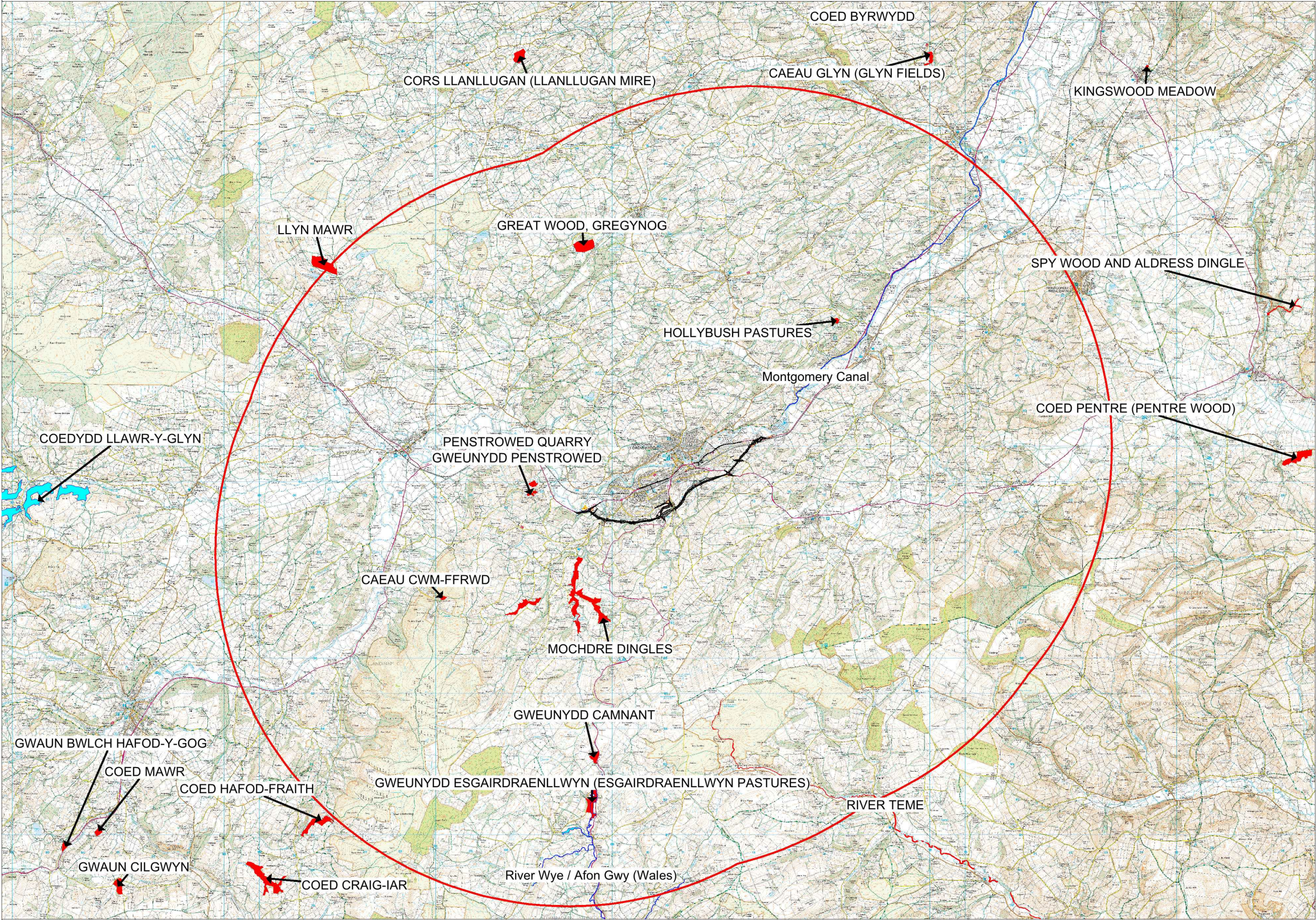


Environmental Designations

- 30km Buffer Area
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Sites of Special Scientific Interest (SSSI)



Environmental Designations

- 10km Buffer Area
- Special Area of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)

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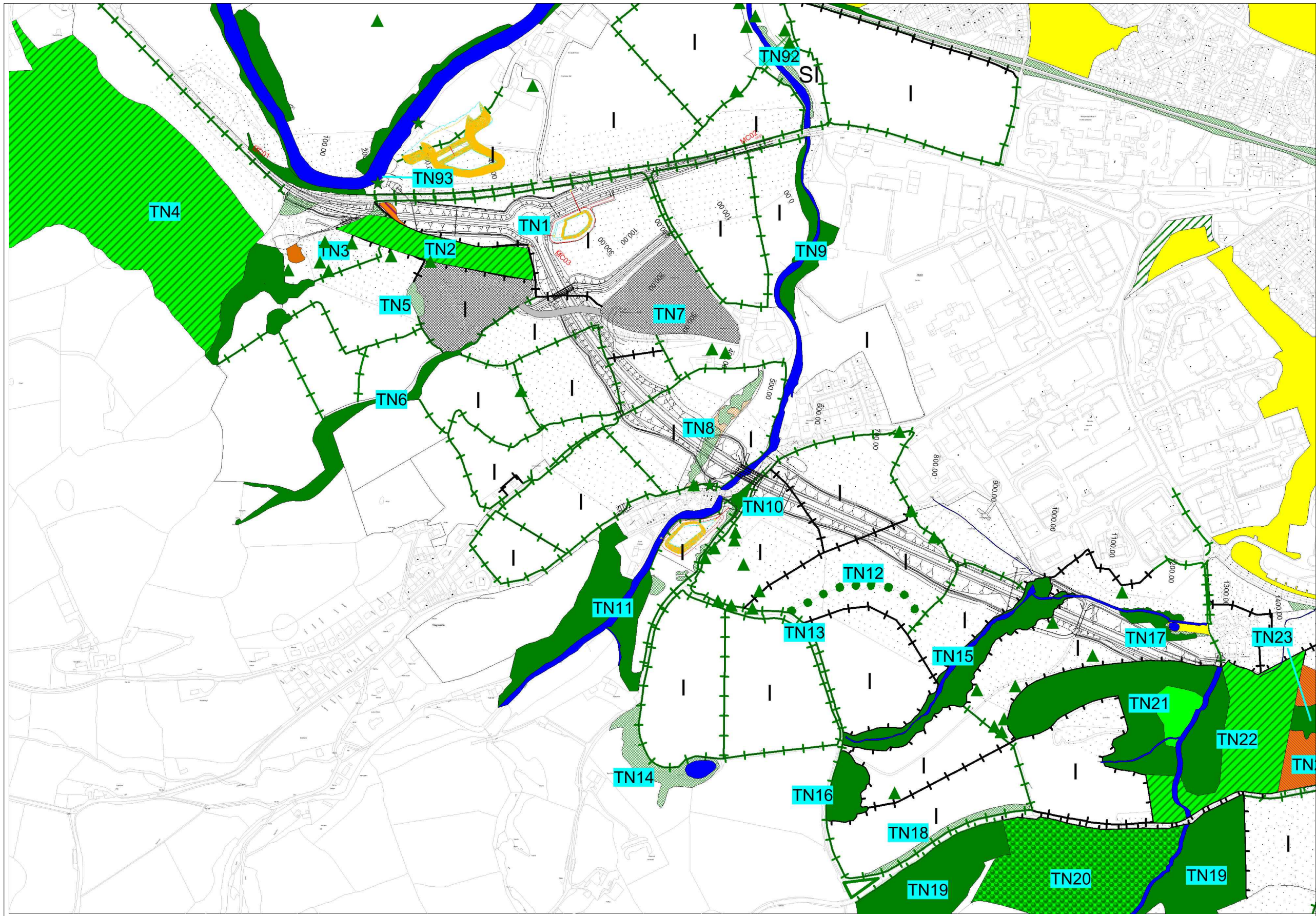
Job Title

A483/A489
Newtown Bypass

Drawing Title

Environmental Statement
Nature Conservation
Ecological Designations
Sheet 2 of 2

Date	OCT 2014	Drawn by	FS
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Drawing Status	FINAL	Approved	JW
Job No	60597	Figure No	8.1b
		Issue	-



- Phase I Habitat Survey Legend**
- Wall
 - Species poor hedge with trees
 - Fence
 - Broadleaved tree line
 - Coniferous tree line
 - Improved / Poor semi-improved grassland
 - Bare ground
 - Broad-leaved Semi-natural woodland
 - Dense/continuous scrub
 - Mixed Semi-natural woodland
 - Coniferous Semi-natural woodland
 - Running water
 - Amenity grassland
 - Broad-leaved plantation woodland
 - Coniferous plantation woodland
 - Mixed plantation woodland
 - Marsh/marshy grassland
 - Continuous bracken
 - Scattered bracken
 - Tall ruderal herb and fern
 - Semi-improved neutral grassland
 - Glandulas Holiday Home Park
 - Invasive species - Japanese Knotweed / Giant Hogweed
 - Scattered Scrub
 - Broad-leaved scattered trees

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Newtown Bypass

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Nature Conservation
Phase 1 Habitat Survey
Sheet 1 of 9

Date

OCT 2014

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JB

Scale at A3

Not to Scale

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MB

Drawing Status

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Job No

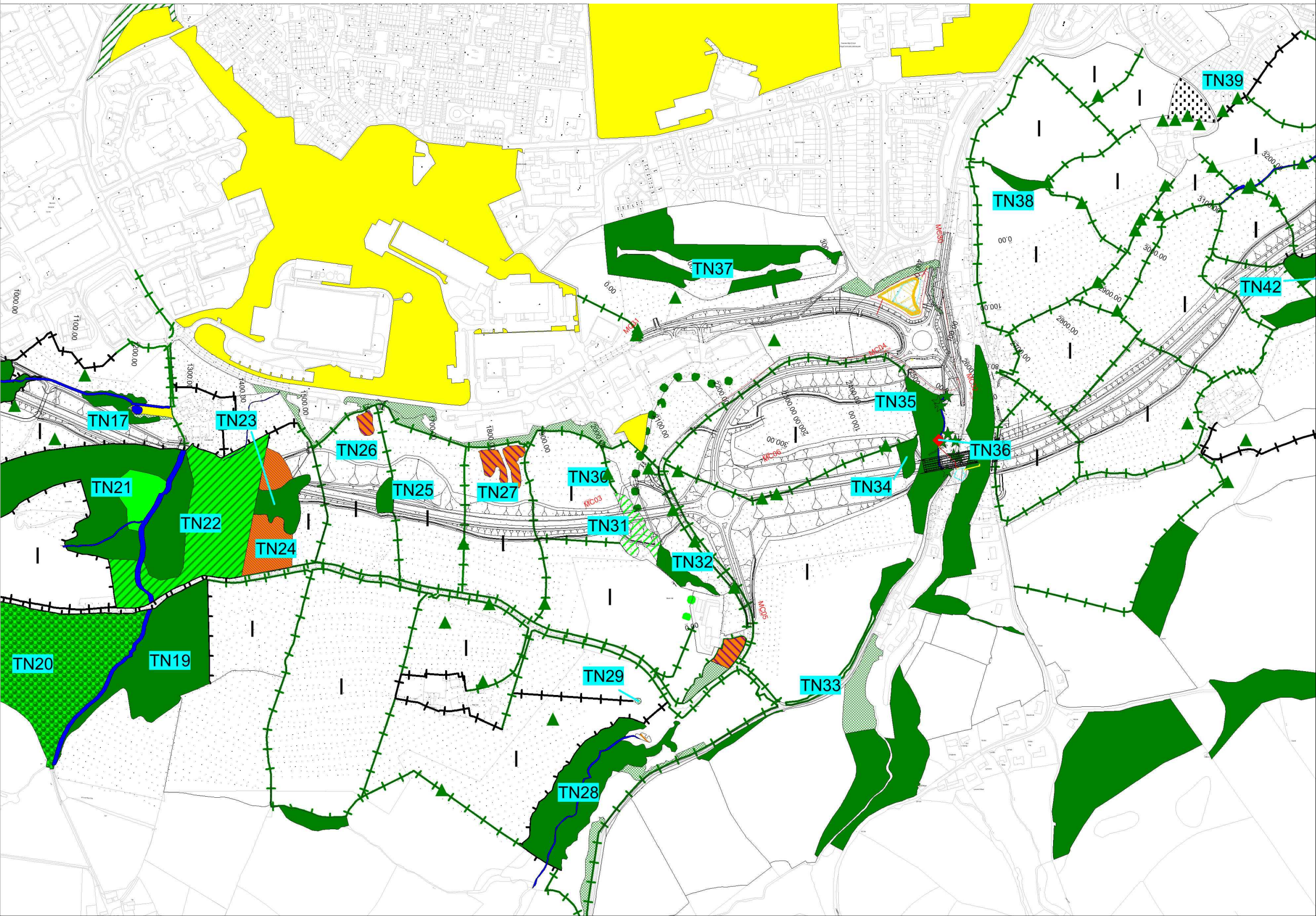
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Figure No

8.2a

Issue

-



- Phase I Habitat Survey Legend**
- Wall
 - Species poor hedge with trees
 - Fence
 - Broadleaved tree line
 - Coniferous tree line
 - Improved / Poor semi-improved grassland
 - Bare ground
 - Broad-leaved Semi-natural woodland
 - Dense/continuous scrub
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 - Invasive species - Japanese Knotweed / Giant Hogweed
 - Scattered Scrub
 - Broad-leaved scattered trees

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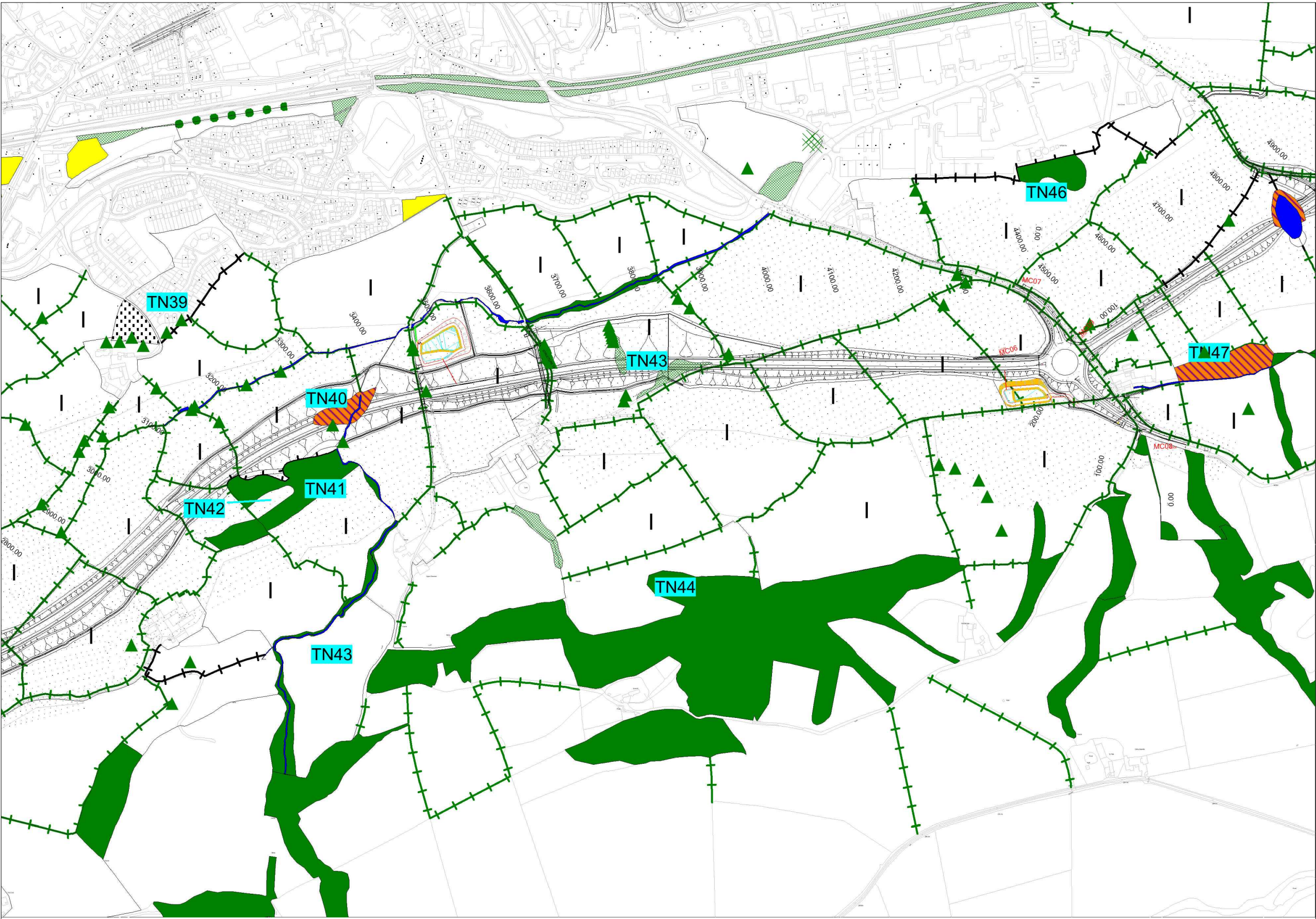
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Figure No

8.2b

Issue

-



- Phase I Habitat Survey Legend**
- Wall
 - Species poor hedge with trees
 - Fence
 - Broadleaved tree line
 - Coniferous tree line
 - Improved / Poor semi-improved grassland
 - Bare ground
 - Broad-leaved Semi-natural woodland
 - Dense/continuous scrub
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 - Scattered Scrub
 - Broad-leaved scattered trees

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Drawing Status

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Job No

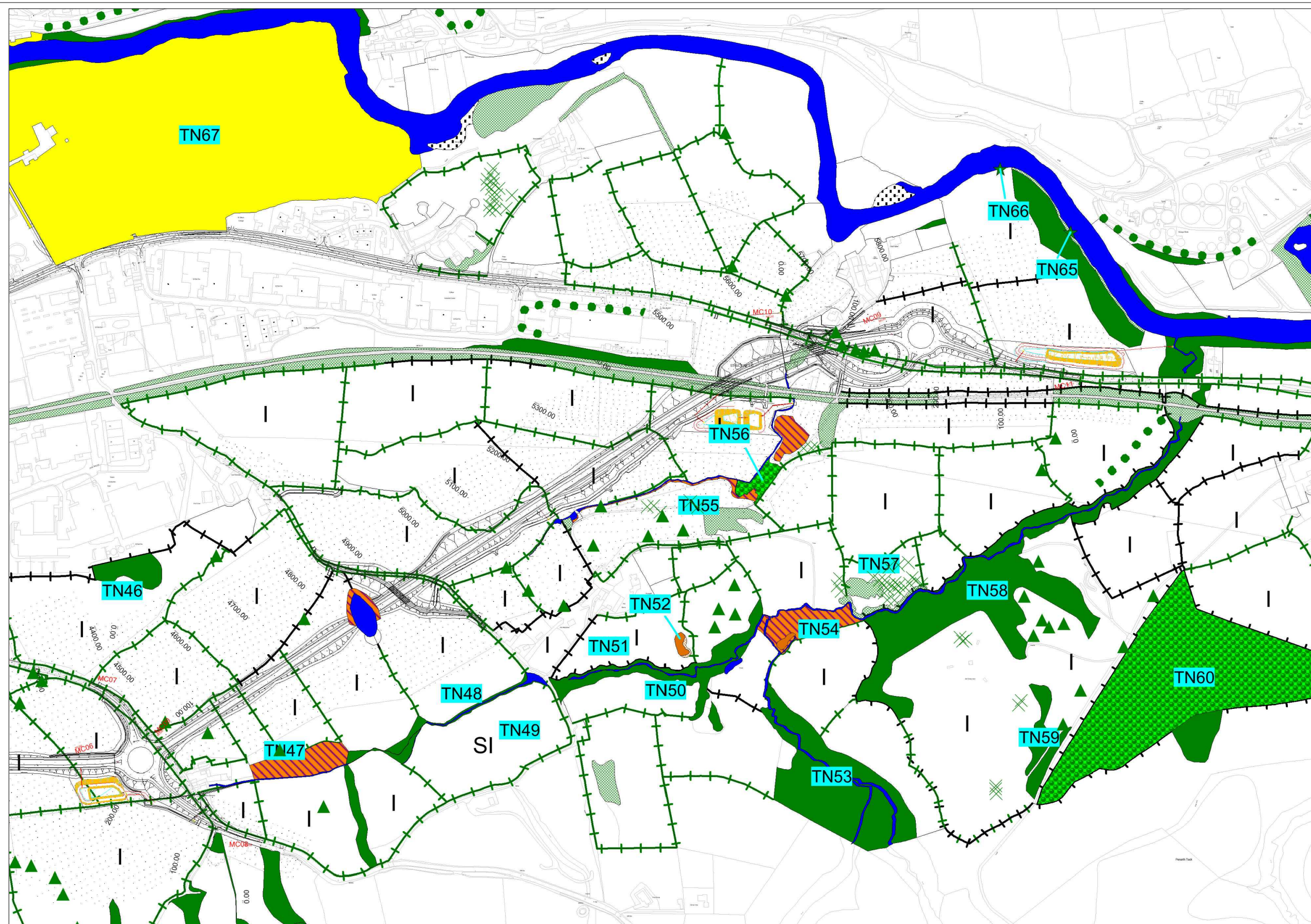
60597

Figure No

8.2c

Issue

-



- Phase I Habitat Survey Legend**
- Wall
 - Species poor hedge with trees
 - Fence
 - Broadleaved tree line
 - Coniferous tree line
 - Improved / Poor semi-improved grassland
 - Bare ground
 - Broad-leaved Semi-natural woodland
 - Dense/continuous scrub
 - Mixed Semi-natural woodland
 - Coniferous Semi-natural woodland
 - Running water
 - Amenity grassland
 - Broad-leaved plantation woodland
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 - Glandulas Holiday Home Park
 - Invasive species - Japanese Knotweed / Giant Hogweed
 - Scattered Scrub
 - Broad-leaved scattered trees

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Nature Conservation
Phase 1 Habitat Survey
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Date	OCT 2014	Drawn by	JB
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Job No	60597	Figure No	8.2d
		Issue	-

Phase I Habitat Survey Target Notes

Target Note 1 –Improved agricultural field, drainage ditch along boundary with woodland, small rush dominated improved marshy grassland area to western corner, very wet at time of survey

Target Note 2 – A mixed woodland (c.60% conifer, 40% broad-leaved) to 20m tall but patchy in cover on a steep slope with the central portion dominated by Larch (*Larix decidua*) and the eastern and western ends by Ash (*Fraxinus excelsior*) and Beech (*Fagus sylvatica*) with Sycamore (*Acer pseudoplatanus*) and pedunculate oak (*Quercus robur*). There is a well-developed lower hedge dominated by Hazel (*Corylus avellana*) with Holly (*Ilex aquifolium*) and Hawthorn (*Crataegus monogyna*). The ground layer is patchy and generally poor being grazed with some open grassy areas, patches of Nettles (*Urtica dioica*) and Bramble (*Rubus fruticosus* agg), and at the western end Bracken (*Pteridium aquilinum*) and Bramble.

Target Note 3 – Agricultural field with scattered mature scrub and broad-leaved trees, area of dense Bracken (*Pteridium aquilinum*) cover adjacent to the north west boundary

Target Note 4 – Mixed plantation woodland, limited ground flora due to dense canopy

Target Note 5 – Dense scrub on field boundary, dominated by European Gorse (*Ulex europeaus*)

Target Note 6 – Broad-leaved woodland along small stream, limited ground flora due to grazing and canopy cover, spp include: Oak, Hazel (*Corylus avellana*), Holly, Bramble

Target Note 7 – Holiday Park, areas of amenity grassland and small gardens

Target Note 8 – Slope between agriculturally improved fields, areas of dense Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*) scrub and scattered Bracken, improved grassland species dominate ground flora. A rabbit burrow is also present within this area. spp include: Yorkshire Fog, Perennial Rye Grass (*Lolium perenne*)

Target Note 9 – Broad-leaved woodland and mature scrub along tributary riverbank, spp include: Oak, Willow spp (*Salix* spp), European Gorse, Wild Garlic (*Allium ursinum*), Yorkshire Fog, Perennial Rye Grass

Target Note 10 – Small Ash (*Fraxinus excelsior*) dominated wooded area on steep embankment between main road and single vehicle lane, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Betula pendula</i>	Silver Birch	R
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fraxinus excelsior</i>	Ash	D
<i>Salix cinerea</i>	Grey Willow	O
Understorey and Ground Layer		
<i>Ajuga reptans</i>	Bugle	O
<i>Allium ursinum</i>	Wild Garlic	F
<i>Anthriscus sylvestris</i>	Cow Parsley	A
<i>Cerastium fontanum</i>	Common Mouse-Ear	O
<i>Cirsium spp</i>	Thistle spp	F
<i>Festuca spp</i>	Fescue spp	A
<i>Galium aparine</i>	Cleavers	F
<i>Geranium robertianum</i>	Herb Robert	F
<i>Hedera helix</i>	Ivy	F
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Holcus lanatus</i>	Yorkshire Fog	A
<i>Myosotis arvensis</i>	Field Forget-Me-Not	R
<i>Prunella vulgaris</i>	Self Heal	O
<i>Rosa arvensis</i>	Field Rose	O
<i>Rubus fruticosus</i> agg	Bramble	F
<i>Taraxacum officinale</i>	Dandelion	F
<i>Vicia spp</i>	Vetch spp	R

Target Note 11 – Ash dominated woodland on steep stream embankment and adjacent dense Blackthorn scrub, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Betula pendula</i>	Silver Birch	R
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	D
<i>Ilex aquifolium</i>	Holly	O
<i>Quercus spp</i>	Oak	A
<i>Salix cinerea</i>	Grey Willow	O
Understorey and Ground Layer		
<i>Allium ursinum</i>	Wild Garlic	A
<i>Anemone nemorosa</i>	Wood Anemone	FLA
<i>Anthriscus sylvestris</i>	Cow Parsley	R
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cirsium spp</i>	Thistle spp	R
<i>Hedera helix</i>	Ivy	O
<i>Hyacinthoides non-scripta</i>	Bluebell	FLA
<i>Mercurialis perennis</i>	Dog's Mercury	O/LA
<i>Orchis mascula</i>	Early-Purple Orchid	O
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rosa arvensis</i>	Field Rose	R
<i>Rubus fruticosus</i> agg	Bramble	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	R
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	R
<i>Viola riviniana</i>	Common Dog-Violet	O

Target Note 12 – Mature tree line within improved agricultural field, ground flora heavily sheep grazed as surrounding field, tree line dominated by Sycamore (*Acer pseudoplatanus*), Oak and Ash also present

Target Note 13 – Species poor hedgerow with adjacent species rich road verge, spp include: Blackthorn, Hawthorn, Bluebell, Primrose, Early Purple Orchid...

Target Note 14 – Mature dense Blackthorn scrub around farm pond

Target Note 15 – Ash dominated broad-leaved woodland along stream embankments, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Alnus glutinosa</i>	Alder	A
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	D
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Quercus spp</i>	Oak	R
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	A
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Caltha palustris</i>	Marsh Marigold	R/LA
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Chrysoplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	
<i>Festuca spp</i>	Fescue spp	F
<i>Geum urbanum</i>	Wood Avens	O
<i>Holcus lanatus</i>	Yorkshire Fog	R
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Lolium perenne</i>	Perennial Ryegrass	F
<i>Mercurialis perennis</i>	Dog's Mercury	O/LA
<i>Primula vulgaris</i>	Primrose	F
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rosa arvensis</i>	Field Rose	R
<i>Rubus fruticosus</i> agg	Bramble	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	O
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	O

Target Note 16 – Small Ash dominated broad-leaved woodland on western boundary of improved sheep grazed grassland, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fagus sylvatica</i>	Beech	R
<i>Fraxinus excelsior</i>	Ash	D
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	O
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	O
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Conopodium majus</i>	Pignut	R
<i>Dactylis glomerata</i>	Cock's Foot Grass	O
<i>Holcus lanatus</i>	Yorkshire Fog	O
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Pteridium aquilinum</i>	Bracken	O
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rubus fruticosus</i> agg	Bramble	A
<i>Viola riviniana</i>	Common Dog-Violet	R

Target Note 17 – Small Ash dominated broad-leaved woodland on field embankment beside small stream, with a small pond and recreational ground to the east of the woodland, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fraxinus excelsior</i>	Ash	D
<i>Ilex aquifolium</i>	Holly	R
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	R
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	O
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Festuca spp</i>	Fescue spp	F
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Lolium perenne</i>	Perennial Ryegrass	O
<i>Primula vulgaris</i>	Primrose	R
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rosa arvensis</i>	Field Rose	R
<i>Rubus fruticosus</i> agg	Bramble	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	O
<i>Taraxacum officinale</i>	Dandelion	R
<i>Urtica dioica</i>	Stinging Nettle	O

Target Note 18 – Mature Hawthorn scrub along steep roadside embankment spp present:

Species Name	Common Name	Abundance
<i>Fraxinus excelsior</i>	Ash	R
<i>Corylus avellana</i>	Hazel	F
<i>Lonicera periclymenum</i>	Honeysuckle	A
<i>Rosa arvensis</i>	Field Rose	O
<i>Rubus fruticosus</i> agg	Bramble	F
<i>Salix cinerea</i>	Grey Willow	R
<i>Crataegus monogyna</i>	Hawthorn	D

Target Note 19 – Ash and Oak broad-leaved woodland divided into two sections by mixed broad-leaved and coniferous wood, eastern section moderately sheep grazed and wetter than western section due to presence of natural springs and shallower slope gradient, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fagus sylvatica</i>	Beech	O
<i>Fraxinus excelsior</i>	Ash	D
<i>Ilex aquifolium</i>	Holly	F
<i>Prunus spinosa</i>	Blackthorn	O
<i>Quercus spp</i>	Oak	A
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	F
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Chrysoplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	R/LA
<i>Cirsium spp</i>	Thistle spp	R
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Lonicera periclymenum</i>	Honeysuckle	F
<i>Moss spp 1</i>	Moss spp 1	O
<i>Moss spp 2</i>	Moss spp 2	O
<i>Primula vulgaris</i>	Primrose	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus</i> agg	Bramble	R
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Taraxacum officinale</i>	Dandelion	O
<i>Ulex europaeus</i>	European Gorse	R
<i>Urtica dioica</i>	Stinging Nettle	F

Target Note 20 – Mixed coniferous and broad-leaved woodland, diverse ground flora with good percentage cover, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Conifer spp</i>	Conifer spp	A
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fagus sylvatica</i>	Beech	R
<i>Fraxinus excelsior</i>	Ash	F
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Quercus spp</i>	Oak	R
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	F
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Chrysoplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	R/LA
<i>Cirsium spp</i>	Thistle spp	R
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	O
<i>Galium aparine</i>	Cleavers	F
<i>Geranium robertianum</i>	Herb Robert	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Lonicera periclymenum</i>	Honeysuckle	A
<i>Mercurialis perennis</i>	Dog's Mercury	O/LA
<i>Moss spp 1</i>	Moss spp 1	O
<i>Primula vulgaris</i>	Primrose	R
<i>Pteridium aquilinum</i>	Bracken	F
<i>Ranunculus acris</i>	Meadow Buttercup	R
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Rubus fruticosus</i> agg	Bramble	A
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Taraxacum officinale</i>	Dandelion	R
<i>Teucrium scorodonia</i>	Wood Sage	O
<i>Ulex europaeus</i>	European Gorse	R
<i>Urtica dioica</i>	Stinging Nettle	F



Target Note 21 – Woodland of two types: 1. A dense conifer stand with little ground flora. 2. Broadleaved woodland. The woodland on the slopes is mainly Oak (*Quercus robur*), with hazel (*Corylus avellana*) with scattered ash (*Fraxinus excelsior*) mainly along the bottom edge. On the plateau at the top is a small area of ash coppice.

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Conifer spp</i>	Conifer spp	F
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fagus sylvatica</i>	Beech	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Ilex aquifolium</i>	Holly	F
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
<i>Salix cinerea</i>	Grey Willow	O
Understorey and Ground Layer		
<i>Allium ursinum</i>	Wild Garlic	A
<i>Anemone nemorosa</i>	Wood Anemone	F
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Blechnum spicant</i>	Hard Fern	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Galium aparine</i>	Cleavers	F
<i>Glechoma hederacea</i>	Ground Ivy	O
<i>Holcus lanatus</i>	Yorkshire Fog	O/LF
<i>Hyacinthoides non-scripta</i>	Bluebell	F/LD
<i>Lolium perenne</i>	Perennial Ryegrass	O/LF
<i>Lonicera periclymenum</i>	Honeysuckle	F
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	O/LA
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Rubus fruticosus agg</i>	Bramble	A
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Taraxacum officinale</i>	Dandelion	F
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica filiformis</i>	Slender Speedwell	R
<i>Viola riviniana</i>	Common Dog-Violet	R

Target Note 22 – Mixed wood dominated by coniferous species on eastern steep stream embankment, diverse ground flora limited to open areas and woodland edges due to dense conifer canopy in parts, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Conifer spp</i>	Conifer spp	D
<i>Corylus avellana</i>	Hazel	
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Fagus sylvatica</i>	Beech	R
<i>Fraxinus excelsior</i>	Ash	R
<i>Ilex aquifolium</i>	Holly	R
<i>Prunus spinosa</i>	Blackthorn	R
<i>Quercus spp</i>	Oak	O
Understorey and Ground Layer		
<i>Allium ursinum</i>	Wild Garlic	O
<i>Anemone nemorosa</i>	Wood Anemone	R
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Blechnum spicant</i>	Hard Fern	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Galium aparine</i>	Cleavers	R
<i>Glechoma hederacea</i>	Ground Ivy	R
<i>Holcus lanatus</i>	Yorkshire Fog	O/LF
<i>Hyacinthoides non-scripta</i>	Bluebell	O/LF
<i>Lolium perenne</i>	Perennial Ryegrass	O/LF
<i>Lonicera periclymenum</i>	Honeysuckle	F
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Primula vulgaris</i>	Primrose	R
<i>Pteridium aquilinum</i>	Bracken	O/LA
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Rubus fruticosus agg</i>	Bramble	F
<i>Rumex crispus</i>	Curled Dock	R
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	O
<i>Taraxacum officinale</i>	Dandelion	R
<i>Urtica dioica</i>	Stinging Nettle	O
<i>Veronica filiformis</i>	Slender Speedwell	R

Target Note 23 – Small wooded area within marshy grassland, ground flora limited due to moderate/heavy grazing, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Betula pendula</i>	Silver Birch	R
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fagus sylvatica</i>	Beech	R
<i>Ilex aquifolium</i>	Holly	R
<i>Prunus spinosa</i>	Blackthorn	O
<i>Quercus spp</i>	Oak	D
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Moss spp</i>	Moss spp	F
<i>Primula vulgaris</i>	Primrose	R
<i>Pteridium aquilinum</i>	Bracken	R
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Rubus fruticosus agg</i>	Bramble	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Viola riviniana</i>	Common Dog-Violet	R

Target Note 24 – Semi-improved species poor marshy grassland, moderate/heavy horse grazing, will become more improved with continued heavy grazing, spp present:

Species Name	Common Name	Abundance
<i>Bellis perennis</i>	Daisy	R
<i>Cirsium spp</i>	Thistle spp	R
<i>Festuca spp</i>	Fescue spp	F
<i>Holcus lanatus</i>	Yorkshire Fog	O
<i>Juncus effusus</i>	Soft Rush	A
<i>Moss spp</i>	Moss spp	A
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Plantago major</i>	Greater Plantain	R
<i>Primula vulgaris</i>	Primrose	R
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus ficaria</i>	Lesser Celadine	O
<i>Rumex crispus</i>	Curled Dock	R
<i>Taraxacum officinale</i>	Dandelion	O

Target Note 25 – Small wood within the boundary of improved agricultural fields, western section dominated by broad-leaved species, eastern section dominated by coniferous species, ground flora consistent across both, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
Western Section		
<i>Betula pendula</i>	Silver Birch	O
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Quercus spp</i>	Oak	D
<i>Sorbus aucuparia</i>	Rowan	R
Eastern Section		
<i>Conifer spp</i>	Conifer spp	D
<i>Corylus avellana</i>	Hazel	O
<i>Quercus spp</i>	Oak	R
Understorey and Ground Layer		
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Lolium perenne</i>	Perennial Rye Grass	A
<i>Poa pratensis</i>	Smooth Meadow Grass	A
<i>Ranunculus ficaria</i>	Lesser Celadine	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Sambucus nigra</i>	Elder	R
<i>Stellaria media</i>	Common Chickweed	R
<i>Urtica dioica</i>	Stinging Nettle	F

Target Note 26 – Soft Rush (*Juncus effuses*) dominated marshy area within agriculturally improved grassland, few other marshy grassland species, located within a shallow valley like depression toward the base of an embankment

Target Note 27 – Soft Rush dominated areas along the northern section of agriculturally improved grassland, located within shallow depression at the base of field embankment, ground slopes towards stream along eastern boundary of field, few other marshy grassland species present

Target Note 28 – Broad-leaved woodland within steep sided stream valley, diverse ground flora with good continuous cover throughout, east embankment wetter than west embankment due to a number of small natural springs, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fagus sylvaticus</i>	Beech	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
<i>Salix cinerea</i>	Grey Willow	O
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	A
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Asplenium scolopendrium</i>	Hart's Tongue	R
<i>Cardamine pratensis</i>	Cuckoo Flower	F
<i>Chrysosplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	O/LA
<i>Cirsium spp</i>	Thistle spp	R
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	R
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Galium aparine</i>	Cleavers	O
<i>Geranium robertianum</i>	Herb Robert	F
<i>Geum urbanum</i>	Wood Avens	O
<i>Hedera helix</i>	Ivy	O
<i>Holcus lanatus</i>	Yorkshire Fog	O
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Lolium perenne</i>	Perennial Rye Grass	R
<i>Lonicera periclymenum</i>	Honeysuckle	F
<i>Moss spp</i>	Moss spp	O/LA
<i>Oxalis acetosella</i>	Wood Sorrell	O/LA
<i>Primula vulgaris</i>	Primrose	F
<i>Pteridium aquilinum</i>	Bracken	O
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Rubus fruticosus agg</i>	Bramble	A
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	R/LA
<i>Taraxacum officinale</i>	Dandelion	O
<i>Ulex europeaus</i>	European Gorse	R/LA
<i>Urtica dioica</i>	Stinging Nettle	R/LA
<i>Viola riviniana</i>	Common Dog Violet	R

Target Note 29 – Small area of Hazel (*Corylus avellana*) within an agriculturally improved field

Target Note 30 – Species rich embankment within agriculturally improved field, small quarry/exposed rock area adjacent to woodland, spp present:

Species Name	Common Name	Abundance
<i>Alnus glutinosa</i>	Alder	R/LF
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Cirsium spp</i>	Thistle spp	O
<i>Corylus avellana</i>	Hazel	R/L O
<i>Crataegus monogyna</i>	Hawthorn	R/LF
<i>Digitalis purpurea</i>	Foxglove	O
<i>Fraxinus excelsior</i>	Ash (sapling)	R
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Lolium perenne</i>	Perennial Rye Grass	O
<i>Potentilla spp</i>	Potentilla spp	R
<i>Primula vulgaris</i>	Primrose	F
<i>Prunus spinosa</i>	Blackthorn	R/L O
<i>Pteridium aquilinum</i>	Bracken	R/LF
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rosa arvensis</i>	Field Rose	O
<i>Rubus fruticosus agg</i>	Bramble	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Sambucus nigra</i>	Elder	O
<i>Silene dioica</i>	Red Campion	F
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica chamaedrys</i>	Germander Speedwell	R

Target Note 31 – Conifer dominated woodland, sparse but fairly diverse ground flora, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Alnus glutinosa</i>	Alder	O
<i>Conifer spp</i>	Conifer spp	D
<i>Crataegus monogyna</i>	Hawthorn	O
Understorey and Ground Layer		
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Conopodium majus</i>	Pignut	R
<i>Digitalis purpurea</i>	Foxglove	R
<i>Epilobium spp</i>	Willowherb spp	R
<i>Glechoma hederacea</i>	Ground Ivy	R
<i>Holcus lanatus</i>	Yorkshire Fog	O
<i>Hyacinthoides non-scripta</i>	Bluebell	R
<i>Lolium perenne</i>	Perennial Rye Grass	O
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Pteridium aquilinum</i>	Bracken	O
<i>Rubus fruticosus agg</i>	Bramble	O
<i>Silene dioica</i>	Red Campion	R
<i>Taraxacum officinale</i>	Dandelion	R
<i>Urtica dioica</i>	Stinging Nettle	O

Target Note 32 – Broad-leaved dominated woodland, diverse ground flora with good continuous coverage, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Alnus glutinosa</i>	Alder	F
<i>Conifer spp</i>	Conifer spp	R
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	A
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
<i>Sambucus nigra</i>	Elder	O
Understorey and Ground Layer		
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Digitalis purpurea</i>	Foxglove	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Lolium perenne</i>	Perennial Rye Grass	F
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Rumex crispus</i>	Curled Dock	F
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F

Target Note 32 – Broad-leaved dominated woodland, diverse ground flora with good continuous coverage, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Alnus glutinosa</i>	Alder	F
<i>Conifer spp</i>	Conifer spp	R
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	A
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
<i>Sambucus nigra</i>	Elder	O
Understorey and Ground Layer		
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Digitalis purpurea</i>	Foxglove	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Lolium perenne</i>	Perennial Rye Grass	F
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Rumex crispus</i>	Curled Dock	F
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica montana</i>	Wood Speedwell	R



Target Note 33 – Species rich embankment along roadside, recent tree clearance, spp present:

Species Name	Common Name	Abundance
Hedge Layer		
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	D
<i>Fagus sylvatica</i>	Beech	O
Ground Layer		
<i>Acer campestre</i>	Field Maple (seedling)	R
<i>Anthriscus sylvestris</i>	Cow Parsley	F
<i>Arum maculatum</i>	Lords and Ladies	O
<i>Calystegia spp</i>	Bindweed spp	R
<i>Centaurea nigra</i>	Knapweed	O
<i>Cirsium spp</i>	Thistle spp	R
<i>Crataegus monogyna</i>	Hawthorn (low growth)	R
<i>Cruciata laevipes</i>	Crosswort	O/LF
<i>Digitalis purpurea</i>	Foxglove	O
<i>Epilobium spp</i>	Willowherb spp	O
<i>Festuca spp</i>	Fescue spp	O
<i>Galium aparine</i>	Cleavers	F
<i>Galium odoratum</i>	Woodruff	O
<i>Geranium robertianum</i>	Herb Robert	O
<i>Glechoma hederacea</i>	Ground Ivy	O
<i>Hedera helix</i>	Ivy	O/LF
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Holcus lanatus</i>	Yorkshire Fog	O
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Lamiasstrum galeobdolon</i>	Yellow Archangel	R
<i>Lathyrus linifolius</i>	Bitter Vetchling	O
<i>Lolium perenne</i>	Perennial Rye Grass	O
<i>Myosotis sylvatica</i>	Wood Forget Me Not	R
<i>Potentilla reptans</i>	Creeping Cinquefoil	F
<i>Potentilla spp</i>	Potentilla spp	O
<i>Pteridium aquilinum</i>	Bracken	R
<i>Quercus spp</i>	Oak (seedling)	R
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Rosa arvensis</i>	Field Rose	R
<i>Rumex acetosa</i>	Common Sorrell	O
<i>Rumex crispus</i>	Curled Dock	F
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Sambucus nigra</i>	Elder	R
<i>Silene dioica</i>	Red Campion	O
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Taraxacum officinale</i>	Dandelion	F
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Vicia sativa</i>	Common Vetch	O
<i>Vicia sepium</i>	Bush Vetch	O
<i>Alliaria petiolata</i>	Jack By The Hedge	R

Target Note 34 – Small wooded area on top of field embankment, different composition to adjacent woodland, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	D
<i>Prunus spinosa</i>	Blackthorn	F
Understorey and Ground Layer		
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cirsium spp</i>	Thistle spp	O
<i>Conopodium majus</i>	Pignut	O
<i>Cruciata laevipes</i>	Crosswort	R/LF
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Holcus lanatus</i>	Yorkshire Fog	A
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Lolium perenne</i>	Perennial Rye Grass	A
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	R
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Rumex crispus</i>	Curled Dock	F
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Sambucus nigra</i>	Elder	R
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Taraxacum officinale</i>	Dandelion	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Trifolium repens</i>	White Clover	O
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica chamaedrys</i>	Germander Speedwell	R
<i>Vicia sepium</i>	Bush Vetch	R

Target Note 35 – Broad-leaved woodland on steep embankment between agriculturally improved fields and single vehicle lane, diverse ground flora with continuous coverage, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Conifer spp</i>	Conifer spp	R
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	A
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
<i>Salix spp</i>	Willow spp	O
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	A
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Arum maculatum</i>	Lords and Ladies	O
<i>Calystegia spp</i>	Bindweed spp	R
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Conopodium majus</i>	Pignut	O
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Galium aparine</i>	Cleavers	F
<i>Geranium robertianum</i>	Herb Robert	F
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Lamiasstrum galeobdolon</i>	Yellow Archangel	R
<i>Lolium perenne</i>	Perennial Rye Grass	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Poa annua</i>	Annual Meadow Grass	F
<i>Primula vulgaris</i>	Primrose	O
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Sambucus nigra</i>	Elder	R
<i>Stellaria holostea</i>	Greater Stitchwort	R
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Vicia sativa</i>	Common Vetch	O
<i>Viola sepium</i>	Bush Vetch	O
<i>Viola riviniana</i>	Common Dog Violet	R

Target Note 36 – Dense mature Japanese Knotweed (*Fallopia japonica*) along stream banks, sparser younger growth downstream, suggests plants are spreading along stream

Target Note 37 – Broad-leaved dominated mixed woodland, horse grazed and machine cut agricultural fields adjacent, industrial and residential developments surround

Target Note 38 – Small broad-leaved woodland on stream/ditch embankments, streambed dry at the time of survey, some rubbish scattered around, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fraxinus excelsior</i>	Ash	D
<i>Ilex aquifolium</i>	Holly	R
<i>Quercus spp</i>	Oak	R
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	O
<i>Anthriscus sylvestris</i>	Cow Parsley	F
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Galium aparine</i>	Cleavers	F
<i>Hedera helix</i>	Ivy	O
<i>Hyacinthoides non-scripta</i>	Bluebell	F/LA
<i>Melica uniflora</i>	Wood Melick	O
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica chamaedrys</i>	Germander Speedwell	R
<i>Veronica persica</i>	Common Field Speedwell	R
<i>Alliaria petiolata</i>	Jack By The Hedge	R

Target Note 39 – New residential development and building material storage area

Target Note 40 – Small marshy grassland area around natural flush within agriculturally improved sheep grazed fields, some standing water at time of survey, few individual tree species, spp present:

Species Name	Common Name	Abundance
<i>Alnus glutinosa</i>	Alder	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Galium aparine</i>	Cleavers	O
<i>Holcus lanatus</i>	Yorkshire Fog	A
<i>Juncus effusus</i>	Soft Rush	A
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rosa arvensis</i>	Field Rose	R
<i>Rubus fruticosus agg</i>	Bramble	R
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Salix fragilis</i>	Crack Willow	R
<i>Urtica dioica</i>	Stinging Nettle	F

Target Note 41 – Broad-leaved woodland, lacking understorey, some wetter woodland areas dominated by Willow (*Salix spp*), diverse ground flora with varied coverage due to sheep grazing and poaching, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer campestre</i>	Field Maple	O
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Alnus glutinosa</i>	Alder	F
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fagus sylvatica</i>	Beech	F
<i>Quercus spp</i>	Oak	A
<i>Salix cinerea</i>	Grey Willow	O/LF
<i>Ilex aquifolium</i>	Holly	
Understorey and Ground Layer		
<i>Allium ursinum</i>	Wild Garlic	O
<i>Anemone nemorosa</i>	Wood Anemone	O/LF
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Caltha palustris</i>	Marsh Marigold	R/LF
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Conopodium majus</i>	Pignut	R
<i>Cytisus scoparius</i>	Broom	O/LA
<i>Digitalis purpurea</i>	Foxglove	F
<i>Geranium robertianum</i>	Herb Robert	R
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Melica uniflora</i>	Wood Melick	R
<i>Orchis mascula</i>	Early Purple Orchid	R
<i>Poa annua</i>	Annual Meadow Grass	F
<i>Potentilla spp</i>	Potentilla spp	R
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	F
<i>Ranunculus ficaria</i>	Lesser Celadine	F/LD
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rubus fruticosus agg</i>	Bramble	R
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Silene dioica</i>	Red Campion	R
<i>Stellaria holostea</i>	Greater Stitchwort	F
<i>Stellaria media</i>	Common Chickweed	A
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica chamaedrys</i>	Germander Speedwell	R
<i>Veronica persica</i>	Common Field Speedwell	R
<i>Vicia sepium</i>	Bush Vetch	R

Target Note 42 – Small species poor grassland area within the woodland area, different composition to adjacent improved grassland although composition suggests either poor semi improved or improved grassland habitat, spp present:

Species Name	Common Name	Abundance
<i>Bellis perennis</i>	Daisy	O
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Carex spp</i>	Sedge spp	R
<i>Cirsium spp</i>	Thistle spp	R
<i>Holcus lanatus</i>	Yorkshire Fog	A
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Lolium perenne</i>	Perennial Rye Grass	F
<i>Poa annua</i>	Annual Meadow Grass	A
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Rumex acetosa</i>	Common Sorrell	R
<i>Rumex crispus</i>	Curled Dock	R
<i>Taraxacum officinale</i>	Dandelion	O
<i>Trifolium repens</i>	White Clover	O
<i>Urtica dioica</i>	Stinging Nettle	O

Target Note 43 – Broad-leaved woodland along banks of small farmland stream, diverse ground flora, continuous cover, different composition to surrounding improved grasslands, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	cD
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	cD
<i>Quercus spp</i>	Oak	R
<i>Sorbus aucuparia</i>	Rowan	R
Understorey and Ground Layer		
<i>Allium ursinum</i>	Wild Garlic	A
<i>Anemone nemorosa</i>	Wood Anemone	O
<i>Cirsium spp</i>	Thistle spp	R
<i>Conopodium majus</i>	Pignut	O
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	R
<i>Galium aparine</i>	Cleavers	F
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Melica uniflora</i>	Wood Melick	O/LA
<i>Primula vulgaris</i>	Primrose	R
<i>Pteridium aquilinum</i>	Bracken	O
<i>Ranunculus ficaria</i>	Lesser Celadine	F/LA
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rosa arvensis</i>	Field Rose	R
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Silene dioica</i>	Red Campion	R
<i>Stellaria holostea</i>	Greater Stitchwort	R
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Veronica montana</i>	Wood Speedwell	O
<i>Veronica persica</i>	Common Field Speedwell	R

Target Note 44 – Large broad-leaved woodland area along field boundaries, some areas grazed and poached more than others, spp include: Oak, Ash, Holly, Bramble, Wild Garlic, Bluebell, Primrose, Meadow Buttercup, Creeping Buttercup

Target Note 45 – Area of disturbed ground between the broad-leaved woodland areas (TN43, TN44) comprised of dense Hawthorn and Blackthorn scrub within agricultural fields

Target Note 46 – Small broad-leaved woodland on field embankment, ground flora similar to surrounding improved grassland, moderately sheep grazed, Oak dominates canopy species

Target Note 47 – Soft Rush dominated area between agriculturally improved fields, area very wet at the time of survey, few other species present, spp include: Soft Rush, Yorkshire Fog, Perennial Rye Grass, Buttercup Spp

Target Note 48 – Mature Blackthorn and Willow scrub along small stream

Target Note 49 – Poor semi-improved grassland, horse grazed, some Bracken and European Gorse present



Target Note 50 – Broad-leaved woodland along shallow stream, diverse ground flora, good continuous cover, small pond to south western boundary, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Alnus glutinosa</i>	Alder	F
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	A
<i>Ilex aquifolium</i>	Holly	R
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
<i>Salix cinerea</i>	Grey Willow	R
Understorey and Ground Layer		
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Caltha palustris</i>	Marsh Marigold	R/LF
<i>Chrysosplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	R/LF
<i>Cirsium spp</i>	Thistle spp	R
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	F
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Galium aparine</i>	Cleavers	F
<i>Geranium robertianum</i>	Herb Robert	F
<i>Geum urbanum</i>	Water Avens	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Juncus effusus</i>	Soft Rush	R
<i>Lolium perenne</i>	Perennial Rye Grass	F
<i>Mentha aquatica</i>	Water Mint	R
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Moss spp</i>	Moss spp	R
<i>Primula vulgaris</i>	Primrose	O/LF
<i>Pteridium aquilinum</i>	Bracken	R/LF
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rumex crispus</i>	Curled Dock	O
<i>Urtica dioica</i>	Stinging Nettle	F
Pond Vegetation		
<i>Carex spp</i>	Sedge spp	O
<i>Juncus effusus</i>	Soft Rush	F
<i>Mentha aquatica</i>	Water Mint	A
<i>Typha latifolia</i>	Bulrush	A

Target Note 51 – Rough improved grassland, not recently grazed, sward tall and tussocky, last year's growth remains, Soft Rush dominates along southern section beside woodland stream at the base of field slope, spp present:

Species Name	Common Name	Abundance
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	A
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Juncus effusus</i>	Soft Rush	O/LA
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Pteridium aquilinum</i>	Bracken	R/LF
<i>Rumex acetosa</i>	Common Sorrell	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Taraxacum officinale</i>	Dandelion	F

Target Note 52 – Area within improved field with increased species diversity including some dense Bracken, spp present:

Species Name	Common Name	Abundance
<i>Achillea millefolium</i>	Yarrow	R
<i>Ajuga reptans</i>	Bugle	R
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Cirsium spp</i>	Thistle spp	O
<i>Conopodium majus</i>	Pignut	R
<i>Digitalis purpurea</i>	Foxglove	O
<i>Galium aparine</i>	Cleavers	F
<i>Lotus corniculatus</i>	Common Bird's Foot Trefoil	O
<i>Myosotis sylvatica</i>	Field Forget Me Not	R
<i>Poa pratensis</i>	Smooth Meadow Grass	F
<i>Potentilla reptans</i>	Creeping Cinquefoil	R
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	A
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Trifolium repens</i>	White Clover	F
<i>Veronica chamaedrys</i>	Germander Speedwell	R
<i>Vicia spp</i>	Vetch spp	R

Target Note 53 – Broad-leaved woodland along steep sided stream valley between improved fields, diverse ground flora, good continuous coverage throughout wood except within the north west section where ground flora becomes sparse, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fagus sylvaticus</i>	Beech	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	D
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	A
<i>Cerastium fontanum</i>	Common Mouse-Ear	R
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	O
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Galium aparine</i>	Cleavers	F
<i>Geranium robertianum</i>	Herb Robert	F
<i>Geum urbanum</i>	Wood Avens	F
<i>Hedera helix</i>	Ivy	R
<i>Holcus lanatus</i>	Yorkshire Fog	O
<i>Hyacinthoides non-scripta</i>	Bluebell	A
<i>Mercurialis perennis</i>	Dog's Mercury	O/LA
<i>Moss spp</i>	Moss spp	O
<i>Oxalis acetosella</i>	Wood Sorrell	O
<i>Primula vulgaris</i>	Primrose	F
<i>Pteridium aquilinum</i>	Bracken	R
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Rosa arvensis</i>	Field Rose	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	O
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	O
<i>Veronica chamaedrys</i>	Germander Speedwell	O
<i>Veronica filiformis</i>	Slender Speedwell	R
<i>Viola riviniana</i>	Common Dog Violet	R

Target Note 54 – Improved marshy grassland between a small stream along its north boundary and a currently dry drainage ditch to its south boundary, moderately sheep grazed, spp present:

Species Name	Common Name	Abundance
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Carex spp</i>	Sedge spp	R
<i>Chrysosplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	R/LA
<i>Cirsium spp</i>	Thistle spp	O
<i>Deschampsia flexuosa</i>	Wavy Hair Grass	F
<i>Festuca spp</i>	Fescue spp	A
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Juncus effusus</i>	Soft Rush	A
<i>Lolium perenne</i>	Perennial Rye Grass	O
<i>Moss spp</i>	Moss spp	R/LF
<i>Pteridium aquilinum</i>	Bracken	O/LD
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	O
<i>Taraxacum officinale</i>	Dandelion	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Trifolium repens</i>	White Clover	O
<i>Urtica dioica</i>	Stinging Nettle	O

Target Note 55 – Steep field embankment, dominated by Hawthorn and Blackthorn scrub, improved grassland species dominate ground flora, moderately sheep grazed. A small area of willow scrub is also present in the western corner of the field, along the boundary. spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Crataegus monogyna</i>	Hawthorn	D
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	R
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	O
<i>Cirsium spp</i>	Thistle spp	R
<i>Conopodium majus</i>	Pignut	R
<i>Holcus lanatus</i>	Yorkshire Fog	A
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Lathyrus linifolius</i>	Bitter Vetchling	O
<i>Lotus corniculatus</i>	Common Bird's Foot Trefoil	O
<i>Moss spp</i>	Moss spp	R
<i>Plantago lanceolata</i>	Ribwort Plantain	F
<i>Poa pratensis</i>	Smooth Meadow Grass	A
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Lolium perenne</i>	Perennial Rye Grass	F

Target Note 56 – Mixed broad-leaved and coniferous woodland, some areas very wet at the time of survey, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Alnus glutinosa</i>	Alder	A
<i>Conifer spp</i>	Conifer spp	A
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Prunus spinosa</i>	Blackthorn	F
<i>Salix spp</i>	Willow spp	R
Understorey and Ground Layer		
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Chrysosplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	R/LF
<i>Cirsium spp</i>	Thistle spp	R
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Galium aparine</i>	Cleavers	O
<i>Holcus lanatus</i>	Yorkshire Fog	A
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	F

Target Note 57 – Steep south facing field embankment, western section dominated by dense Hawthorn scrub, poor semi-improved ground flora, numerous ant hills across embankment, light to moderate sheep grazed, Soft Rush dominates base of slope beside stream, spp present:

Species Name	Common Name	Abundance
Scrub Layer		
<i>Crataegus monogyna</i>	Hawthorn	D
<i>Ulex europaeus</i>	European Gorse	F
Ground Layer		
<i>Achillea millefolium</i>	Yarrow	R
<i>Cirsium spp</i>	Thistle spp	O
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	R/LF
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Lolium perenne</i>	Perennial Rye Grass	A
<i>Plantago lanceolata</i>	Ribwort Plantain	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Viola riviniana</i>	Common Dog-Violet	O

Target Note 58 – Stream woodland, heavily grazed and poached with limited ground flora in parts, elsewhere ground flora provides continuous good coverage, flora diverse throughout, southern section quite wet around natural springs and flushes, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Fraxinus excelsior</i>	Ash	A
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus spinosa</i>	Blackthorn	F
<i>Quercus spp</i>	Oak	A
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	A
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	R
<i>Chrysosplenium oppositifolium</i>	Opposite Leaved Golden Saxifrage	O/LA
<i>Cirsium spp</i>	Thistle spp	O
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	O/LF
<i>Galium aparine</i>	Cleavers	O
<i>Geranium robertianum</i>	Herb Robert	O
<i>Geum rivale</i>	Water Avens	R
<i>Hedera helix</i>	Ivy	R
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	F/LD
<i>Lolium perenne</i>	Perennial Rye Grass	O
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Moss spp</i>	Moss spp	O
<i>Primula vulgaris</i>	Primrose	R
<i>Ranunculus ficaria</i>	Lesser Celadine	A
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rosa arvensis</i>	Field rose	O
<i>Rubus fruticosus agg</i>	Bramble	F
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Taraxacum officinale</i>	Dandelion	F
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Viola riviniana</i>	Common Dog-Violet	R

Target Note 59 – Two small broad-leaved woodland patches within sheep grazed improved grassland, ground flora limited in diversity and cover, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Corylus avellana</i>	Hazel	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Ilex aquifolium</i>	Holly	O
<i>Prunus avium</i>	Wild Cherry	R
<i>Quercus spp</i>	Oak	A
<i>Sorbus aucuparia</i>	Rowan	R
Understorey and Ground Layer		
<i>Cerastium fontanum</i>	Common Mouse-Ear	R
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Geranium robertianum</i>	Herb Robert	R
<i>Lolium perenne</i>	Perennial Rye Grass	A
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus ficaria</i>	Lesser Celadine	O
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Taraxacum officinale</i>	Dandelion	O
<i>Urtica dioica</i>	Stinging Nettle	F



Target Note 60 – Large mixed broad-leaved and coniferous woodland, some wetter areas dominated by Willow spp around springs and flushes, diverse ground flora, fairly good cover throughout, more limited beneath coniferous species, not grazed, some dense Bracken within, spp present:

Species Name	Common Name	Abundance
Canopy Layer		
<i>Alnus glutinosa</i>	Alder	O
<i>Betula pendula</i>	Silver Birch	O/LF
<i>Conifer spp</i>	Conifer spp	A
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	A
<i>Ilex aquifolium</i>	Holly	F
<i>Quercus spp</i>	Oak	F
<i>Salix cinerea</i>	Grey Willow	O
Understorey and Ground Layer		
<i>Anemone nemorosa</i>	Wood Anemone	O/LF
<i>Arum maculatum</i>	Lords and Ladies	R
<i>Cardamine pratensis</i>	Cuckoo Flower	O
<i>Cerastium fontanum</i>	Common Mouse-Ear	R
<i>Cirsium spp</i>	Thistle spp	F
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	O
<i>Festuca spp</i>	Fescue spp	F
<i>Fragaria vesca</i>	Wild Strawberry	R
<i>Galium aparine</i>	Cleavers	O
<i>Geranium robertianum</i>	Herb Robert	O
<i>Holcus lanatus</i>	Yorkshire Fog	F
<i>Hyacinthoides non-scripta</i>	Bluebell	F/LA
<i>Lonicera periclymenum</i>	Honeysuckle	A
<i>Mercurialis perennis</i>	Dog's Mercury	R/LA
<i>Moss spp</i>	Moss spp	F/LA
<i>Oxalis acetosella</i>	Wood Sorrell	O
<i>Primula vulgaris</i>	Primrose	O
<i>Pteridium aquilinum</i>	Bracken	O/LF
<i>Ranunculus ficaria</i>	Lesser Celadine	F
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Rosa arvensis</i>	Field Rose	F
<i>Rubus fruticosus agg</i>	Bramble	A
<i>Rumex obtusifolius</i>	Broad-Leaved Dock	F
<i>Teucrium scorodonia</i>	Wood Sage	R
<i>Urtica dioica</i>	Stinging Nettle	F
<i>Viola riviniana</i>	Common Dog Violet	R

Target Note 61 – Giant Hogweed (*Heracleum mantegazzianum*) beside river, only a small number of plants at present

Target Note 62 – Japanese Knotweed beside river, low growth, only a small number of plants at present

Target Note 63 – Amenity area including golf course and tennis courts

Target Note 64 – Japanese Knotweed on riverbank, only a small number of plants present

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Client/Team



Llywodraeth Cymru
Welsh Government



Job Title

A483/A489
Newtown Bypass

Drawing Title

Environmental Statement
Nature Conservation
Phase 1 Habitat Survey
Sheet 9 of 9

Date
OCT 2014

Drawn by
JB

Scale at A3
Not to Scale

Checked
MB

Drawing Status
FINAL

Approved
JW

Job No
60597

Figure No
8.2i

Issue
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