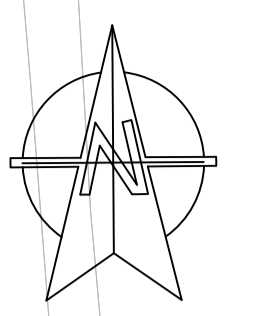


0 10 100  
Millimetres



**EFA/EFB/efd**  
**LE 2.1 LE 4.3 E3.1 E3.2**  
Woodland/woodland edge and scrub habitat to link into existing vegetation, provide visual screening and integration. Hibernacula/reptile refuges. Dormouse mitigation planting

**EFB/efd** **LE 2.2 LE 4.3**  
Hedgerow and hedgerow trees boundary. Woodland edge with intermittent trees, species rich grassland

**EFJ** **P 4.1**  
Temporary works lay down areas. Reinstatement and return to agriculture

**EFC/EFK** **LE 7.4**  
Shared use path. Access for pedestrian, equestrian and cyclist

**EFK** **P 4.4**  
PRoW (AX3/11/10) retained. Temporary closure during construction

**EFB/efd** **LE 4.4**  
Hedgerow planting to reinstate field boundaries and roadside corridor

**EFC/efe** **LE7.4**  
Shared use path

FOR CONTINUATION REFER TO DRAWING  
BNWLBP-TACP-ELS-X\_BB\_Z-DR-LE-000011

**EFA/EFB/efd**  
**LE 4.4 LE2.2 LE1.3**  
Hedgerow and hedgerow trees boundary. Woodland edge with intermittent trees, species rich grassland

**EFH** **E2.1**  
Swale accommodating road runoff

**EFE** **LE5.1**  
Scattered groups of individual trees

**efd** **E3.2**  
Hibernacula reptiles - subterranean Habitat scrub/woodland edge (Dormouse). Fruiting trees and enhance damp flush meadow

**EFB/efd** **LE 4.4**  
Hedgerow planting to link into existing vegetation and strengthen field boundary

**efd** **LE5.2**  
Bat hopover to guide flightline

**EFK** **P 4.4**  
PRoW (AX3/25/10) retained and remains open during construction

**efd** **E 3.2**  
Nest boxes and roosting opportunities

**EFA/EFB/efd** **LE 2.1/LE 2.5**  
Woodland and woodland edge planting with species rich grassland. Providing screening from properties along Knightcott Road and connectivity with existing field pattern

**EFJ** **P 4.1**  
Location for Main site compound. Reinstatement and return to agriculture

**efd** **E3.2**  
Protected species fencing to highway boundary/mitigation areas

**EFB/efd** **LE 4.4**  
Hedgerow planting to create new field boundaries and roadside corridor for Wells Lane

**efd** **LE5.2**  
Bat hopover to guide flightline

**EFC** **LE 1.2**  
Grassland with native bulbs to enhance gateway entrance to Banwell

**EFC/efe** **LE 5.1**  
Individual trees - Gateway setting and placemaking

**EFA/EFB** **LE2.5**  
Woodland edge and intermittent trees to screen and filter views of Banwell West roundabout from properties on Knightcott Road

**EFC** **LE7.3**  
Placemaking: Traffic calming, widened footway gateway entrance to Banwell

**EFK/efc** **LE7.3**  
Detrunked Knightcott Road retained and remodelled for PMA

**EFK** **P 4.4**  
PRoW (AX3/12/10) retained.

**NOTES:**

Landscape Element (LE)	Environmental Element (EE)	Planning & Policy Feature (P)
EFH	LE1.1	
Environmental Function (EF)		Brief Description or justification for inclusion

**ENVIRONMENTAL FUNCTIONS:**

EFA	Visual Screening
EFB	Landscape Integration
EFC	Enhancing the Built Environment
efd	Nature Conservation & Biodiversity
EFH	Visual Amenity
EFJ	Heritage
EFK	Auditory Amenity
EFL	Water Quality
EFM	Agricultural / Highway Boundary
EFN	Access / Landscape Management
EFO	LE2.7 Scattered trees - orchard trees
EP	LE5.2 Heavy standard trees

**LANDSCAPE ELEMENTS:**

LE1	Grassland
LE1.1	Amenity grass areas
LE1.2	Grassland with bulbs
LE1.3	Species Rich (or Conservation) Grassland
LE1.3	Meadow management (Conservation grazing)
LE2	Compound area - Reinstatement grass
LE2.1	Woodland
LE2.2	Woodland Edge
LE2.7	Scattered Trees
LE2.8	Scrub
LE4	Hedges
LE4.3	Native Species Hedgerows
LE4.4	Native Hedgerows with Trees
LE5.1	Individual Trees
LE 6.2	Watercourse/Drains

**ENVIRONMENTAL ELEMENTS**

LE6.4	Marsh and Wet Grassland
	Traditional orchard
	Retained trees (of note)
LE7	Hard Landscape
LE7.7	Retaining wall
	PRoW
	PRoW (Diversion)
E3.2	Mammal crossing provision
E3.2	Protected species fencing

**ENVIRONMENTAL ELEMENTS**

E1	NOISE
E1.1	Noise reducing surfaces
E1.2	Noise Barrier built elements
E2	WATER
E2.1	Water Pollution Control Measures
E2.2	Surface Water Outfalls
E3	NATURE CONSERVATION & BIODIVERSITY
E3.1	Protected Species
E3.2	Ecological Protection Measures
E4	PESTS & INJURIOUS WEEDS
E4.1	Injurious weeds
E4.2	Legislated Pests

**PLANNING AND POLICY FEATURES**

P1	NATURE CONSERVATION DESIGNATION
P1.1	Statutory nature conservation designation
P1.2	Non-statutory designation
P2	LANDSCAPE DESIGNATION
P2.1	Statutory designation
P2.2	Local Landscape designation
P3	CULTURAL HERITAGE
P3.1	Cultural Heritage Feature
P3.2	Conservation Area
P4	LAND USE
P4.1	Agricultural Land
P4.3	Public Open Space
P4.4	Public Rights of Way
P6	WATER QUALITY
P6.1	Watercourse Quality
P6.2	Areas of Ground Water Sensitivity

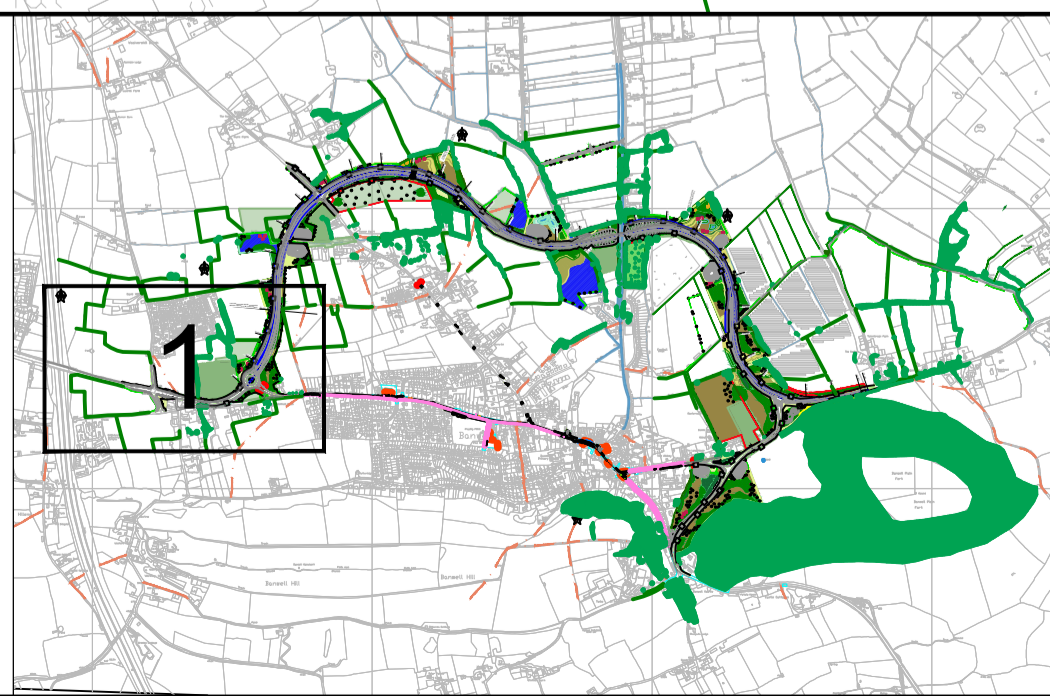
**NOTES:**

- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ONLY WRITTEN DIMENSIONS SHALL BE USED, DO NOT SCALE.

**SCHEME ELEMENTS:**

	Scheme - On embankment
	Scheme - In cutting
	Swale
	Shared use path (3m wide unless labelled otherwise)
	Existing vegetation (Woodland)
	Existing vegetation (Hedgerow)
	Attenuation basin
	Flood Compensation Area

ACNB	Area of Outstanding Natural Beauty
SAC	Special Area of Conservation
SNCI	Site of Special Scientific Interest
SSSI	Site of Special Scientific Interest
TPO	Tree Preservation Order
PMA	Private Means of Access
PRoW	Public Right of Way



**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS (REFERENCE SHALL ALSO BE MADE TO THE DESIGN HAZARD LOG)

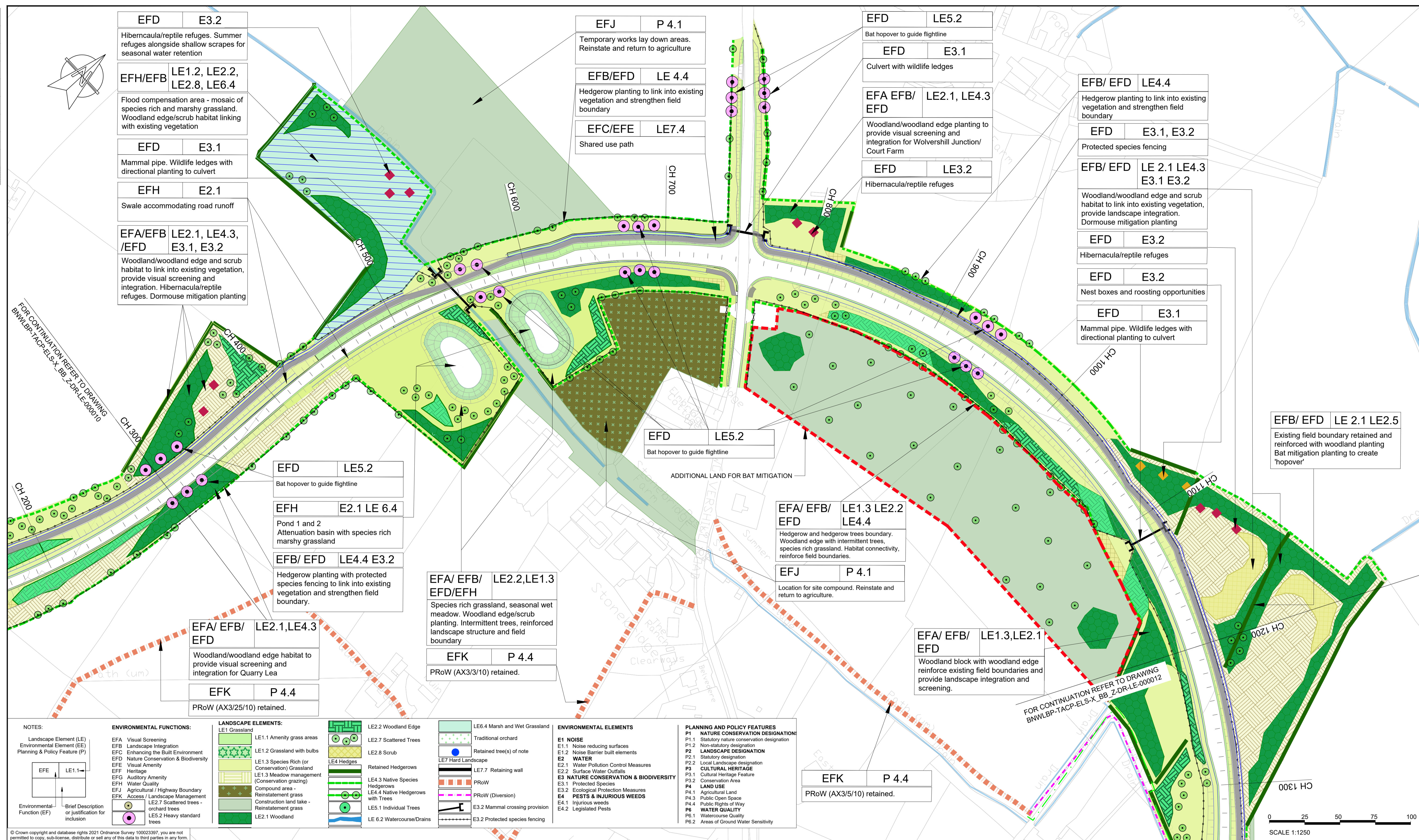
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<b>MAINTENANCE / CLEANING</b>		REF NO.	(TO BE POPULATED)						
<b>USE</b>		REF NO.	(TO BE POPULATED)						
<b>DECOMMISSIONING / DEMOLITION</b>		REF NO.	(TO BE POPULATED)						
Rev.	Date	Description	By	Chk'd	App'd	Auth'd			

Suitability	Drawing Status	S8	FOR PLANNING APPLICATION
<b>GRIFFITHS</b> civil engineering and construction			
<b>ARUP</b> <b>TACP</b>			
<b>North Somerset COUNCIL</b>			

Project Title		BANWELL BYPASS AND HIGHWAY IMPROVEMENTS			
Drawing Title		ENVIRONMENTAL MASTERPLAN SHEET 1 OF 6			
Scale	By	Checked	Approved	Authorised	
1:1250	SD	JP	TE	MJ	
Original Size	Date	Date	Date	Date	
A1	14/12/22	14/12/22	14/12/22	14/12/22	
Drawing Number	Project	Originator	Volume	Revision	
BNWLBP - TACP - ELS - X_BB_Z - DR - LE - 000010				P06	
Location	Type	Role	Number		



100  
0 10  
Millimetres



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**ENVIRONMENTAL FUNCTIONS:**  
EFA Visual Screening  
EFB Landscape Integration  
EFC Enhancing the Built Environment  
EFD Nature Conservation & Biodiversity  
EFE Visual Amenity  
EFF Heritage  
EFG Auditory Amenity  
EFH Water Quality  
EFJ Agricultural / Highway Boundary  
EFK Access / Landscape Management  
EFL LE2.7 Scattered trees - orchard trees  
EFL LE5.2 Heavy standard trees

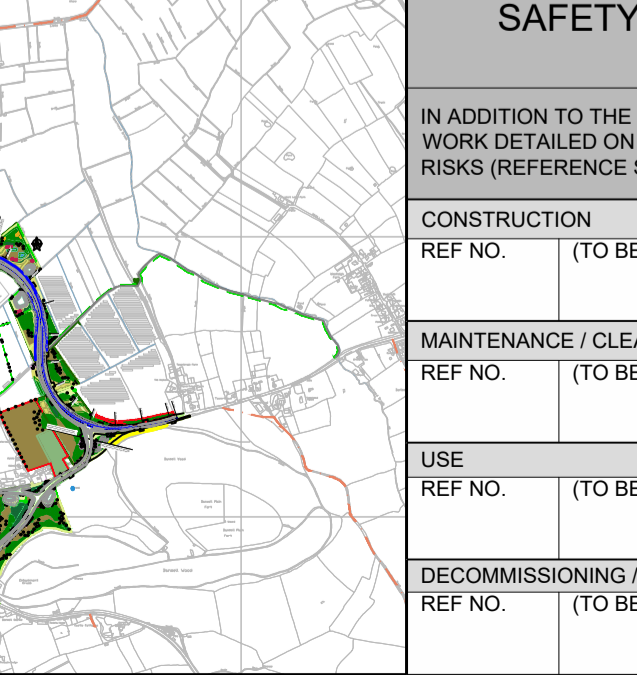
**LANDSCAPE ELEMENTS:**  
LE1 Grassland  
LE1.1 Amenity grass areas  
LE1.2 Grassland with bulbs  
LE1.3 Species Rich (or Conservation) Grassland  
LE1.3 Meadow management (Conservation grazing)  
Compound area - Reinstatement grass  
Construction land take - Reinstatement grass  
LE2.1 Woodland  
LE2.2 Woodland Edge  
LE2.7 Scattered Trees  
LE2.8 Scrub  
LE4 Hedges  
Retained Hedgerows  
LE4.3 Native Species Hedgerows  
LE4.4 Native Hedgerows with Trees  
LE5.1 Individual Trees  
LE 6.2 Watercourse/Drains  
LE6.4 Marsh and Wet Grassland  
Traditional orchard  
Retained tree(s) of note  
LE7 Hard Landscape  
LE7.7 Retaining wall  
PRoW  
PRoW (Diversion)  
E3.2 Mammal crossing provision  
E3.2 Protected species fencing

**ENVIRONMENTAL ELEMENTS**  
E1 NOISE  
E1.1 Noise reducing surfaces  
E1.2 Noise Barrier built elements  
E2 WATER  
E2.1 Water Pollution Control Measures  
E2.2 Surface Water Outfalls  
E3 NATURE CONSERVATION & BIODIVERSITY  
E3.1 Protected Species  
E3.2 Ecological Protection Measures  
E4 PESTS & INJURIOUS WEEDS  
E4.1 Injurious weeds  
E4.2 Legislated Pests

**PLANNING AND POLICY FEATURES**  
P1 NATURE CONSERVATION DESIGNATION  
P1.1 Statutory nature conservation designation  
P1.2 Non-statutory designation  
P2 LANDSCAPE DESIGNATION  
P2.1 Statutory designation  
P2.2 Local Landscape designation  
P3 CULTURAL HERITAGE  
P3.1 Cultural Heritage Feature  
P3.2 Conservation Area  
P4 LAND USE  
P4.1 Agricultural Land  
P4.3 Public Open Space  
P4.4 Public Rights of Way  
P6 WATER QUALITY  
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P6.2 Areas of Ground Water Sensitivity

**SCHEME ELEMENTS:**  
Scheme - On embankment  
Scheme - In cutting  
Swale  
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Existing vegetation (Woodland)  
Existing vegetation (Hedgerow)  
Attenuation basin  
Flood Compensation Area

ACONB Area of Outstanding Natural Beauty  
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SNCI Site of Nature Conservation Importance  
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TPO Tree Preservation Order  
PMA Private Means of Access  
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CONSTRUCTION	REF NO.	(TO BE POPULATED)					
	P01	03/03/22	FIRST ISSUE	YL	SD	TE	RW
	P02	21/06/22	SECOND ISSUE	YL	LC	AC	RW
	P03	24/06/22	THIRD ISSUE	LC	SD	AC	MJ
	P04	05/07/22	FOURTH ISSUE	LC	JW	TE	MJ
	P05	12/07/22	ISSUE FOR PLANNING	LC	SD	TE	MJ
	P06	14/12/22	UPDATED FOLLOWING PLANNING CONSULTATION	SD	JP	TE	MJ

Rev.	Date	Description	By	Chk'd	App'd	Auth'd

Suitability	S8	Drawing Status	FOR PLANNING APPLICATION
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**GRIFFITHS**  
civil engineering and construction

**ARUP**

**TACP**

Project Title: **BANWELL BYPASS AND HIGHWAY IMPROVEMENTS**

Drawing Title: **ENVIRONMENTAL MASTERPLAN SHEET 2 OF 6**

Scale: 1:1250

By	SD	Checked	JP	Approved	TE	Authorised	MJ
Original Size	A1	Date	14/12/22	Date	14/12/22	Date	14/12/22

Drawing Number: **BNWLBP - TACP - VOLUME X\_BB\_Z -DR-LE-000011**

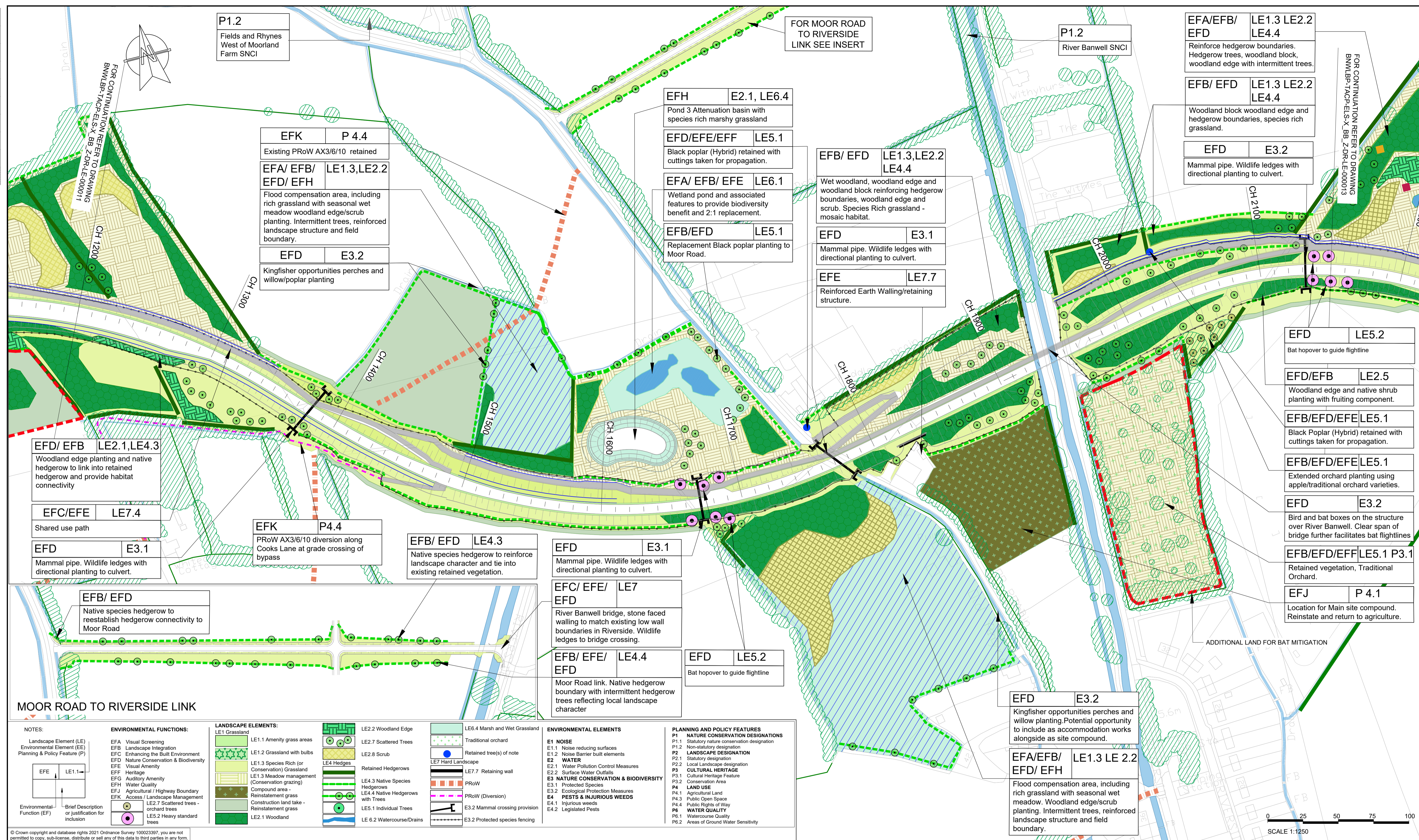
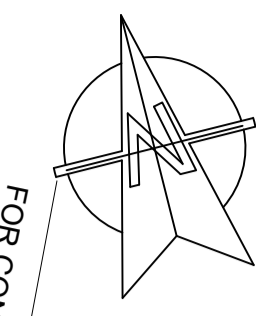
Project: **BNWLBP - TACP - VOLUME X\_BB\_Z -DR-LE-000011**

Location: | Type: | Role: | Number: |

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0 10 100  
Millimetres



**P1.2**  
Fields and Rhynes  
West of Moorland  
Farm SNCI

FOR MOOR ROAD  
TO RIVERSIDE  
LINK SEE INSERT

**P1.2**  
River Banwell SNCI

**EFA/EFB/  
EFD** | **LE1.3 LE2.2  
LE4.4**  
Reinforce hedgerow boundaries.  
Hedgerow trees, woodland block,  
woodland edge with intermittent trees.

**EFB/ EFD** | **LE1.3 LE2.2  
LE4.4**  
Woodland block woodland edge and  
hedgerow boundaries, species rich  
grassland.

**EFD** | **E3.2**  
Mammal pipe. Wildlife ledges with  
directional planting to culvert.

**EFH** | **E2.1, LE6.4**  
Pond 3 Attenuation basin with  
species rich marshy grassland

**EFD/EFB/EFF** | **LE5.1**  
Black poplar (Hybrid) retained with  
cuttings taken for propagation.

**EFA/ EFB/ EFE** | **LE6.1**  
Wetland pond and associated  
features to provide biodiversity  
benefit and 2:1 replacement.

**EFB/EFD** | **LE5.1**  
Replacement Black poplar planting to  
Moor Road.

**EFB/ EFD** | **LE1.3, LE2.2  
LE4.4**  
Wet woodland, woodland edge and  
woodland block reinforcing hedgerow  
boundaries, woodland edge and  
scrub. Species Rich grassland -  
mosaic habitat.

**EFD** | **E3.1**  
Mammal pipe. Wildlife ledges with  
directional planting to culvert.

**EFE** | **LE7.7**  
Reinforced Earth Walling/retaining  
structure.

**EFK** | **P 4.4**  
Existing PRoW AX3/6/10 retained

**EFA/ EFB/  
EFD/ EFH** | **LE1.3, LE2.2**  
Flood compensation area, including  
rich grassland with seasonal wet  
meadow woodland edge/scrub  
planting. Intermittent trees, reinforced  
landscape structure and field  
boundary.

**EFD** | **E3.2**  
Kingfisher opportunities perches and  
willow/poplar planting

**EFD** | **LE5.2**  
Bat hopover to guide flightline

**EFD/EFB** | **LE2.5**  
Woodland edge and native shrub  
planting with fruiting component.

**EFB/EFB/EFB/EFB** | **LE5.1**  
Black Poplar (Hybrid) retained with  
cuttings taken for propagation.

**EFB/EFB/EFB** | **LE5.1**  
Extended orchard planting using  
apple/traditional orchard varieties.

**EFD** | **E3.2**  
Bird and bat boxes on the structure  
over River Banwell. Clear span of  
bridge further facilitates bat flightlines

**EFB/EFB/EFB** | **LE5.1 P3.1**  
Retained vegetation, Traditional  
Orchard.

**EFJ** | **P 4.1**  
Location for Main site compound.  
Reinstate and return to agriculture.

**EFD/ EFB** | **LE2.1, LE4.3**  
Woodland edge planting and native  
hedgerow to link into retained  
hedgerow and provide habitat  
connectivity

**EFC/EFE** | **LE7.4**  
Shared use path

**EFD** | **E3.1**  
Mammal pipe. Wildlife ledges with  
directional planting to culvert.

**EFK** | **P4.4**  
PRoW AX3/6/10 diversion along  
Cooks Lane at grade crossing of  
bypass

**EFB/ EFD** | **LE4.3**  
Native species hedgerow to reinforce  
landscape character and tie into  
existing retained vegetation.

**EFD** | **E3.1**  
Mammal pipe. Wildlife ledges with  
directional planting to culvert.

**EFC/ EFE/  
EFD** | **LE7**  
River Banwell bridge, stone faced  
walling to match existing low wall  
boundaries in Riverside. Wildlife  
ledges to bridge crossing.

**EFB/ EFE/  
EFD** | **LE4.4**  
Moor Road link. Native hedgerow  
boundary with intermittent hedgerow  
trees reflecting local landscape  
character

**EFD** | **LE5.2**  
Bat hopover to guide flightline

**EFD** | **E3.2**  
Kingfisher opportunities perches and  
willow planting. Potential opportunity  
to include as accommodation works  
alongside as site compound.

**EFA/EFB/  
EFD/ EFH** | **LE1.3 LE 2.2**  
Flood compensation area, including  
rich grassland with seasonal wet  
meadow. Woodland edge/scrub  
planting. Intermittent trees, reinforced  
landscape structure and field  
boundary.

**NOTES:**

Environmental Function (EF) | Brief Description or justification for inclusion

**ENVIRONMENTAL FUNCTIONS:**

- EFA Visual Screening
- EFB Landscape Integration
- EFC Enhancing the Built Environment
- EFD Nature Conservation & Biodiversity
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- EFH Heritage
- EFJ Auditory Amenity
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- EFA Access / Landscape Management
- EFB LE2.7 Scattered trees - orchard trees
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  - Reinstatement grass
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  - Reinstatement grass
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- LE2 Woodland Edge
  - LE2.7 Scattered Trees
  - LE2.8 Scrub
- LE4 Hedges
- Retained Hedgerows
- LE4.3 Native Species Hedgerows
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- LE5.1 Individual Trees
- LE 6.2 Watercourse/Drains
- LE6.4 Marsh and Wet Grassland
  - Traditional orchard
- Retained tree(s) of note
- LE7 Hard Landscape
  - LE7.7 Retaining wall
- PRoW
- PRoW (Diversion)
- E3.2 Mammal crossing provision
- E3.2 Protected species fencing

**ENVIRONMENTAL ELEMENTS**

- E1 NOISE**
  - E1.1 Noise reducing surfaces
  - E1.2 Noise Barrier built elements
- E2 WATER**
  - E2.1 Water Pollution Control Measures
  - E2.2 Surface Water Outfalls
- E3 NATURE CONSERVATION & BIODIVERSITY**
  - E3.1 Protected Species
  - E3.2 Ecological Protection Measures
- E4 PESTS & INJURIOUS WEEDS**
  - E4.1 Injurious weeds
  - E4.2 Legislated Pests

**PLANNING AND POLICY FEATURES**

- P1 NATURE CONSERVATION DESIGNATIONS**
  - P1.1 Statutory nature conservation designation
  - P1.2 Non-statutory designation
- LANDSCAPE DESIGNATION**
  - P2.1 Statutory designation
  - P2.2 Local Landscape designation
- CULTURAL HERITAGE**
  - P3 Cultural Heritage Feature
  - P3.2 Conservation Area
- LAND USE**
  - P4.1 Agricultural Land
  - P4.3 Public Open Space
  - P4.4 Public Rights of Way
- WATER QUALITY**
  - P6.1 Watercourse Quality
  - P6.2 Areas of Ground Water Sensitivity

SCALE 1:1250

**NOTES:**

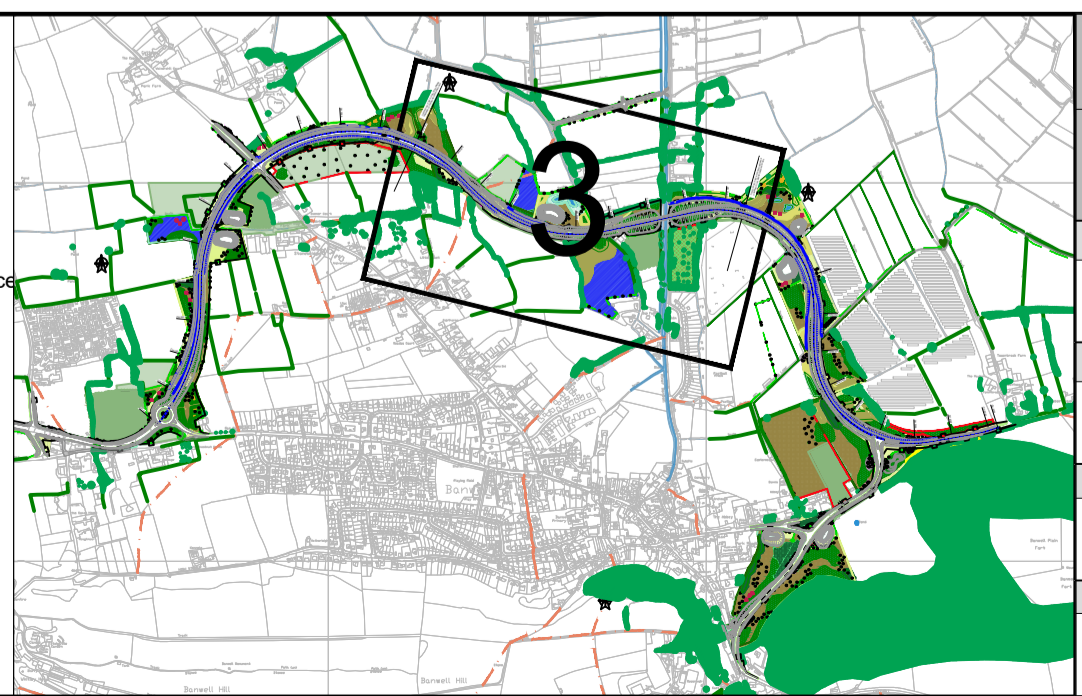
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**SCHEME ELEMENTS:**

- Scheme - On embankment
- Scheme - In cutting
- Swale
- Shared use path (3m wide unless labelled otherwise)
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- Existing vegetation (Hedgerow)
- Attenuation basin
- Flood Compensation Area

AONB Area of Outstanding Natural Beauty  
SAC Special Area of Conservation  
SNCI Site of Nature Conservation Importance  
SSSI Site of Special Scientific Interest  
TPO Tree Preservation Order  
PMA Private Means of Access  
PRoW Public Right of Way

FOR RED LINE BOUNDARY AND ESSENTIAL MITIGATION BOUNDARY REFER TO GENERAL ARRANGEMENT DRAWINGS BNWLBP-ARP-HGN-X\_BB\_Z-DR-CH-000001 TO 000006



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IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS (REFERENCE SHALL ALSO BE MADE TO THE DESIGN HAZARD LOG)

CONSTRUCTION	REF NO.	(TO BE POPULATED)	Y	L	S	T	R
MAINTENANCE/ CLEANING	REF NO.	(TO BE POPULATED)	Y <td>L <td>S</td> <td>T</td> <td>R</td> </td>	L <td>S</td> <td>T</td> <td>R</td>	S	T	R
USE	REF NO.	(TO BE POPULATED)	L <td>J <td>W <td>T</td> <td>M</td> </td></td>	J <td>W <td>T</td> <td>M</td> </td>	W <td>T</td> <td>M</td>	T	M
DECOMMISSIONING/ DEMOLITION	REF NO.	(TO BE POPULATED)	L <td>S</td> <td>T</td> <td>E</td> <td>M</td>	S	T	E	M

Rev.	Date	Description	By	Chk'd	App'd	Auth'd
P01	03/03/22	FIRST ISSUE		YL	SD	TE RW
P02	21/06/22	SECOND ISSUE		YL	LC	AC RW
P03	24/06/22	THIRD ISSUE		LC	SD	AC MJ
P04	05/07/22	FOURTH ISSUE		LC	JW	TE MJ
P05	12/07/22	ISSUE FOR PLANNING		LC	SD	TE MJ
P06	14/12/22	UPDATED FOLLOWING PLANNING CONSULTATION		SD	JP	TE MJ

Suitability Drawing Status  
**S8 FOR PLANNING APPLICATION**

**GRIFFITHS**  
civil engineering and construction

**ARUP** **TACP**

Client: **North Somerset COUNCIL**

Project Title: **BANWELL BYPASS AND HIGHWAY IMPROVEMENTS**

Drawing Title: **ENVIRONMENTAL MASTERPLAN SHEET 3 OF 6**

Scale: 1:1250 By: SD Checked: JP Approved: TE Authorised: MJ

Original Size: A1 Date: 14/12/22 Date: 14/12/22 Date: 14/12/22 Date: 14/12/22

Drawing Number: BNWLBP - TACP - ELS - X\_BB\_Z - DR - LE - 000012 P06

Project: BNWLBP - TACP - ELS - X\_BB\_Z Location: -DR-LE-000012 Type: Role: Number: P06