

A47 Blofield to North Burlingham Dualling

Scheme Number: TR010040

Volume 6 6.8 Masterplan

APFP Regulation 5(2)(o)

Planning Act 2008

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

November 2021

Deadline 7

Infrastructure Planning

Planning Act 2008

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

**A47 Blofield to North Burlingham
Development Consent Order 202[x]**

MASTERPLAN

Regulation Number:	Regulation 5(2)(o)
Planning Inspectorate Scheme Reference	TR010040
Application Document Reference	6.8
Author:	A47 Blofield to North Burlingham Dualling Project Team, Highways England

Version	Date	Status of Version
Rev 0	December 2020	Application Issue
Rev 1	July 2021	Deadline 1
Rev 2	September 2021	Deadline 4
Rev 3	October 2021	Deadline 5
Rev 4	November 2021	Deadline 7

SCHEDULE OF FIGURES INCLUDED IN THIS APPLICATION DOCUMENT

Figure Title	Drawing number	Rev
Masterplan – Key Plan	HE551490-GTY-ELS-000-DR-LX-30070	P01
Masterplan – Sheet 1 of 7	HE551490-GTY-ELS-000-DR-LX-30001	P05
Masterplan – Sheet 2 of 7	HE551490-GTY-ELS-000-DR-LX-30002	P05
Masterplan – Sheet 3 of 7	HE551490-GTY-ELS-000-DR-LX-30003	P05
Masterplan – Sheet 4 of 7	HE551490-GTY-ELS-000-DR-LX-30004	P06
Masterplan – Sheet 5 of 7	HE551490-GTY-ELS-000-DR-LX-30005	P05
Masterplan – Sheet 6 of 7	HE551490-GTY-ELS-000-DR-LX-30006	P05
Masterplan – Sheet 7 of 7	HE551490-GTY-ELS-000-DR-LX-30007	P05
Masterplan – Schedule of plants – Indicative List	HE551490-GTY-ELS-000-DR-LX-30101	P02

SCHEDULE OF CHANGES

DEADLINE 1, REV 1

- Planting adjacent to The White House (Sheet 6)
- New Private Means of Access, off existing B1140
- Fenceline and landscaping adjacent to the Agricultural Access Track updated to reflect agreement with Norfolk County Farms. (Fenceline change omitted in error, updated at Deadline 4)

DEADLINE 4, REV 2

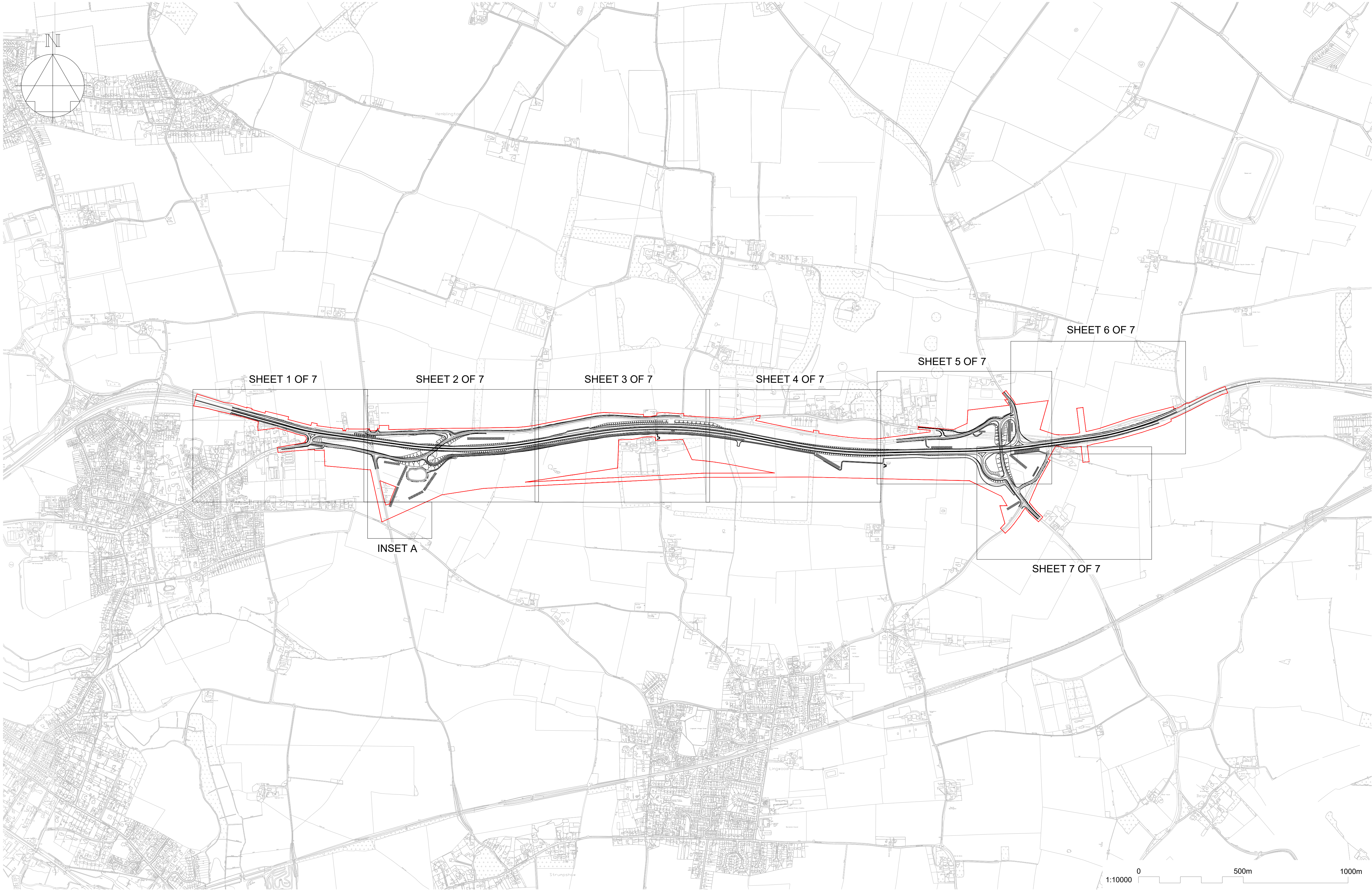
- Fenceline at Blofield Allotments updated to reflect preference of the Allotment Association (Sheet 1)
- Fenceline adjacent to the Agricultural Access Track relocated to reflect the agreement made with Norfolk County Farms
- Landscaping updated to reflect additional loss of woodland and proposed replacement planting due to the change associated with Cadent Block Valve.
- Plant Schedule mixes updated

DEADLINE 5, REV 3

- Correction to sheet 4 to remove the proposed loss of woodland adjacent to the proposed Cadent Block Valve

DEADLINE 7, REV 4

- Footpath / Footway / Cycletrack / Permissive Bridleway updated and cross-referenced to Rights of Way and Access Plans (Sheets 1 to 7)
- Cycle track extended to north of B1140 junction, to align with Rights of Way and Access Plans (Sheets 5 & 6)
- Key Plan corrected



- NOTES
1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
 2. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH DRAWINGS:
HE551490-GTY-ELS-000-DR-LX-30001 SHEET 1 OF 7
HE551490-GTY-ELS-000-DR-LX-30002 SHEET 2 OF 7
HE551490-GTY-ELS-000-DR-LX-30003 SHEET 3 OF 7
HE551490-GTY-ELS-000-DR-LX-30004 SHEET 4 OF 7
HE551490-GTY-ELS-000-DR-LX-30005 SHEET 5 OF 7
HE551490-GTY-ELS-000-DR-LX-30006 SHEET 6 OF 7
HE551490-GTY-ELS-000-DR-LX-30007 SHEET 7 OF 7

KEY TO SYMBOLS

— RED LINE BOUNDARY

P01	04/12/20	FOR ISSUE		MH	RMea	MMur
REV	DATE	REVISION NOTE		ORG	CHKD	APP'D

DESIGNER

SWECO 

CONTRACTOR



CLIENT



PROJECT TITLE

A47 BLOFIELD TO
NORTH BURLINGHAM DUALLING

PROJECT STAGE

PCF STAGE 3

DRAWING TITLE

MASTERPLAN
KEY PLAN
TR010040/APP/6.8

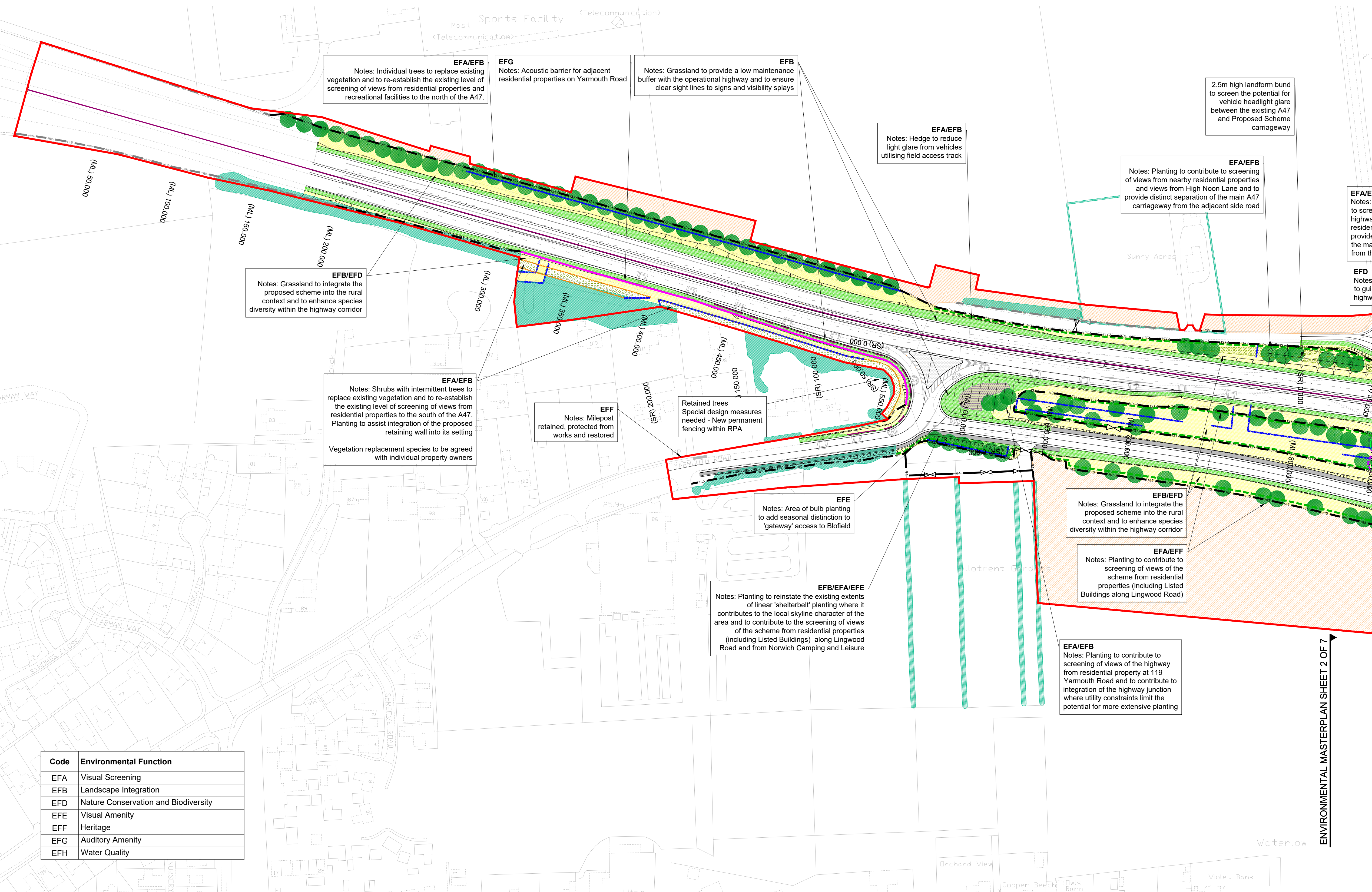
SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:10000	S4	P01

DRAWING NUMBER

HE551490-GTY-ELS-000-DR-LX-30070



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

Red line boundary

EXISTING VEGETATION

Existing vegetation to be retained

PROPOSED ENVIRONMENTAL ELEMENTS

- E1.2 Noise barrier-built elements
- E2.1 Water pollution control measures - attenuation/infiltration ponds
- E2.3 Soakaways
- E3.2.1 Ecological protection measures - skylark plot
- E3.2.2 Ecological protection measures - bat flight path
- E3.2.3 Ecological protection measures - bat hop

- E3.2.4 Habitat Piles
- E3.2.5 Bat Boxes
- E3.2.6 Kestrel Box (location to be confirmed)
- E3.2.7 Turtledove Box (location to be confirmed)
- E3.2.8 Swift Box (location to be confirmed)
- E3.2.9 Tawny Owl Box (location to be confirmed)

PROPOSED LANDSCAPE ELEMENTS

- LE1.1 Amenity grass areas
- LE1.2 Grassland with bulbs
- LE1.3 Species rich grassland

- LE1.6 Open grassland
- LE2.1 Woodland
- LE2.5 Shrubs with intermittent trees
- LE2.8 Scrub
- LE4.3 Native species hedgerows
- LE4.4 Native hedgerows with trees
- LE5.1.1 Individual trees - Large & medium species
- LE5.1.2 Individual trees - Small species
- LE5.1.3 Individual trees - Small to large species planted as extra heavy standard specimens

- LE6.2 Banks and ditches
- LE6.4 Marsh and wet grassland

PROPOSED ELEMENTS - OTHER

- Agricultural land (restored)
- Lighting column location (refer Lighting drawing series for further information)
- Fencing (refer Fencing drawing series for further information)
- VRS Vehicle Restraint Systems
- Root barrier (subject to confirmed location of utilities and easement protection requirements)
- Planting areas where replacement plant species to be agreed with property owners
- Important hedgerow translocated hedge

Footway / Footpath / Cycletrack / Permissive Bridleway
Refer to Rights of Way and Access Plans for detail
(TR010040/APP/2.4)

NOTES

- THIS DRAWING SHALL ONLY BE USED FOR THE DESIGN ELEMENT STATED IN THE DRAWING TITLE.
- DO NOT SCALE FROM THIS DRAWING
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
HE551490-GTY-ELS-000-DR-LX-30002 SHEET 2 OF 7
HE551490-GTY-ELS-000-DR-LX-30003 SHEET 3 OF 7
HE551490-GTY-ELS-000-DR-LX-30004 SHEET 4 OF 7
HE551490-GTY-ELS-000-DR-LX-30005 SHEET 5 OF 7
HE551490-GTY-ELS-000-DR-LX-30006 SHEET 6 OF 7
HE551490-GTY-ELS-000-DR-LX-30007 SHEET 7 OF 7
- FOR LANDSCAPE ELEMENT CODES REFER TO DMRB LD117 LANDSCAPE DESIGN DOCUMENT.
- FOR ARBORICULTURAL IMPACT ASSESSMENT PLAN REFER TO DRAWING 1050831-SWEBLO-AIAP.
- AREAS OF EXISTING VEGETATION TO BE RETAINED SHOWN ON DRAWING TAKEN FROM ADAS ARBORICULTURAL PLAN 1050831-SWEBLO-AIAP.

KEY TO SYMBOLS

P01	22/10/20	FOR ISSUE	LS	RMea	MMur
P02	04/03/21	Final drawing	MHus	MMur	BMcl
P03	05/07/21	DEADLINE 1	LS	MMur	BJon
P04	09/09/21	DEADLINE 4	RMea	RMea	MMur
P05	16/11/21	DEADLINE 7	LS	RMea	MMur
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

SWECO

CONTRACTOR

GallifordTry

CLIENT

highways
england

PROJECT TITLE

A47 BLOFIELD TO
NORTH BURLINGHAM DUALLING

PROJECT STAGE

PCF STAGE 4

DRAWING TITLE

MASTERPLAN
SHEET 1 OF 7
TR010040/APP/6.8

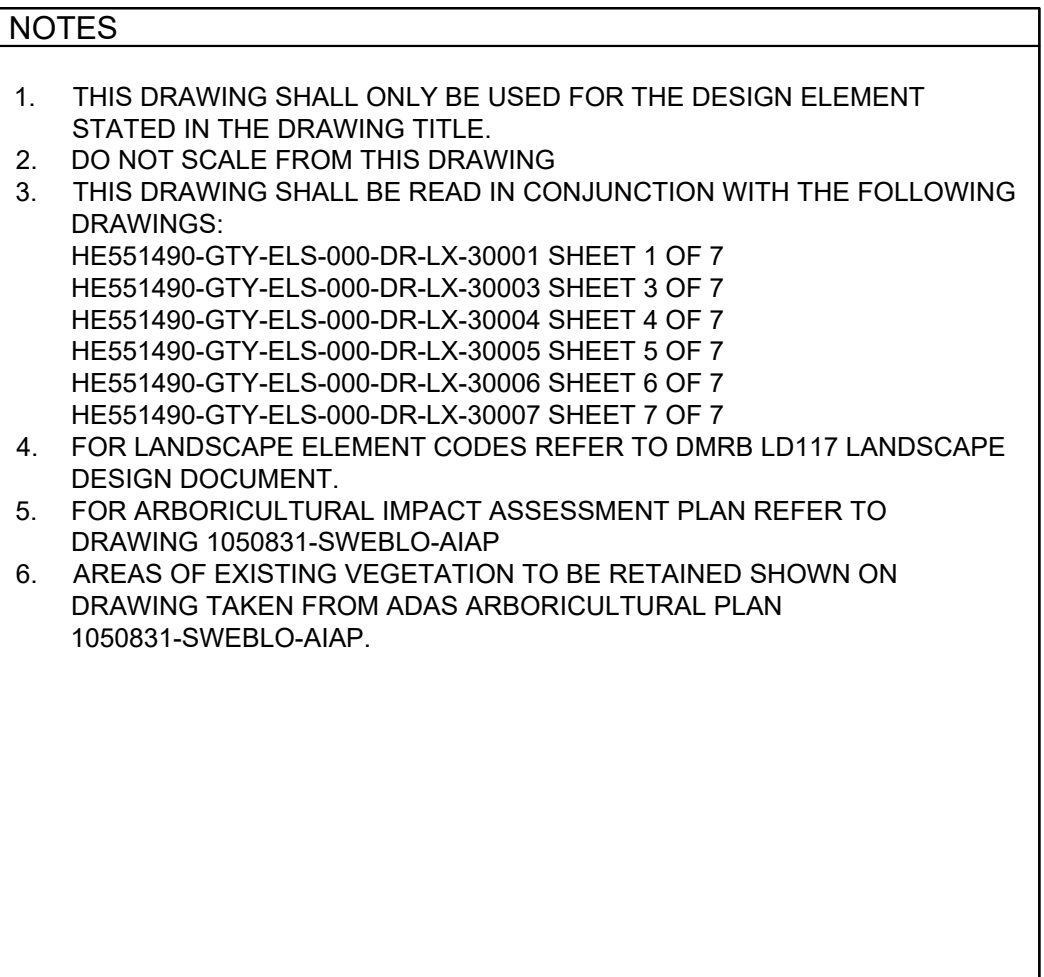
SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P05

DRAWING NUMBER

HE551490-GTY-ELS-000-DR-LX-30001



DESIGNER

SWECO 

CLIENT

 **highways**
england

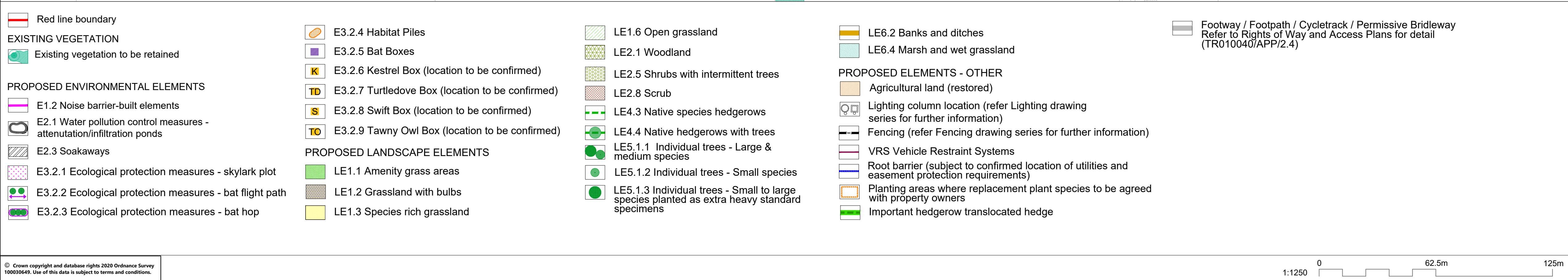
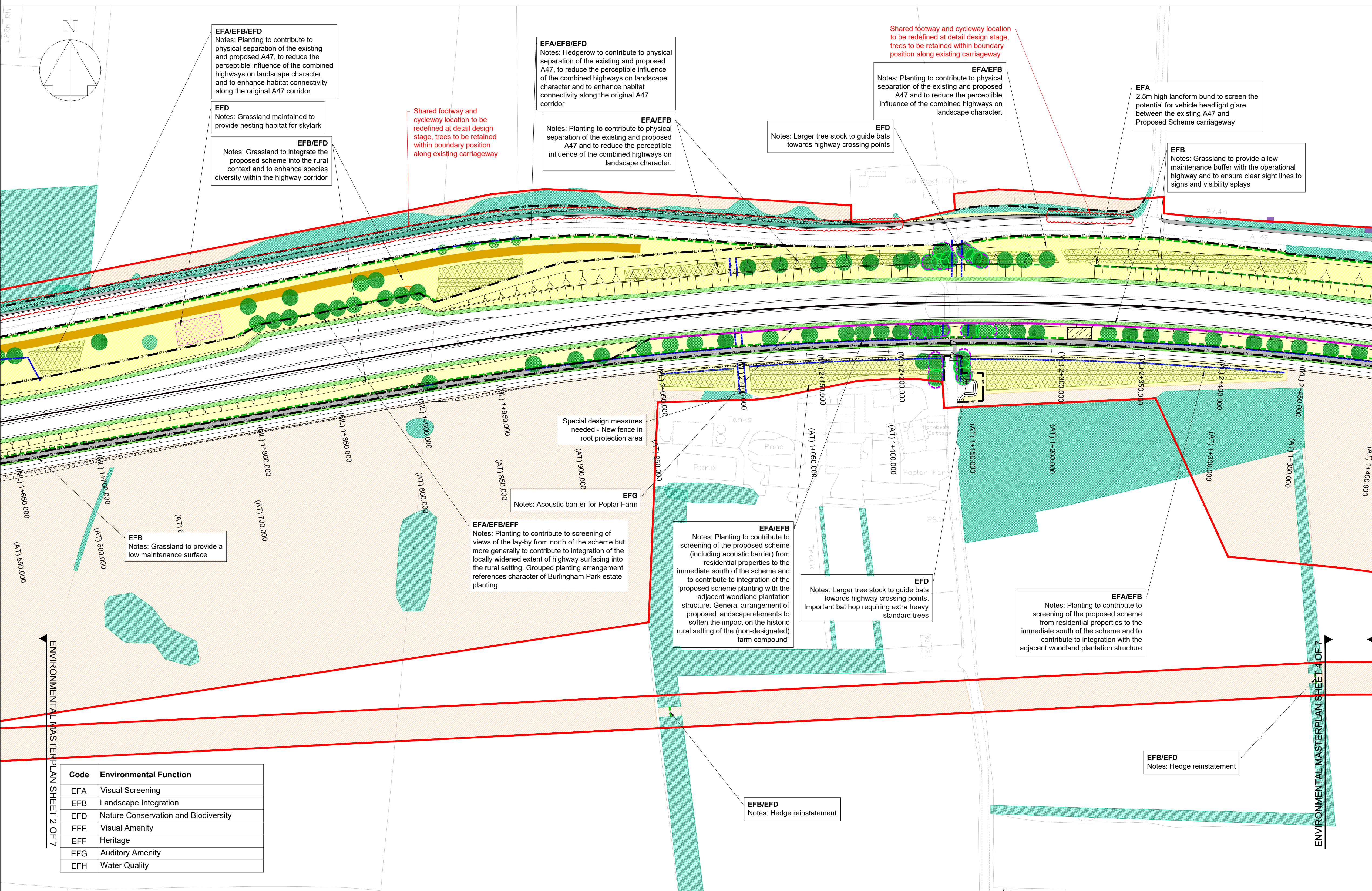
PROJECT STAGE

PCF STAGE 4

SUITABILITY

SUITABLE FOR STAGE APPROVAL

 Red line boundary		 E3.2.4 Habitat Piles		 LE1.6 Open grassland		 LE6.2 Banks and ditches		 Footway / Footpath / Cycletrack / Permissive Bridleway Refer to Rights of Way and Access Plans for detail (TR010040/APP/2.4)																																																																																																															
EXISTING VEGETATION		 E3.2.5 Bat Boxes		 LE2.1 Woodland		 LE6.4 Marsh and wet grassland																																																																																																																	
 Existing vegetation to be retained		 E3.2.6 Kestrel Box (location to be confirmed)		 LE2.5 Shrubs with intermittent trees		PROPOSED ELEMENTS - OTHER																																																																																																																	
PROPOSED ENVIRONMENTAL ELEMENTS		 E3.2.7 Turtle dove Box (location to be confirmed)		 LE2.8 Scrub		 Agricultural land (restored)																																																																																																																	
 E1.2 Noise barrier-built elements		 E3.2.8 Swift Box (location to be confirmed)		 LE4.3 Native species hedgerows		 Lighting column location (refer Lighting drawing series for further information)																																																																																																																	
 E2.1 Water pollution control measures - attenuation/infiltration ponds		 E3.2.9 Tawny Owl Box (location to be confirmed)		 LE4.4 Native hedgerows with trees		 Fencing (refer Fencing drawing series for further information)																																																																																																																	
 E2.3 Soakaways		PROPOSED LANDSCAPE ELEMENTS		 LE5.1.1 Individual trees - Large & medium species		 VRS Vehicle Restraint Systems																																																																																																																	
 E3.2.1 Ecological protection measures - skylark plot		 LE1.1 Amenity grass areas		 LE5.1.2 Individual trees - Small species		 Root barrier (subject to confirmed location of utilities and easement protection requirements)																																																																																																																	
 E3.2.2 Ecological protection measures - bat flight path		 LE1.2 Grassland with bulbs		 LE5.1.3 Individual trees - Small to large species planted as extra heavy standard specimens		 Planting areas where replacement plant species to be agreed with property owners																																																																																																																	
 E3.2.3 Ecological protection measures - bat hop		 LE1.3 Species rich grassland				 Important hedgerow translocated hedge																																																																																																																	
© Crown copyright and database rights 2020 Ordnance Survey 100030649. Use of this data is subject to terms and conditions. 1:1250 0 62.5m 125m <tr><td colspan="10">NORTH BURLINGHAM DUALLING</td></tr> <tr><td colspan="10">PROJECT STAGE</td></tr> <tr><td colspan="10">PCF STAGE 4</td></tr> <tr><td colspan="10">DRAWING TITLE</td></tr> <tr><td colspan="10">MASTERPLAN SHEET 2 OF 7 TR010040/APP/6.8</td></tr> <tr><td colspan="10">SUITABILITY</td></tr> <tr><td colspan="10">SUITABLE FOR STAGE APPROVAL</td></tr> <tr><td colspan="2">SHEET SIZE</td><td colspan="2">SCALE</td><td colspan="2">STATUS</td><td colspan="4">REVISION</td></tr> <tr><td colspan="2">A1</td><td colspan="2">1:1250</td><td colspan="2">S4</td><td colspan="4">P05</td></tr> <tr><td colspan="10">DRAWING NUMBER</td></tr> <tr><td colspan="10">HE551490-GTY-ELS-000-DR-LX-30002</td></tr>										NORTH BURLINGHAM DUALLING										PROJECT STAGE										PCF STAGE 4										DRAWING TITLE										MASTERPLAN SHEET 2 OF 7 TR010040/APP/6.8										SUITABILITY										SUITABLE FOR STAGE APPROVAL										SHEET SIZE		SCALE		STATUS		REVISION				A1		1:1250		S4		P05				DRAWING NUMBER										HE551490-GTY-ELS-000-DR-LX-30002									
NORTH BURLINGHAM DUALLING																																																																																																																							
PROJECT STAGE																																																																																																																							
PCF STAGE 4																																																																																																																							
DRAWING TITLE																																																																																																																							
MASTERPLAN SHEET 2 OF 7 TR010040/APP/6.8																																																																																																																							
SUITABILITY																																																																																																																							
SUITABLE FOR STAGE APPROVAL																																																																																																																							
SHEET SIZE		SCALE		STATUS		REVISION																																																																																																																	
A1		1:1250		S4		P05																																																																																																																	
DRAWING NUMBER																																																																																																																							
HE551490-GTY-ELS-000-DR-LX-30002																																																																																																																							



NOTES

- THIS DRAWING SHALL ONLY BE USED FOR THE DESIGN ELEMENT STATED IN THE DRAWING TITLE.
- DO NOT SCALE FROM THIS DRAWING
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
HE551490-GTY-ELS-000-DR-LX-30001 SHEET 1 OF 7
HE551490-GTY-ELS-000-DR-LX-30002 SHEET 2 OF 7
HE551490-GTY-ELS-000-DR-LX-30004 SHEET 4 OF 7
HE551490-GTY-ELS-000-DR-LX-30005 SHEET 5 OF 7
HE551490-GTY-ELS-000-DR-LX-30006 SHEET 6 OF 7
HE551490-GTY-ELS-000-DR-LX-30007 SHEET 7 OF 7
- FOR LANDSCAPE ELEMENT CODES REFER TO DMRB LD117 LANDSCAPE DESIGN DOCUMENT.
- FOR ARBORICULTURAL IMPACT ASSESSMENT PLAN REFER TO DRAWING 1050831-SWEBLO-AIAP
- AREAS OF EXISTING VEGETATION TO BE RETAINED SHOWN ON DRAWING TAKEN FROM ADAS ARBORICULTURAL PLAN 1050831-SWEBLO-AIAP.

KEY TO SYMBOLS

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

DESIGNER

CONTRACTOR

CLIENT

PROJECT TITLE

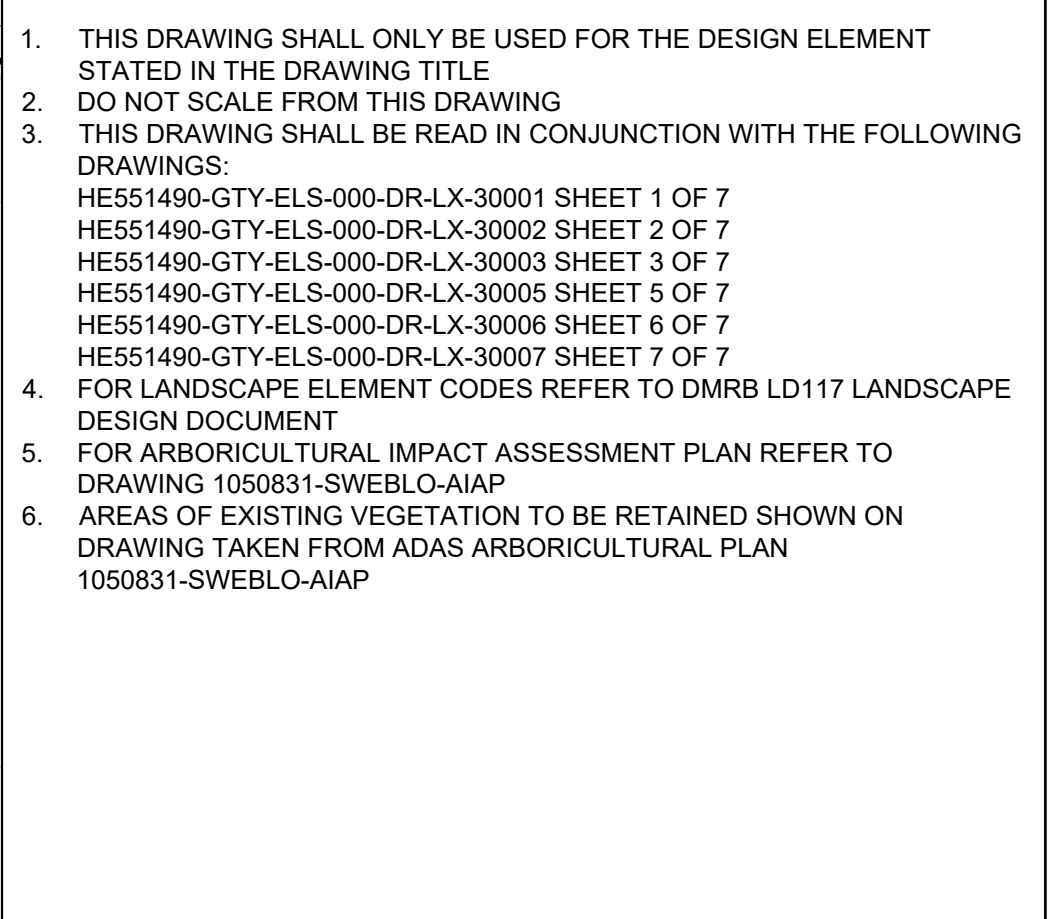
PROJECT STAGE

DRAWING TITLE

SUITABILITY

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P05

DRAWING NUMBER



P01	22/10/20	FOR ISSUE	LS	RMea	MMur
P02	04/03/21	FOR ISSUE	MHus	MMur	BMcL
P03	05/07/21	DEADLINE 1	LS	MMur	BJon
P04	09/09/21	DEADLINE 4	RMea	RMea	MMur
P05	19/10/21	DEADLINE 5	LS	RMea	MMur
P06	16/11/21	DEADLINE 7	LS	RMea	MMur
REV	DATE	REVISION NOTE	ORG	CHK'D	APP'D

CONTRACTOR


GallifordTry

PROJECT TITLE

A47 BLOFIELD TO
NORTH BURLINGHAM DUALLING

DRAWING TITLE

MASTERPLAN
SHEET 4 OF 7
TR010040/APP/6.8

SHEET SIZE A1	SCALE 1:1250	STATUS S4	REVISION P06
------------------	-----------------	--------------	-----------------

© Crown copyright and database rights 2020 Ordnance Survey.
100030649. Use of this data is subject to terms and conditions.

0 62.5m 125m
1:1250

HE551490-GTY-ELS-000-DR-LX-30004

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

ENVIRONMENTAL MASTERPLAN SHEET 4 OF 7

ENVIRONMENTAL MASTERPLAN SHEET 7 OF 7

ENVIRONMENTAL MASTERPLAN SHEET 6 OF 7

EFB/efd
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity within the highway corridor.

EFB
Notes: Grassland to provide a low maintenance buffer with the operational highway and to ensure clear sight lines to signs and visibility splays

EFB/efd/eff
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity.

EFB
Notes: Planting to break up the highway corridor and add definition to the highway junction

EFB/eff
Notes: Planting to contribute to bat hop function and to reinforcement of the field boundary structure to either side of the A47 highway

EFF
Notes: Milepost retained, protected from works and restored

EFF/efb/efe
Notes: Planting to contribute to screening of the proposed scheme overbridge. Planting to soften the appearance of the overbridge embankment landform and to contribute to integration of the landform with the shallower slopes of the surrounding area.

EFF
Notes: Tall, dense trees and directional lighting to limit impact of elevated carriageway on Burlingham Park and listed buildings in North Burlingham

EFB/efa/eff
Notes: Individual trees to contribute to integration of the highway into the local estate 'parkland' and field boundary tree character setting and to contribute to the screening of views of the proposed scheme from the north-east

EFD
Notes: Larger tree stock to guide bats towards highway crossing points

EFB
Notes: Grassland to provide a low maintenance buffer with the operational highway and to ensure clear sight lines to signs and visibility splays

EFB/efd
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity

EFA/EFB/EFd/EFF
Notes: Planting to contribute to screening of views of the proposed scheme from The White House and Coach House and to contribute to integration of the truncated highway into its setting

EFB/efd
Notes: woodland planting to mitigate losses brought about by installation of Cadent gas compound

EFD
Notes: Larger tree stock to guide bats towards highway crossing points

EFB
Notes: Planting to contribute to reinforcement of the field boundary structure to either side of the A47 highway

EFB/efd/eff
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity within the highway corridor

EFA/EFB/EFd/EFF
Notes: Planting to contribute to physical separation of the existing and proposed A47, to reduce the perceptible influence of the combined highways on landscape character and to enhance habitat connectivity along the original A47 corridor, in particular providing a high tree flight line for bats

EFB
Notes: Grassland to provide a low maintenance buffer with the operational highway and to ensure clear sight lines to signs and visibility splays

EFB/efd
Notes: Hedge reinstatement

EFB/efd
Notes: Hedge reinstatement

KEY TO SYMBOLS

DESIGNER

CONTRACTOR


GallifordTry

PROJECT TITLE
A47 BLOFIELD TO NORTH BURLINGHAM DUALLING

DRAWING TITLE	
---------------	--

SUITABILITY	

DRAWING NUMBER			
HE551490-GTY-ELS-000-DR-LX-30005			

NOTES

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

EFB/EFA/EFF
Notes: Individual trees to contribute to integration of the highway into the local estate 'parkland' and field boundary tree character setting and to contribute to the screening of views of the proposed scheme from the north-east

EFD
Notes: Larger tree stock to guide bats towards highway crossing points

EFB
Notes: Grassland to provide a low maintenance buffer with the operational highway and to ensure clear sight lines to signs and visibility splays

EFB/EFD
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity

EFB/EFA
Notes: Individual trees to contribute to the screening of views of the scheme from The White House and Coach House

EFG
Notes: Acoustic barrier for The White House and Coach House

EFA/EFB/EFE/EFF
Notes: Planting to mitigate vegetation loss during construction and to contribute to screening of views of the proposed scheme from The White House and Coach House

EFB/EFD
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity

EFB
Notes: Grassland to provide a low maintenance buffer with the operational highway and to ensure clear sight lines to signs and visibility splays

EFB/EFD
Notes: Grassland to integrate the proposed scheme into the rural context and to enhance species diversity

EFG
Notes: Acoustic barrier for Hall Cottages

EFB
Notes: Grassland and woodland planting to integrate the area associated with the redundant lay-by into the rural context

ENVIRONMENTAL MASTERPLAN SHEET 7 OF 7

KEY TO SYMBOLS

DESIGNER

CONTRACTOR	
------------	--

CLIENT _____

PROJECT TITLE

PROJECT STAGE

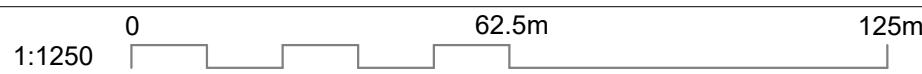
DRAWING TITLE

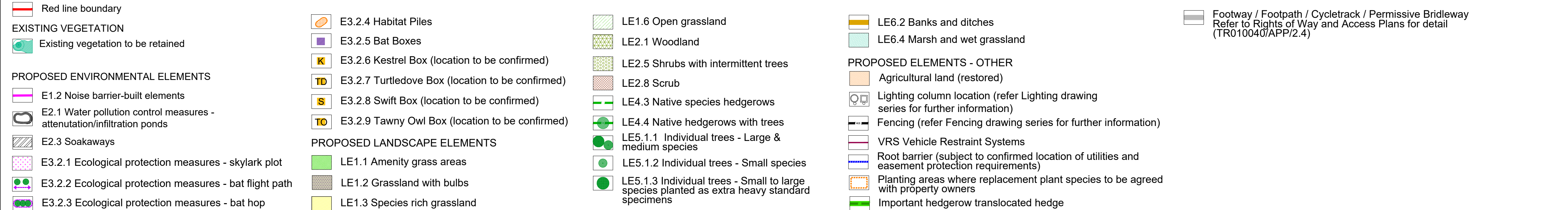
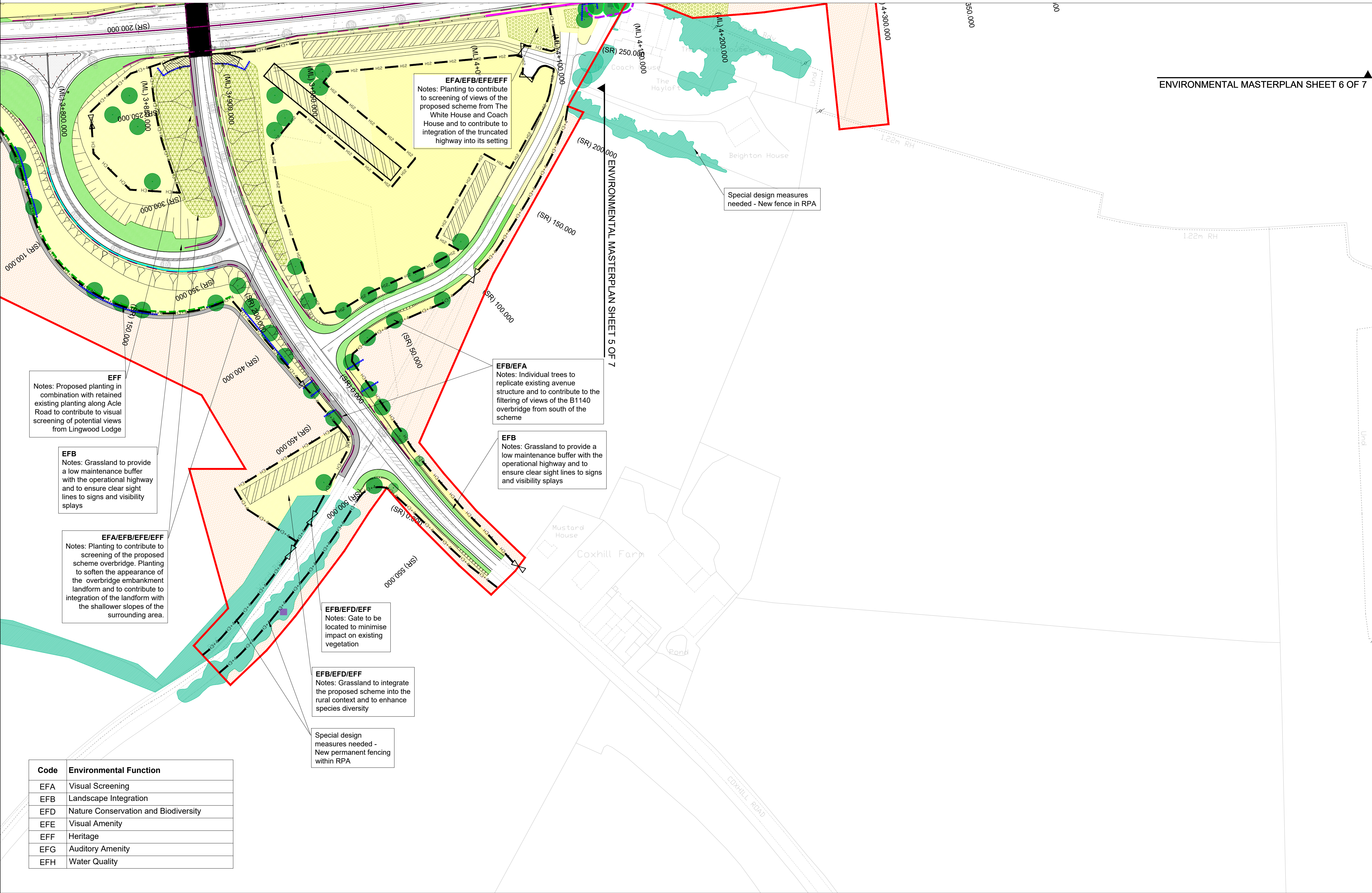
SUITABILITY

SUITABLE FOR STAGE APPROVAL

DRAWING NUMBER

© Crown copyright and database rights 2020 Ordnance Survey 100030649. Use of this data is subject to terms and conditions.





- NOTES**
- THIS DRAWING SHALL ONLY BE USED FOR THE DESIGN ELEMENT STATED IN THE DRAWING TITLE
 - DO NOT SCALE FROM THIS DRAWING
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
HE551490-GTY-ELS-000-DR-LX-30001 SHEET 1 OF 7
HE551490-GTY-ELS-000-DR-LX-30002 SHEET 2 OF 7
HE551490-GTY-ELS-000-DR-LX-30003 SHEET 3 OF 7
HE551490-GTY-ELS-000-DR-LX-30004 SHEET 4 OF 7
HE551490-GTY-ELS-000-DR-LX-30005 SHEET 5 OF 7
HE551490-GTY-ELS-000-DR-LX-30006 SHEET 6 OF 7
 - FOR LANDSCAPE ELEMENT CODES REFER TO DMRB LD117 LANDSCAPE DESIGN DOCUMENT
 - FOR ARBORICULTURAL IMPACT ASSESSMENT PLAN REFER TO DRAWING 1050831-SWEBLO-AIAP
 - AREAS OF EXISTING VEGETATION TO BE RETAINED SHOWN ON DRAWING TAKEN FROM ADAS ARBORICULTURAL PLAN 1050831-SWEBLO-AIAP

KEY TO SYMBOLS

P01	22/10/20	FOR ISSUE	LS	RMea	MMur
P02	04/03/21	Final drawing		MHus	MMur
P03	05/07/21	DEADLINE 1	LS	MMur	BJon
P04	09/09/21	DEADLINE 4	LS	RMea	MMur
P05	16/11/21	DEADLINE 7	LS	RMea	MMur
REV	DATE	REVISION NOTE	ORG	CHKD	APPD

DESIGNER

SWECO

CONTRACTOR

GallifordTry

CLIENT

**highways
england**

PROJECT TITLE

**A47 BLOFIELD TO
NORTH BURLINGHAM DUALLING**

PROJECT STAGE

PCF STAGE 4

DRAWING TITLE

**MASTERPLAN
SHEET 7 OF 7
TR010040/APP/6.8**

SUITABILITY

SUITABLE FOR STAGE APPROVAL

SHEET SIZE	SCALE	STATUS	REVISION
A1	1:1250	S4	P05

DRAWING NUMBER

HE551490-GTY-ELS-000-DR-LX-30007

LE 1.1 Amenity Grass Germinal A18 road verge and embankments Sowing rate: On bare ground 35g/m2; Overseeding rate on thin areas 20g/m2			Approx. Area: 39,377m2
Species Latin Name	Common Name	% of mix	
Agrostis castellana	Highland browntop bentgrass	5	
Festuca rubra subsp. commutata	Highnote chewing's fescue	10	
Festuca rubra rubra	Coral strong creeping Red fescue	40	
Lolium perenne	Calico perennial ryegrass	12.5	
Lolium perenne	Zurich perennial ryegrass	10	
Poa pratensis	Tetris smooth stalked meadow grass	20	
Trifolium repens	Aberace (small) w clover	2.5	

LE 1.2 Grassland and bulbs Pheonix - Reclamation Grass Seed Mx non-Ryegrass) Sowing rate: On bare ground 30g/m2; Overseeding rate on thin areas 10g/m2			Approx. Area: 284m2
Species Latin Name	Common Name	% of mix	
Grasses (100%)			
Agrostis capillaris	Browntop bentgrass	6	
Festuca rubrasubsp. commutata	Chewing's fescue	20	
Festuca rubra rubra	Strong creeping red fescue	35	
Festuca rubra ssp. Litoralis	Slender creeping red fescue	15	
Lotus corniculatus	Bird's-foot trefoil	4	
Trifolium repens	Small leaved white clover	3	
Festuca ovina	Hard fescue	10	
Poa pratensis	Smooth-stalked meadow-grass	7	
Bulbs (100%)			
Narcissus pseudonarcissus	Wild daffodil	100	

LE 1.3 Species Rich Grassland Germinal WFG4 Neutral soils Sowing rate: 5g/m2 <i>Note: LE 2.1, LE2.5 and LE 2.8 are to be under-seeded with this mix. To avoid double counting, the approximate area given for LE 1.3 does not include areas that are seeded and planted.</i>			Approx. Area: 262,835m2
Species Latin Name	Common Name	% of mix	
Achillea millefolium	Yarrow	1	
Centaurea nigra	Common knapweed	1	
Cynosurus cristatus	Crested dogstail	20	
Festuca arundinacea	Tall fescue	10	
Festuca rubra litoralis	Slender creeping red fescue	25	
Festuca rubra rubra	Strong creeping red fescue	20	
Galium verum	Lady's bedstraw	1.2	
Geranium molle	Doves foot cranesbill	0.3	
Leucanthemum vulgare	oxeye daisy	1.5	
Linum usitatissimum	Flax	1.4	
Lotus corniculatus	Leo lotus corniculatus birdsfotts trefoil	0.5	
Lychnis flos cuculi	Ragged robin	0.1	
Medicago lupulina	Black medick	1	
Onobrychis vicifolia	Sainfoin	5	
Phleum bertolonii	Teno	5	
Plantago lanceolata	Ribwort plantain	2.4	
Prunella vulgaris	Self heal	1	
Rhinanthus minor	Yellow rattle	0.8	
Sanguisorba minor	Salad burnet	1.8	
Scabiosa columbaria	Small scabious	0.3	
Silene latifolia	White campion	0.5	
Vicia sativa	Common vetch	0.2	

LE 1.6 Open Grassland Emorsgate EG1 - general purpose meadow grass mixture Sowing Rate: 5g/m2			Approx. Area: 5,796m2
Species Latin Name	Common Name	% of mix	
Agrostis capillaris	Common bent	10	
Cynosurus cristatus	Crested dogstail	35	
Festuca rubra	Slender-creeping red-fescue	30	
Phleum bertolonii	Smaller cat's-tail	5	
Poa pratensis	Smooth-stalked meadow-grass	20	

LE 4.3 Native Species Hedgerow Supply size 1+1 450-600mm high transplants Plant Spacing Plant at 0.25m centres in double staggered rows (0.3m offset between rows) Plant Grouping Plant all species in single species groups of 5-7			Approx. length: 4,086 Linear m
Species Latin Name	Common Name	% of mix	
Acer campestre	Field maple	10	
Cornus sanguinea	Dogwood	5	
Corylus avellana	Hazel	25	
Crataegus monogyna	Hawthorn	30	
Ilex aquifolium	Holly	10	
Prunus Spinosa	Blackthorn	5	
Rosa avensis	Field rose	5	
Rosa canina	Dog rose	5	
Sambucus nigra	Elder	5	

LE 4.4 Native Species Hedgerow With trees Planted with LE5.1.1 individual trees; to be planted as mix of 8-10cm girth standards and 12-14cm girth heavy standard trees in naturalistic groups as per drawing, spacing no less then 5m. Supply size 1+1 450-600mm high transplants Plant Spacing Plant at 0.25m centres in double staggered rows (0.3m offset between rows) Plant Grouping Plant all species in single species groups of 5-7			Approx. length: 3,238 Linear m
Species Latin Name	Common Name	% of mix	
Acer campestre	Field maple	10	
Cornus sanguinea	Dogwood	5	
Corylus avellana	Hazel	30	
Crataegus monogyna	Hawthorn	25	
Ilex aquifolium	Holly	10	
Prunus Spinosa	Blackthorn	5	
Rosa avensis	Field rose	5	
Rosa canina	Dog rose	5	
Sambucus nigra	Elder	5	

LE 2.1 Woodland Supply size 75% 1+1 450-600mm high transplants 15% 1.5-1.8m feathered trees 10% 8-10cm girth standard trees Plant Spacing Transplants at 2m centres Feathered and standards trees at 4m centres Plant Grouping Transplants in single species groups of 5-7 Feathered trees and standards in single species groups of 3-5 Under-seeded with LE 1.3 Species Rich Grassland - Germinal WFG4 Neutral soils			Approx. Area: 33,084m2
Species Latin Name	Common Name	% of mix	
Acer campestre	Field Maple	10	
Betula pendula	Silver Birch	10	
Cornus sanguinea	Dogwood	5	
Corylus avellana	Hazel	20	
Crataegus monogyna	Hawthorn	20	
Ilex aquifolium	Holly	5	
Ligustrum vulgare	Wild Privet	5	
Prunus avium	Wild Cherry	5	
Prunus Spinosa	Blackthorn	10	
Quercus robur	Penduculate Oak	10	

LE 2.5. Shrubs with intermittent trees Supply size 90% 1+1 450-600mm high transplants 5% 1.5-1.8m feathered trees 5% 8-10cm girth standard trees Plant Spacing Transplants at 2m centres Feathered and standard trees at 4m centres Plant Grouping Transplants in single species groups of 5-7 Feathered trees and standards in single species groups 3-5 Under-seeded with LE 1.3 Species Rich Grassland - Germinal WFG4 Neutral soils			Approx. Area: 3,564m2
Species Latin Name	Common Name	% of mix	
Acer campestre	Field maple	5	
Cornus sanguinea	Dogwood	10	
Corylus avellana	Hazel	30	
Betula pendula	Silver birch	2.5	
Crataegus monogyna	Hawthorn	30	
Ilex aquifolium	Holly	2.5	
Prunus avium	Wild cherry	5	
Prunus Spinosa	Blackthorn	7.5	
Quercus robur	Common oak	5	
Salix cinerea	Grey willow	2.5	

LE 2.8 Scrub Supply size 1+1 450-600mm high transplants Plant Spacing Plant in groups at 1-3m centres Plant grouping Plant all species in single species of 3-5 Under-seeded with LE 1.3 Species Rich Grassland - Germinal WFG4 Neutral soils			Approx. Area: 133m2
Species Latin Name	Common Name	% of mix	
Acer campestre	Field maple	5	
Cornus sanguinea	Dogwood	10	
Corylus avellana	Hazel	30	
Betula pendula	Silver birch	2.5	
Crataegus monogyna	Hawthorn	30	
Ilex aquifolium	Holly	2.5	
Prunus avium	Wild cherry	5	
Prunus Spinosa	Blackthorn	7.5	
Quercus robur	Common oak	5	
Salix cinerea	Grey willow	2.5	

LE 5.1.1 Individual trees -large and medium species Supply size Mix of 8-10cm girth standard and 12-14cm girth heavy standard trees			No. of trees: x394
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	

LE 5.1.1 Individual trees -large and medium species Supply size Mix of 8-10cm girth standard and 12-14cm girth heavy standard trees			No. of trees: x394
Species Latin Name	Common Name		
Carpinus betulus	Hornbeam		
Fagus sylvatica	Beech		
Populus nigra	Poplars		
Prunus avium	Wild cherry		
Quercus robur	Pedunculate oak		
Salix alba	White willow		
Salix cinerea	Grey willow		

LE 5.1.2 Individual Trees - small species Supply size Mix of 8-10cm girth standard and 12-14cm girth heavy standard trees			No. of trees: x15
Species Latin Name	Common Name		
Acer campestre	Field maple		
Betula Pendula	Silver birch		
Crataegus monogyna	Hawthorn		
Malus Sylvestris	Common crab apple		

LE 5.1.3 Individual trees - small to large species planted as extra heavy standard specimens Supply size 16-18cm extra heavy standard trees			No. of trees: x77
Species Latin Name	Common Name		
Acer campestre	Field maple		
Betula Pendula	Silver birch		
Crataegus monogyna	Hawthorn		
Fagus sylvatica	Beech		
Pinus sylvestris	Scots pine		
Populus nigra	Black poplar		
Prunus avium	Wild cherry		
Quercus robur	Oak		
Salix alba	White willow		
Salix cinerea	Grey willow		

LE 6.2 Banks and ditches Emorsgate EP1 Pond Edge mixture Sowing rate: 4g/m2			Approx. area: 7,152m2
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	
Lycopus europaeus	Gypswort	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	2	
Anthoxanthum odoratum	Sweet vernal-grass	2	
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	
Plug plants			
Plants to be notch planted in single species swathes at 0.5m centres within an extent of area to be identified on site by an ecologist as contributing proportionate value to the mitigation objectives of the Environmental Masterplan			
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	
Carex lasiocarpa	Lesser pond sedge	6.25	

Plug plants			
Plants to be notch planted in single species swathes at 0.5m centres within an extent of area to be identified on site by an ecologist as contributing proportionate value to the mitigation objectives of the Environmental Masterplan			
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	

NOTES

- THIS DRAWING SHALL ONLY BE USED FOR THE DESIGN ELEMENT STATED IN THE DRAWING TITLE.
- DO NOT SCALE FROM THIS DRAWING
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
HE551490-GTY-ELS-000-DR-LX-30001 SHEET 1 OF 7
HE551490-GTY-ELS-000-DR-LX-30002 SHEET 2 OF 7
HE551490-GTY-ELS-000-DR-LX-30003 SHEET 3 OF 7
HE551490-GTY-ELS-000-DR-LX-30004 SHEET 4 OF 7
HE551490-GTY-ELS-000-DR-LX-30005 SHEET 5 OF 7
HE551490-GTY-ELS-000-DR-LX-30006 SHEET 6 OF 7
HE551490-GTY-ELS-000-DR-LX-30007 SHEET 7 OF 7
- FOR LANDSCAPE ELEMENT CODES REFER TO DMRB LD117 LANDSCAPE DESIGN DOCUMENT .

KEY TO SYMBOLS

--	--	--	--