Sambucus nigra	Elder	7.5
	Rosa canina	Dog rose	15
	Rubus fruticosus	Bramble	5
	Cornus sanguinea	Dogwood	15
	Corylus avellana	Hazel	20

	<u>LE 5.1 Individual Trees</u>	
	Supply size	
	Mlx of 6-8cm girth light standard trees	
	Species	
	Latin Name	Common Name
	Acer campestre	Field maple
	Acer pseudoplatanus	Sycamore
	Malus sylvestris	Common crab apple
	Pinus sylvestris	Scots pine
Prunus avium	Wild cherry	
Quercus robur	Pedunculate oak	
Salix alba	White willow	

	LE 6.4 Marsh and Wet Grassland		
	Riparian seed mix and plug plants		
	Riparian Seed Mix		
	Emorsgate EP1 Pond Edge mixture		
	Sowing rate:		
	4g/m2		
	Species		
	Latin Name	Common Name	% of mix
	Wildflowers (20%)		
	Achillea ptarmica	Sneezewort	1
	Angelica sylvestris	Wild angelica	2.3
	Caltha palustris	Marsh marigold	0.1
	Eupatorium cannabinum	Hemp agrimony	0.6
	Filipendula ulmaria	Meadowsweet	3
	Geum rivale	Water avens	1
	Hypericum tetrapterum	Square-stalked st john's wort	0.4
	Iris pseudacorus	Yellow Iris	4
	Lotus pedunculatus	Greater birdsfoot trefoil	1
	Lyopus europaeus	Gypsywort	0.8
	Lythrum salicaria	Purple loosestrife	0.6
	Mentha aquatica	Water mint	0.1
	Pulicaria dysenterica	Common fleabane	0.1
	Ranunculus acris	Meadow buttercup	2.5
	Scrophularia auriculata	Water figwort	0.1
	Silene flos-cuculi	Ragged robin	1
	Succisa pratensis	Devil's-bit scabious	1
	Vicia cracca	Tufted vetch	0.4
	Grasses (80%)		
	Agrostis capillaris	Common bent	10
	Alopecurus pratensis	Meadow foxtail	3
	Anthoxanthum odoratum	Sweet vernal-grass	3
	Cynosurus cristatus	Crested dogstail	32
	Dechampsia cespitosa	Tufted hair-grass	1
	Festuca rubra	slender-creeping red-fescue	24
	Hordeum secalinum	Meadow barley	1
	Schedonorus pratensis	Meadow fescue	6
	Riparian Plug Plants		
	Plants to be notch planted in single species swaths at 0.5m centres		
	7cm pot		
	Species		
	Latin Name	Common Name	% of mix
	Alisma plantago-aquatica	Water plantain	6.25
	Butomus umbellatus	Flowering rush	6.25
	Carex elata	Tufted sedge	6.25
	Glyceria maxima	Reed sweet-grass	6.25
	Iris pseudacorus	Yellow flag iris	6.25
	Myosotis scorpioides	Water forget-me-not	6.25
	Veronica beccabunga	Brooklime	6.25
	Stachys palustris	Marsh woundwort	6.25
	Caltha palustris	Marsh-marigold	6.25
	Eupatorium cannabinum	Hemp agrimony	6.25
	Allium ursinum	Wild garlic	6.25
	Persicaria bistorta	Common bistort	6.25
	Mentha aquatica	Water mint	6.25
	Ranunculus acris	Meadow buttercup	6.25
	Geum rivale	Water avens	6.25
	Carex riparia	Greater pond sedge	6.25

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    graph TD
      SWECO[SWECO] -- CONTRACTOR --> GallifordTry[GallifordTry]
      GallifordTry -- CLIENT --> highways_england[highways england]
  
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NOTES

Purpose of use

FOR DCO SUBMISSION

Development Consent Order Number / Document

TR010039/APP/2.13

SHEET PLAN

SHEETS 1 - 7 (INCLUDES INSET A).

1. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH OTHER PLANS AND DOCUMENTS IN THE DEVELOPMENT CONSENT ORDER.

2. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.

3. ONLY HEDGES WITHIN THE ORDER LIMITS ARE DISPLAYED ON THIS DRAWING SET.

KEY TO SYMBOLS

ORDER LIMITS

EXISTING VEGETATION TO BE RETAINED

EXISTING POND TO BE RETAINED

EXISTING FENCE TO BE RETAINED

EXISTING PARAPET TO BE RETAINED

EXISTING LIGHTING COLUMN TO BE RETAINED

PROPOSED LANDSCAPE ELEMENTS

LE1.3 SPECIES RICH GRASSLAND

LE2.1 WOODLAND

LE2.5 SHRUBS WITH INTERMITTENT TREES

LE4.3 NATIVE SPECIES HEDGEROWS

LE4.4 NATIVE HEDGEROWS WITH TREES

LE5.1 INDIVIDUAL TREES

LE6.2 BANKS AND DITCHES

LE6.4 MARSH AND WET GRASSLAND

E2.1 ATTENUATION/INFILTRATION BASINS

E3.2.1 ENVIRONMENTAL FENCING

E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH

PROPOSED ELEMENTS - OTHER

AGRICULTURAL LAND RESTORED

HIGHWAYS FENCE (INDICATIVE)

ANTI GLARE FENCE (INDICATIVE)

PARAPET (INDICATIVE)

LIGHTING COLUMN (INDICATIVE)

P01	04/08/21	FOR ISSUE		LS	PBla BJon
REV	DATE	REVISION NOTE		ORG	CHKD APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

ENVIRONMENTAL MASTERPLAN
SHEET 1 OF 7

SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE

A1

SCALE

1:1250

STATUS

S4

REVISION

P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33001

IMPORTANT

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION

TO BE READ IN CONJUNCTION WITH HAZARD REGISTER
DOC. REF: HE551489-GTY-GHS-000-HS-ZZ-30001.

HAZARD REF AND BRIEF DESCRIPTION OF HAZARD:-
HAZARD REF | BRIEF HAZARD DESCRIPTION

0

62.5m

125m

1:1250

CODE

ENVIRONMENTAL FUNCTION

EFA VISUAL SCREENING

EFB LANDSCAPE INTEGRATION

EFD NATURE CONSERVATION AND BIODIVERSITY

EFE VISUAL AMENITY

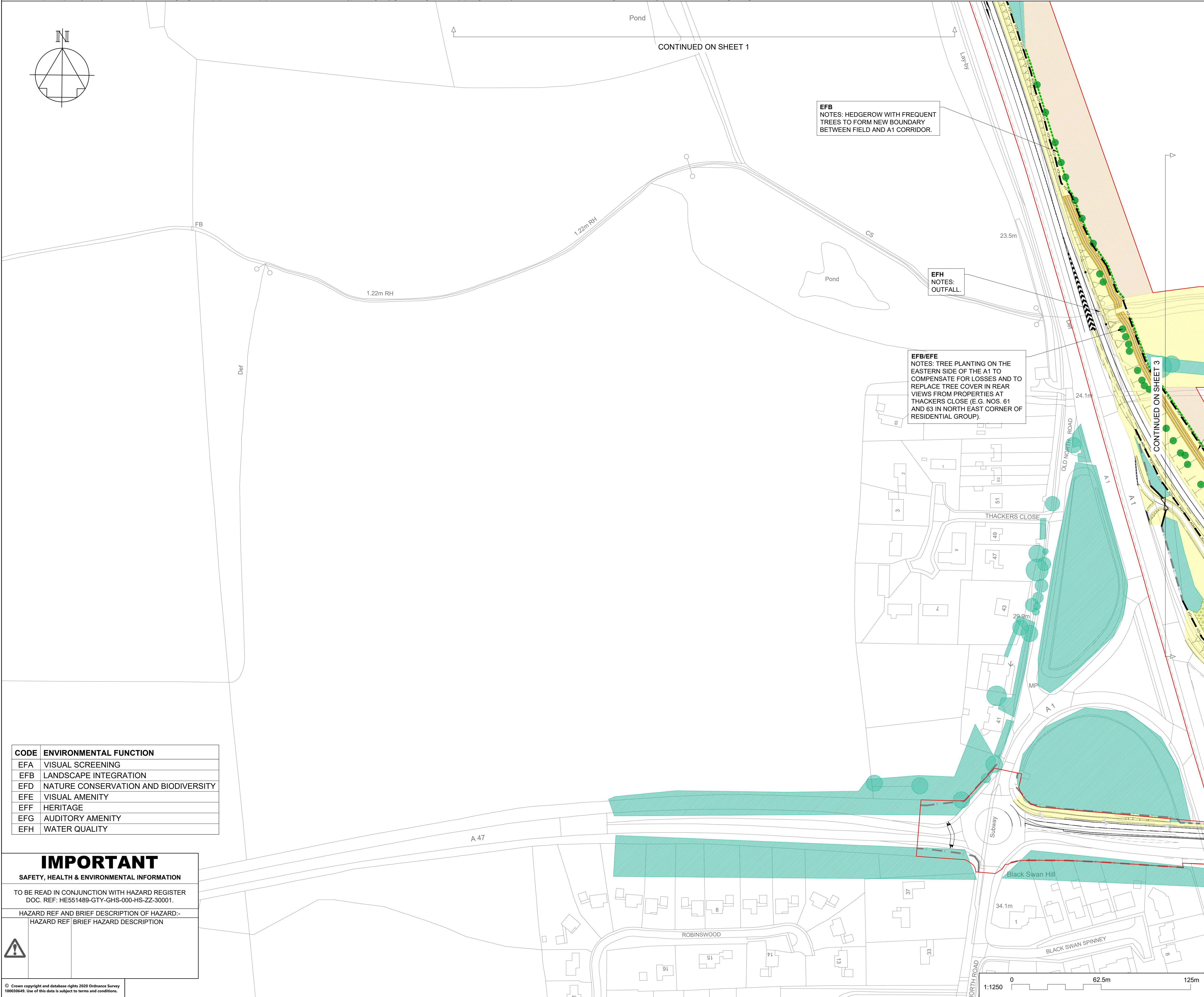
EFF HERITAGE

EFG AUDITORY AMENITY

EFH WATER QUALITY

CONTINUED ON SHEET 2

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KEY TO SYMBOLS

- ORDER LIMITS - EXISTING VEGETATION TO BE RETAINED - EXISTING POND TO BE RETAINED - EXISTING FENCE TO BE RETAINED - EXISTING PARAPET TO BE RETAINED - EXISTING LIGHTING COLUMN TO BE RETAINED PROPOSED LANDSCAPE ELEMENTS - LE1.3 SPECIES RICH GRASSLAND - LE2.1 WOODLAND - LE2.3 SHRUBS WITH INTERMITTENT TREES - LE2.4 NATIVE SPECIES HEDGEROWS - LE2.5 NATIVE HEDGEROWS WITH TREES - LE5.1 INDIVIDUAL TREES - LE6.2 BANKS AND DITCHES - LE6.4 MARSH AND WET GRASSLAND PROPOSED ENVIRONMENTAL ELEMENTS - E2.1 ATTENUATION/INFILTRATION BASINS - E3.2.1 ENVIRONMENTAL FENCING - E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH PROPOSED ELEMENTS - OTHER - AGRICULTURAL LAND RESTORED - HIGHWAYS FENCE (INDICATIVE) - ANTILGARE FENCE (INDICATIVE) - PARAPET (INDICATIVE) - LIGHTING COLUMN (INDICATIVE)	PROPOSED ENVIRONMENTAL ELEMENTS - E2.1 ATTENUATION/INFILTRATION BASINS - E3.2.1 ENVIRONMENTAL FENCING - E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH PROPOSED ELEMENTS - OTHER - AGRICULTURAL LAND RESTORED - HIGHWAYS FENCE (INDICATIVE) - ANTILGARE FENCE (INDICATIVE) - PARAPET (INDICATIVE) - LIGHTING COLUMN (INDICATIVE)
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P01	04/08/21	FOR ISSUE	LS	PBIa	8Jon
REV	DATE	REVISION NOTE	ORG	CHK'D	APP'D

DESIGNER

SWECO 

CONTRACTOR


GallifordTry

CLIENT

 highways
england

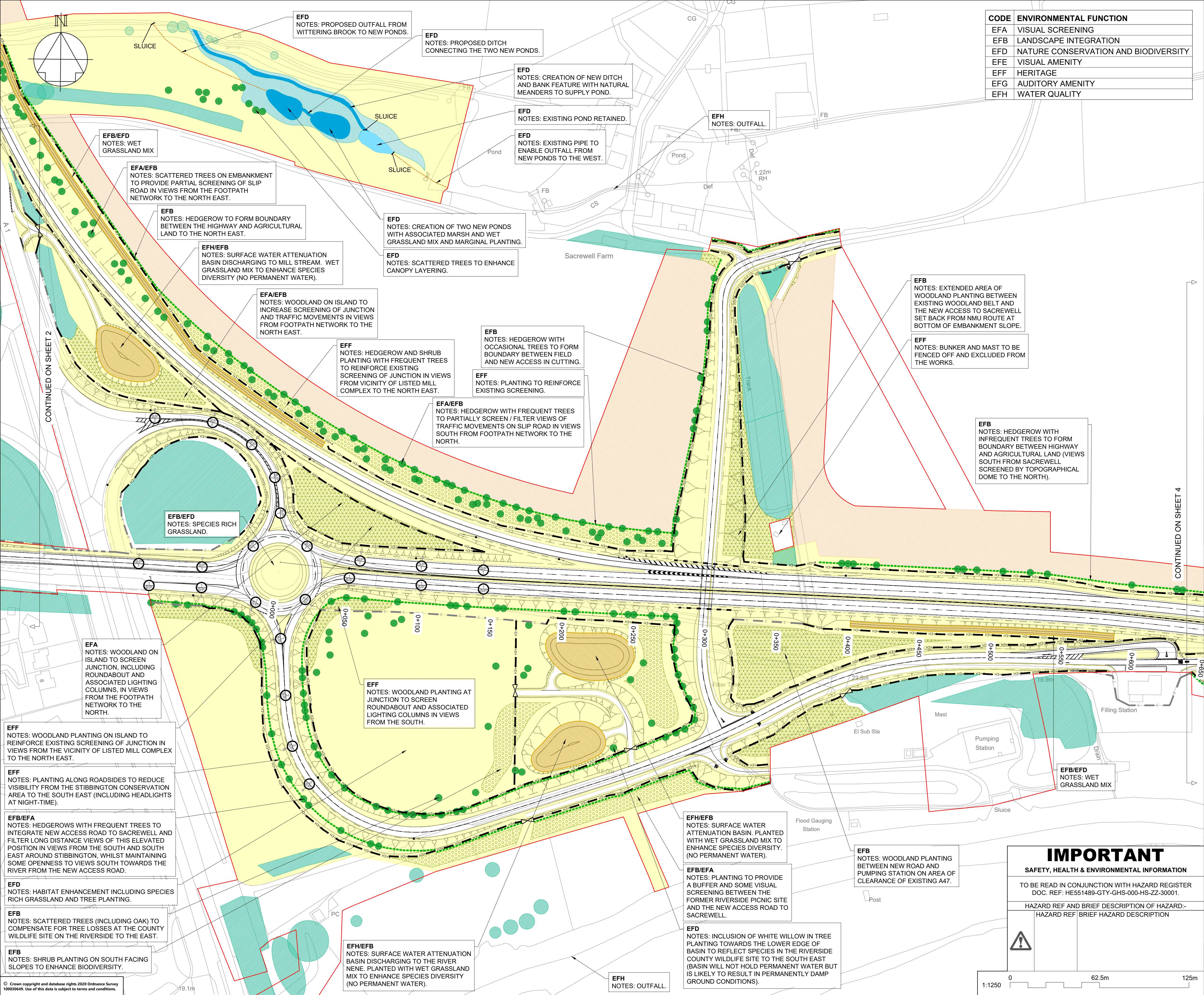
PROJECT TITLE
A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE	PCF STAGE 3
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DRAWING TITLE

ENVIRONMENTAL MASTERPLAN
SHEET 2 OF 7

SUITABILITY			
SUITABLE FOR STAGE APPROVAL			
SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P01
DRAWING NUMBER			
HE551494-GTY-ELS-000-DR-LE-33002			



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SHEET PLAN

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KEY TO SYMBOLS

ORDER LIMITS	LE6.2 BANKS AND DITCHES
EXISTING VEGETATION TO BE RETAINED	LE6.4 MARSH AND WET GRASSLAND
EXISTING POND TO BE RETAINED	E2.1 ATTENUATION/INFILTRATION BASINS
EXISTING FENCE TO BE RETAINED	E3.2.1 ENVIRONMENTAL FENCING
EXISTING PARAPET TO BE RETAINED	E3.2.3 PROPOSED PERMANENT WATER IN WILDLIFE PONDS AND DITCH
EXISTING LIGHTING COLUMN TO BE RETAINED	PROPOSED ELEMENTS - OTHER
PROPOSED LANDSCAPE ELEMENTS	AGRICULTURAL LAND RESTORED
LE1.1 SPECIES RICH GRASSLAND	HIGHWAYS FENCE (INDICATIVE)
LE2.1 WOODLAND	ANTIGLARE FENCE (INDICATIVE)
LE2.5 SHRUBS WITH INTERMITTENT TREES	PARAPET (INDICATIVE)
LE4.3 NATIVE SPECIES HEDGEROWS	LIGHTING COLUMN (INDICATIVE)
LE4.4 NATIVE HEDGEROWS WITH TREES	
LE5.1 INDIVIDUAL TREES	

P01	04/08/21	FOR ISSUE	LS	PBla	BJon
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

SWECO

CONTRACTOR

GallifordTry

CLIENT

**highways
england**

PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

**ENVIRONMENTAL MASTERPLAN
SHEET 3 OF 7**

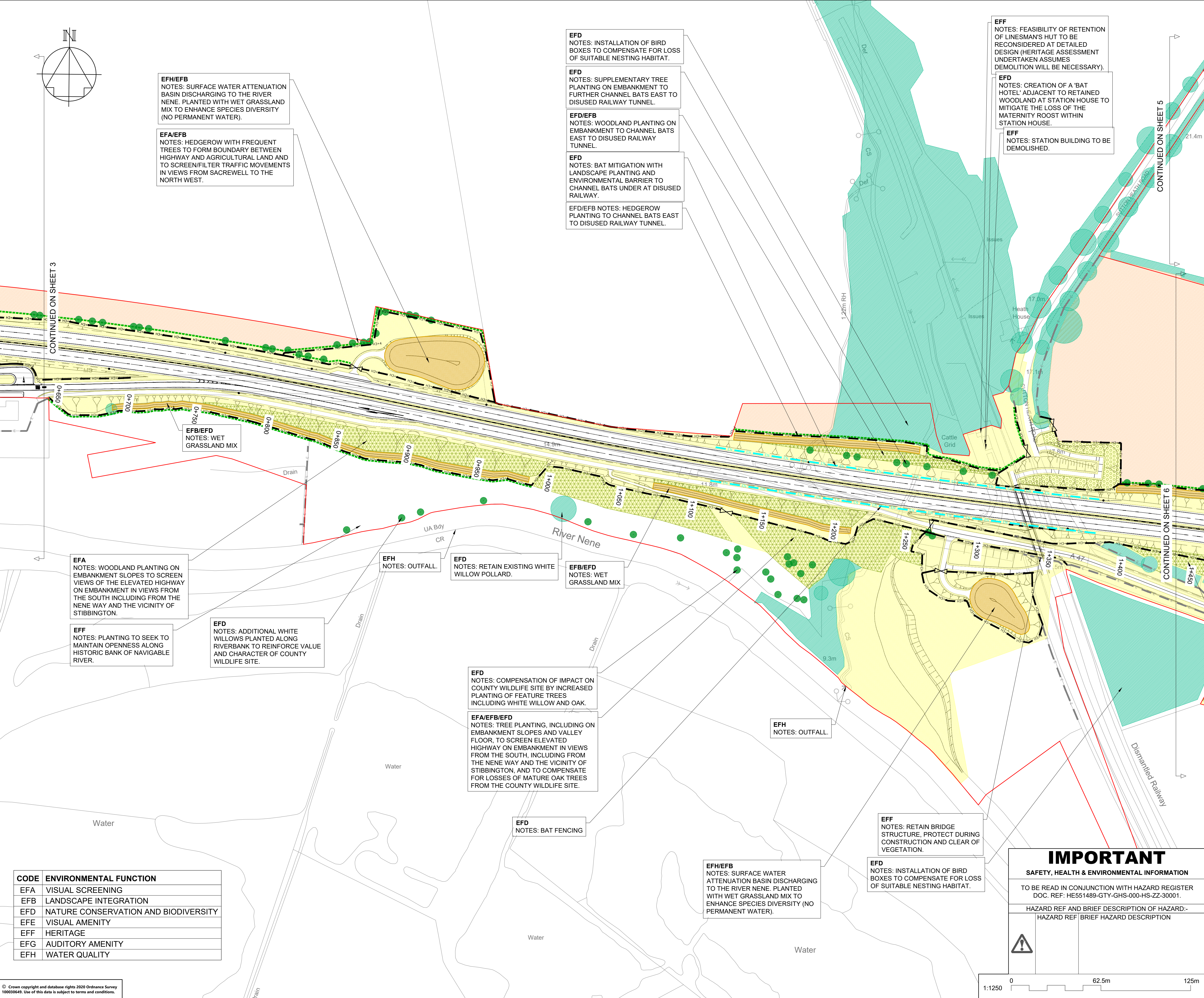
SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33003



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FOR DCO SUBMISSION

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LIGHTING COLUMN (INDICATIVE)

P01	04/08/21	FOR ISSUE	LS	PBla	BJon
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

ENVIRONMENTAL MASTERPLAN
SHEET 4 OF 7

SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33004

IMPORTANT

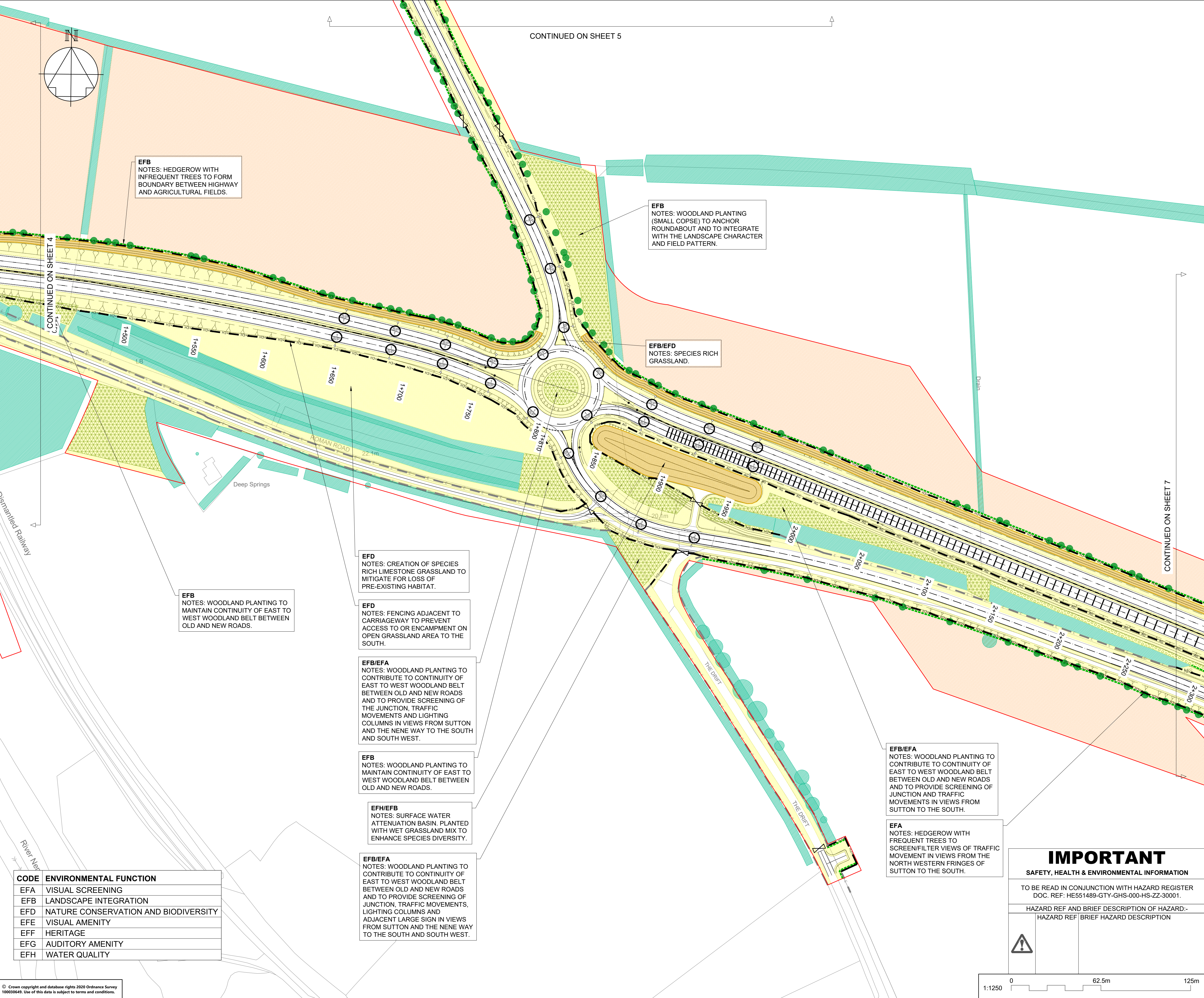
SAFETY, HEALTH & ENVIRONMENTAL INFORMATION

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DOC. REF: HE551489-GTY-GHS-000-HS-ZS-30001.

HAZARD REF AND BRIEF DESCRIPTION OF HAZARD:-
HAZARD REF | BRIEF HAZARD DESCRIPTION

0 62.5m 125m

1:1250



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P01	04/08/21	FOR ISSUE	LS	PBla	BJon
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

A47 WANSFORD TO SUTTON DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

ENVIRONMENTAL MASTERPLAN
SHEET 6 OF 7

SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P01

DRAWING NUMBER

HE551494-GTY-ELS-000-DR-LE-33006

