Welsh Government

M4 Corridor around Newport

Environmental Statement Volume 3: Appendix 10.21

Hedgerow Survey Report 2015

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Summary

- RPS has undertaken a hedgerow survey on land along the route of the proposed M4 Corridor around Newport (M4CaN) between Castleton and Magor to inform the ecological baseline for the Environmental Impact Assessment (EIA) of the Scheme. The EIA is reported in the M4CaN Environmental Statement (ES) of which this document is an appendix to the chapter on Ecology and Nature Conservation.
- S.2 A hedgerow survey undertaken by Arup on behalf of Welsh Government in 2014 is reported separately Appendix 10.5 of the M4CaN ES.
- **S.3** This document reports the findings of the 2015 hedgerow survey, which was undertaken from September to October 2015 using standard guidance given in the Hedgerow Survey Handbook (DEFRA, 2007).
- A total of forty eight hedgerows were surveyed between Castleton and Rogiet along the new section of motorway. Hedgerows selected were those which had not previously been surveyed in the 2014 hedgerow survey (ES Appendix 10.5) and which would be affected by the proposed new section of motorway.
- S.5 Thirty eight of the hedgerows were classified as 'Important' in accordance with the Hedgerow Regulations criteria.

1 Introduction

- 1.1.1 RPS has undertaken a hedgerow survey of land along the route of the proposed M4 Corridor around Newport (M4CaN) between Castleton and Magor to inform the ecological baseline for an Environmental Impact Assessment (EIA) of the Scheme. The survey included hedgerows within or close to the land affected by the new section of motorway following the guidance set out in the Hedgerow Survey Handbook (DEFRA, 2007) and the requirements of the Hedgerow Regulations 1997. The EIA is reported in the M4CaN Environmental Statement (ES) of which this document is an appendix to the chapter on Ecology and Nature Conservation.
- A hedgerow survey previously undertaken by Arup on behalf of Welsh Government in 2014 is reported separately in Appendix 10.5 of the M4CaN ES. A review of that work was undertaken independently by Hyder (see Appendix 9.1 in the ES Scoping Report (ES Appendix 5.1)) and RPS (see ES Chapter 10). The conclusions of that review and the requirements for additional surveys in 2015 were set out in the Scope of Ecology Surveys Report (see Appendix 9.1 of the ES Scoping Report). This was discussed with Natural Resources Wales (NRW) and they were further consulted on the scope of the proposed surveys through the consultation on the ES Scoping Report.
- 1.1.3 This document reports the findings of the hedgerow survey undertaken from September to October 2015. The hedgerows selected for the 2015 survey were those which had not previously been surveyed in the 2014 hedgerow survey. This report outlines the previous survey carried out and the reasons for this additional survey (Section 2), describes the methods used in the survey (Section 3) and the findings of the survey (Section 4). A discussion of the survey findings is provided in Section 5.

2 Previous Surveys

2.1 Introduction

- 2.1.1 The 2014 hedgerow survey is reported in Appendix 10.5 of the ES
- **2.1.2** The objectives of the survey were as follows.
 - To identify 'Important' hedgerows in accordance with the Hedgerow Regulations 1997.
 - To identify hedgerows that are 'Important' with regard to providing habitat for protected species.
- 2.1.3 The survey area was based on a 250 metre buffer around the physical extents of the alignment studied in 2007/8, including the route alignment proposed at that time, potential junctions and water treatment areas.

2.2 2014 Survey Method

- **2.2.1** Information was recorded in the field. An individual recording sheet was used for each survey of a hedgerow.
- 2.2.2 A total of 516 hedgerows were surveyed within the study area, with information being collected from the full extent of each hedgerow length. Each hedgerow was surveyed for attributes identified in the Hedgerows Regulations 1997. This data was then used to ascertain the 'importance' of the hedgerows according to the Regulations. Information recorded for each hedgerow included the following.
 - Height and width of hedgerow (in metres).
 - Species composition.
 - 'Associated features' (according to sub-paragraph 4, section 7 of Part II of Schedule 1 of the Hedgerows Regulations 1997).
 - Public Rights of Way (PRoW).
- **2.2.3** Associated features are as follows.
 - A bank or wall for at least half the length.
 - A ditch for at least half the length.
 - Gaps over no more than 10% of the length.
 - At least one standard tree per 50 metres.
 - At least three ground flora woodland species as defined in Schedule 2 of the Regulations within 1 metre of the hedgerow and listed in Annex A.
 - Connections scoring four or more points, where connection with a hedgerow counts as one, a broadleaved woodland or pond counts as two.
 - A parallel hedge within 15 metres.
- **2.2.4** The hedgerows were assigned to categories which provide a description of the hedgerow, so as to standardise the recording and to inform the final assessment

of hedgerow importance. These categories were based on descriptions given in the Hedgerow Survey Handbook (DEFRA, 2007) as follows.

- Managed 'gappy' hedgerow.
- Intact managed hedgerow.
- Unmanaged Hedgerow.
- Hedgebank with occasional shrubs.
- Managed hedgerow with mature trees.
- Treeline.
- New/reinstated hedgerow.
- Fenceline.
- 2.2.5 It was presumed that given the history of the Gwent Levels, the hedgerows included within the study area were over 30 years old, unless it was clear from the age of the vegetation that the hedgerow was recently planted.
- 2.2.6 A record was also made of any protected species (species included on Schedule 1 (birds), Schedule 5 (animals), or Schedule 8 (plants) of the Wildlife and Countryside Act 1981 (as amended)) or field signs of such species found during the survey. These protected species records informed the assessment of hedgerow importance.
- 2.2.7 Following collection of the field data, an assessment of hedgerow importance was conducted using all the available information, including information on Public Rights of Way (PRoW) obtained from Ordnance Survey (OS) data.
- 2.2.8 Hedgerows are considered 'Important' under the Hedgerows Regulations if they meet the following criteria. However, the scope of this assessment was limited to ecological criteria including the following.
 - Being 20 m or more in length.
 - Meeting another hedgerow at each end.
 - Being at least 30 years old.
 - Satisfy at least one of the criteria listed below, which are taken from Part II of Schedule 1 of the Regulations.
 - The hedgerow contains species listed in Part I of Schedule 1, Schedule 5 or Schedule 8 of the Wildlife and Countryside Act 1981 or contains a Red Data Book species.
 - The hedgerow is adjacent to a Public Right of Way and contains at least four woody species and at least two associated features.
 - The hedgerow includes one or more of the following.
 - 1. At least seven woody species (as defined in Schedule II of the Regulations and listed in Annex A).
 - 2. At least six woody species, and has associated with it at least 3 of the 'associated features'.
 - 3. At least six woody species including one of the following:

black poplar tree (*Populus nigra* spp *betulifolia*); large-leaved lime (*Tilia platyphyllos*); small-leaved lime (*Tilia cordata*); or wild service-tree (*Sorbus torminalis*).

- 4. At least five woody species and has associated with it at least four of the 'associated features'.
- **2.2.9** The Regulations do not apply to garden hedges, even if land on the other side of the hedge meets the above criteria.
- 2.2.10 Climbers and bramble do not count towards the total woody species (except for roses). Hedgerows that contain fewer woody species but have a rich basal herbaceous flora may also be defined as species-rich, but the criteria to define these have to be set on a local basis as there is no national definition.
- 2.2.11 The collected species composition information was cross-referenced with the Woodland Species list in Schedule 2 and the Woody Species list in Schedule 3 of the Hedgerows Regulations.

2.3 Limitations

- 2.3.1 Due to the scale of the survey area and limitations to access, the entire hedgerow complex was not covered and only a sample of the area was completed. In addition to this, due to the scale of the survey, some of the hedgerows were surveyed later in the year when the flora could not be as easily identified. Therefore, woodland ground flora (for example) may not have been recorded. Limitations to access (e.g. access permission and dense vegetation) also hindered the survey of the woodland ground flora.
- 2.3.2 The majority of the hedgerows included in the 2014 survey were adjacent to or had an internal ditch present. Therefore, it was not always possible to accurately measure the width at the base of the hedgerow due to access difficulties.
- 2.3.3 The assessment of whether or not the hedgerow is 'Important' was based on the Hedgerow Regulations 1997 criteria. However, hedgerows are also features of the Gwent Levels Sites of Special Scientific Interest (SSSIs). The report states that hedgerows that fall within the boundaries of these sites would require further assessment.
- 2.3.4 A detailed record could not be made of some hedges due to these hedges having been flailed, limiting species identification. In one instance a hedgerow could not be accessed due to dense scrub. In all twelve instances where limitations were recorded, there was still sufficient information collected during the survey to inform the assessment of these hedgerows.

2.4 Requirements for Further Survey

2.4.1 As referred to earlier in this section the report states that hedgerows that fall within the boundaries of the Gwent Levels SSSIs would require further assessment. The report also states that once initial design work has been undertaken, further surveys of any hedgerows which would need to be removed,

- either permanently or temporarily during construction, should be undertaken to inform the EIA.
- 2.4.2 At the Hyder/NRW meeting on 30th January 2015, it was agreed that only lengths of hedgerow within the footprint of the fixed alignment would need to be surveyed against the Hedgerow Regulations.
- 2.4.3 Having considered the report of the hedgerow survey in the context of the above recommendations, RPS proposed further survey of hedgerows to support the EIA where access for surveys was not previously available. In these areas those hedgerows identified as potentially 'Important' through the further Phase 1 Survey would be targeted. RPS does not consider it necessary to survey hedgerows that have already been surveyed by Arup and thus the survey covered hedgerows within the footprint of the new section of motorway to which access was not previously possible.

3 2015 Survey Methods

3.1 Introduction

- **3.1.1** The hedgerow survey was carried out over the period September-October 2015, which falls within the suitable period for this type of survey.
- 3.1.2 The survey extent comprised hedgerows within the footprint of the new section of motorway to which access was not possible at the time of the Arup 2014 survey.

3.2 Methodology

- 3.2.1 Aerial photography overlain with the alignment of the proposed new section of motorway was used to identify hedgerows that had not been previously surveyed and which would be affected.
- 3.2.2 Hedgerows were selected for further survey if they were intersected by the alignment of the proposed new section of motorway and were not included in the 2014 Hedgerow Report (Appendix 10.5 of the ES). A total of forty eight hedgerows were selected to be included in the 2015 hedgerow survey, as shown on Figure 1.
- 3.2.3 Hedgerows were visited and assessed in accordance with Hedgerow Regulations 1997 criteria. Where hedgerows measured 30 m or less, the entire length of the hedgerow was surveyed. Sample sections measuring 30 m were taken along hedgerows exceeding 30 m in length. In general, one 30 m sample section was taken for hedgerows less than 100 m in length, two samples were taken for hedgerows measuring 100-200 m, and an additional sample was taken for each additional 100 m of hedgerow where hedgerows exceeded 200 m in length. Samples were taken from the central section of hedgerow where the hedgerow measured less than 100 m in length, and regularly spaced along hedgerows exceeding 100 m in length.
- 3.2.4 This data was then used to ascertain the 'importance' of the hedgerows in the context of the Hedgerow Regulations. Information recorded for each hedgerow included the following.
 - Height and width of hedgerow (in metres).
 - Adjacent land use.
 - Hedgerow type and shape.
 - 'Associated features' (according to sub-paragraph 4, section 7 of Part II of Schedule 1 of the Hedgerows Regulations 1997).
 - Continuity of hedgerow (estimated percentage of gaps).
 - Species and diameter of isolated trees within the hedgerow.
 - Notes on signs of associated fauna.
 - Species composition.
 - Proximity to Public Rights of Way (PRoW).

3.2.5 Hedgerows were then assessed to determine whether they meet the Hedgerow Regulations criteria to be considered 'Important'. This was undertaken using the same methodology as that used in the 2014 survey.

3.3 Limitations

- 3.3.1 While all surveys were undertaken within the recommended survey season, ground flora had in places died back. Hedgerows where this was apparent were nevertheless classified as 'Important' based on the presence of other features. It is accepted that surveys conducted during September and October may have under estimated the species diversity of ground flora, however there were still sufficient species present (i.e. indicator species) to understand their importance.
- 3.3.2 Ten hedgerows were not classified as 'Important'. Eight of these hedgerows would not meet the criteria to be classified as 'Important' regardless of their ground flora. The remaining two hedgerows (H20 and H34), where the presence of three woodland ground flora species would have resulted in these hedgerows being classified as Important, were adjacent to areas of species poor grassland, where the availability of excessive nutrients has resulted in the dominance of a small number of aggressive species and a significant reduction in plant diversity. Potential under estimation of ground flora species-richness has therefore not affected the classification of hedgerows as 'Important'.

4 Results

4.1 Introduction

- 4.1.1 A total of forty eight hedgerows were surveyed between Castleton and Rogiet along the alignment of the new section of motorway. The locations of surveyed hedgerows are shown in Figure 1. The results are set out below and on Figure 1. The full survey forms are provided in Annex B and photographs of the hedgerows are provided in Annex C.
- **4.1.2** Of the forty eight hedgerows surveyed, thirty eight were classified as 'Important' under the Hedgerow Regulations.

4.2 Hedgerow Characteristics

- 4.2.1 The surveyed hedgerows were typically dense, with occasional hedgerow trees. Both trimmed and untrimmed hedgerows were commonly recorded. Two of the hedgerows were categorised as a line of trees, although clearly originated from unmanaged hedgerows.
- 4.2.2 The majority of hedgerows supported several woody species. Many of the hedgerows had small banks along their base, which frequently contained woodland species as listed in Schedule 2 of the Hedgerow Regulations. This commonly included herb Robert, yellow archangel and lords-and-ladies. Less frequently recorded were wood avens, dog's mercury, common dog violet, wood medic, wood sage and barren strawberry.

4.3 Hedgerows Classified as 'Important'

- 4.3.1 A summary of the features of the hedgerows classified as 'Important' is provided in Table 4.1 and the full survey forms are provided in Annex B.
- 4.3.2 Of the thirty eight hedgerows classified as 'Important', twenty three contained at least seven woody species. The remaining fifteen hedgerows each comprised six woody species and had at least three of the associated features listed in the Regulations.
- 4.3.3 The Hedgerow Regulations guidelines suggest that garden hedgerows should not be classified as 'Important'. While hedgerows H2, H3, H10, H11 and H28 adjoin residential properties, due to their similarity in structure, function and composition to surrounding 'Important' hedgerows they have been included with the 'Important' hedgerow category.
- 4.3.4 The majority of the 'Important' hedgerows had either small banks or ditches at the base of the hedge. Hedgerows H13 and H14 are considerably larger than the other surveyed hedgerows at over 10 metres in width and both contain partially wet ditches. Hedgerows H18 and H19, which do not meet the criteria to be classified as 'Important', are parallel hedges along the edge of a small stream.
- 4.3.5 Hedgerows were generally intact with few gaps, occasionally containing trees within the hedge. Fifteen of the 'Important' hedgerows have semi-mature or mature trees as detailed in Annex D and the full survey forms provided in Annex B. Hedgerows H35 and H40 comprised an assemblage of saplings, young trees

- and shrubs. Hedgerows H6 and H21 both merge with small sections of broadleaved woodland to the north.
- 4.3.6 Only hedgerows H12 and H21 scored four or more connection points. Hedgerow H12 is located along the east border of an arable field towards the western part of the new section of motorway and connects to four other hedgerows. Hedgerow H21 forms a boundary between grazing pasture fields to the north of Magor and connects to several hedgerows and a small block of woodland.
- 4.3.7 Many of the hedgerows classified as 'Important' formed boundaries between fields and minor roads, often with parallel hedgerows on the opposite side of the road. At hedgerows H33, H35 and H40 motorway drainage basins lie within a small strip of land bordered by hedgerows. Hedgerow H15 extends along the northern boundary of a narrow field used as allotments, with a parallel hedgerow to the south.

4.4 Hedgerows Not Classified as 'Important'

- **4.4.1** Ten of the forty eight surveyed hedgerows were not classified as 'Important' under the Hedgerow Regulations guidelines.
- 4.4.2 Hedgerows H20, H26, and H47 are dense hedgerows that form boundaries between grazing pasture fields in the eastern part of the new section of motorway. All are relatively large and dense comprising several woody species. Hedgerow H9 is similar in composition and borders an arable field and small lane. Annex D provides a summary of trees present in hedgerows not classified as 'Important' such as H20.
- **4.4.3** Hedgerows H34 and H39 border small fields containing drainage basins. Both hedgerows are relatively tall and dense mainly comprising hawthorn, bramble, blackthorn, hazel and ash.
- 4.4.4 Hedgerows H18 and H19 are located either side of a small stream to the north of Magor. The hedgerows mainly comprise sprawling hawthorn, bramble and crack willow. A summary of the trees present within both hedgerows is provided in Annex D.
- 4.4.5 Hedgerow H17 forms a boundary between an arable field and the B4245 to the north of Magor. The hedgerow mainly comprises semi-mature sycamore trees and dense hawthorn and bramble scrub. Hedgerow H16 intersects H17, bordering the arable field and a small semi-improved grassland field. The hedgerow has frequent gaps though contains several semi-mature trees, as summarised in Annex D.

Table 4.1: Summary of Features of Hedgerows Classified as 'Important' under the Hedgerow Regulations

'Important' hedgerow	Average number of woody species	Average of three of more herbaceous woodland species	Wall/Bank or ditch along half or more of the length	Average of 1 or more standard tree per 50 m	Gaps which add up to more than 10% of the hedge	A parallel hedge within 15 m	Connections scoring four points
H1	7	Υ	Bank	-	Υ	Υ	-
H2	6	-	Bank	-	-	Υ	-
H3	6	-	Bank	-	-	Υ	-
H4	8	Υ	Bank	-	-	Υ	-
H5	7	-	-	-	-	-	-
H6	7	-	Ditch	Υ	-	-	-
H7	6	-	Ditch	Υ	-	-	-
H8	8	-	Bank	Υ	-	-	-
H10	6	-	-	Υ	-	Υ	-
H11	6	-	Ditch	Υ	-	-	-
H12	9	-	-	Υ	Υ	-	Υ
H13	7	Υ	Ditch	Υ	-	-	-
H14	6	Υ	Ditch	Υ	-	-	-
H15	6	-	-	Υ	-	Υ	-
H21	8	Υ	Bank	Υ	-	-	Υ
H22	6	Υ	Bank	-	-	-	-
H23	7	Υ	-	-	-	Υ	-
H24	7	Υ	Bank	-	-	Υ	-
H25	7	Υ	Bank	-	-	Υ	-
H27	6	-	Bank	-	-	Υ	-
H28	8	-	-	-	-	Υ	-
H29	6	-	Bank	Υ	-	Υ	-
H30	7	-	-	Υ	-	Υ	-
H31	8	-	Bank	Υ	-	-	-
H32	8	-	Bank	-	-	-	-
H33	7	-	Bank	-	Υ	Υ	-
H35	8	-	Ditch	Υ	-	Υ	-
H36	7	Υ	Bank	-	-	Υ	-
H37	6	Υ	-	-	-	Υ	-
H38	7	Υ	Bank	-	-	Υ	-
H40	7	-	Ditch	Υ	-	Υ	-
H41	7	Υ	Bank	-	Υ	-	-

'Important' hedgerow	Average number of woody species	Average of three of more herbaceous woodland species	Wall/Bank or ditch along half or more of the length			A parallel hedge within 15 m	Connections scoring four points
H42	6	Υ	Bank	-	-	-	-
H43	6	-	Bank	-	-	Υ	-
H44	8	Υ	Bank	-	-	Υ	-
H45	6	-	Bank	-	-	Υ	-
H46	8	Υ	Bank	-	-	Υ	-
H48	6	Υ	Bank	-	-	Υ	-

5 Discussion

- **5.1.1** Hedgerows provide wildlife corridors for a variety of species and can be a significant landscape feature.
- Thirty eight of the forty eight surveyed hedgerows were classified as 'Important' under the Hedgerow Regulations. These are located mainly to the north of Magor and Undy in the eastern part of the proposed new section of motorway, and to the west and south east of Coedkernew in the western part. These data supplement the 2014 hedgerow survey.
- 5.1.3 Several signs of protected species were recorded during the hedgerow surveys. These have been included in ES Appendix 10.23 (bats) and Confidential Appendices 10.37 and 10.38 (badgers).
- All hedgerows are listed as a Priority Habitat on the UK Biodiversity Action Plan and Section 42 (Wales) of the Natural Environment and Rural Communities Act 2006. The Local Biodiversity Action Plans of Monmouthshire and Newport also list hedgerows as a Priory Habitat and the Newport Biodiversity Action Plan states that the current condition of hedgerows is highly variable and aims to maintain, restore and extend hedgerows within the county.

References

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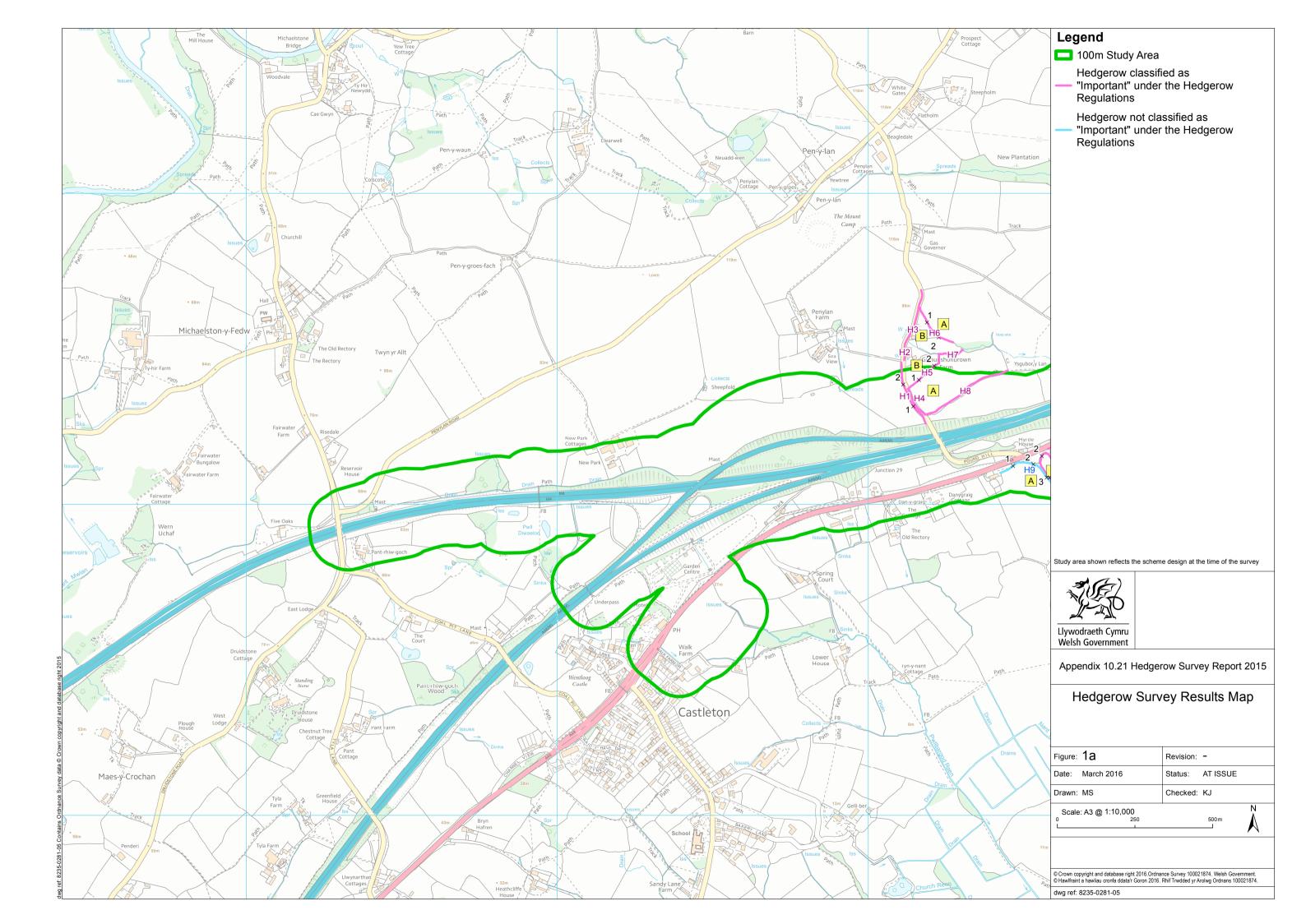
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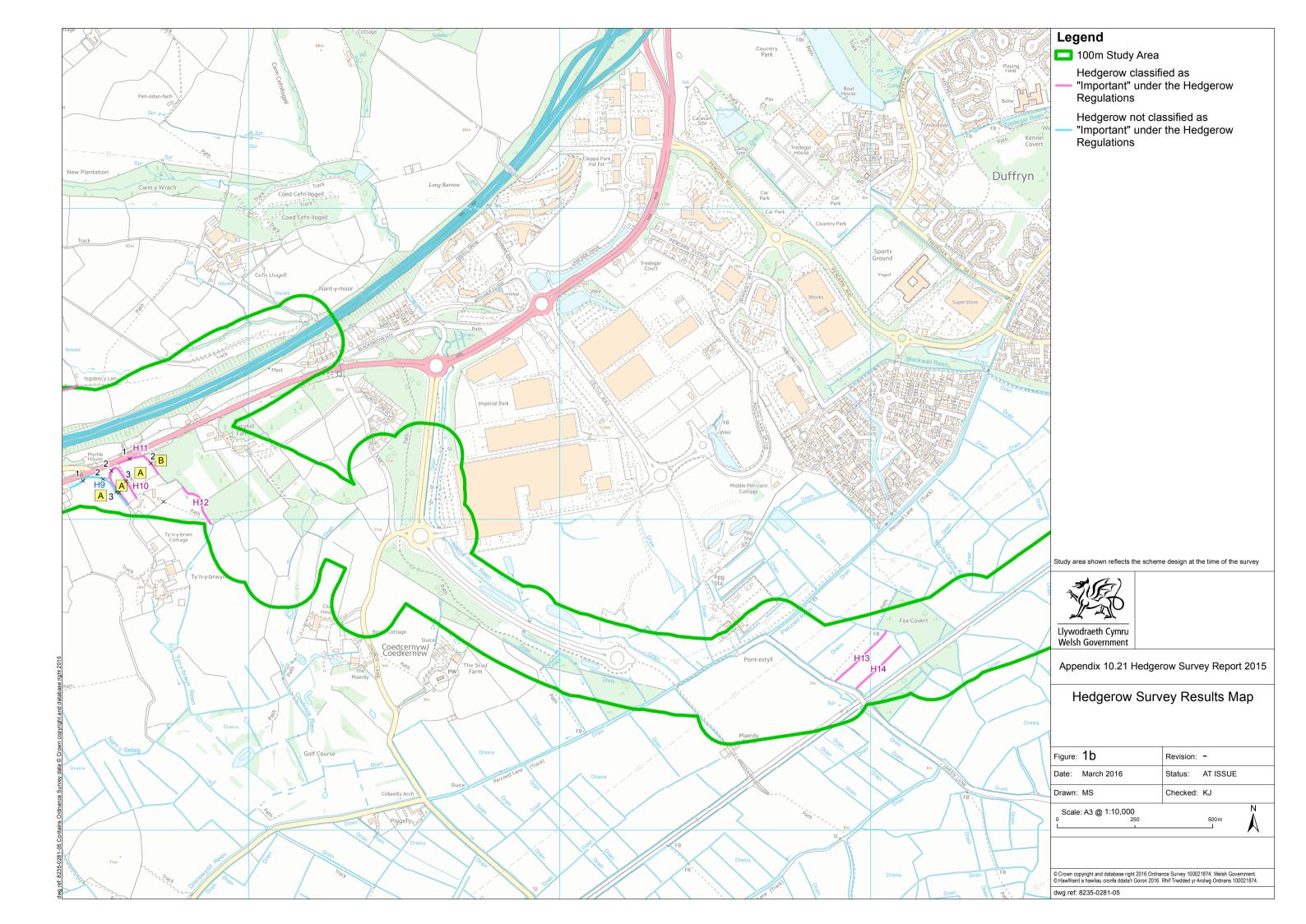
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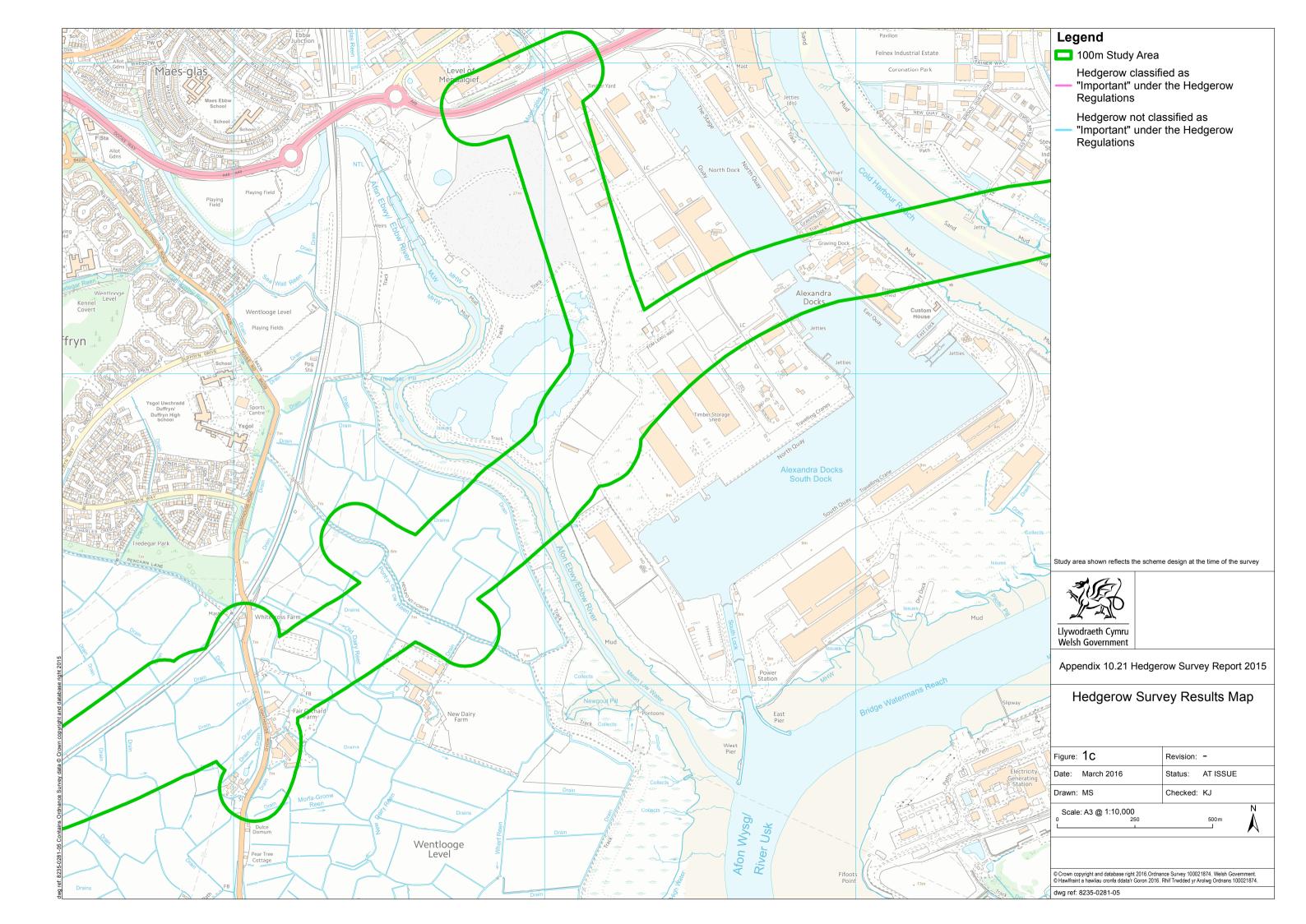
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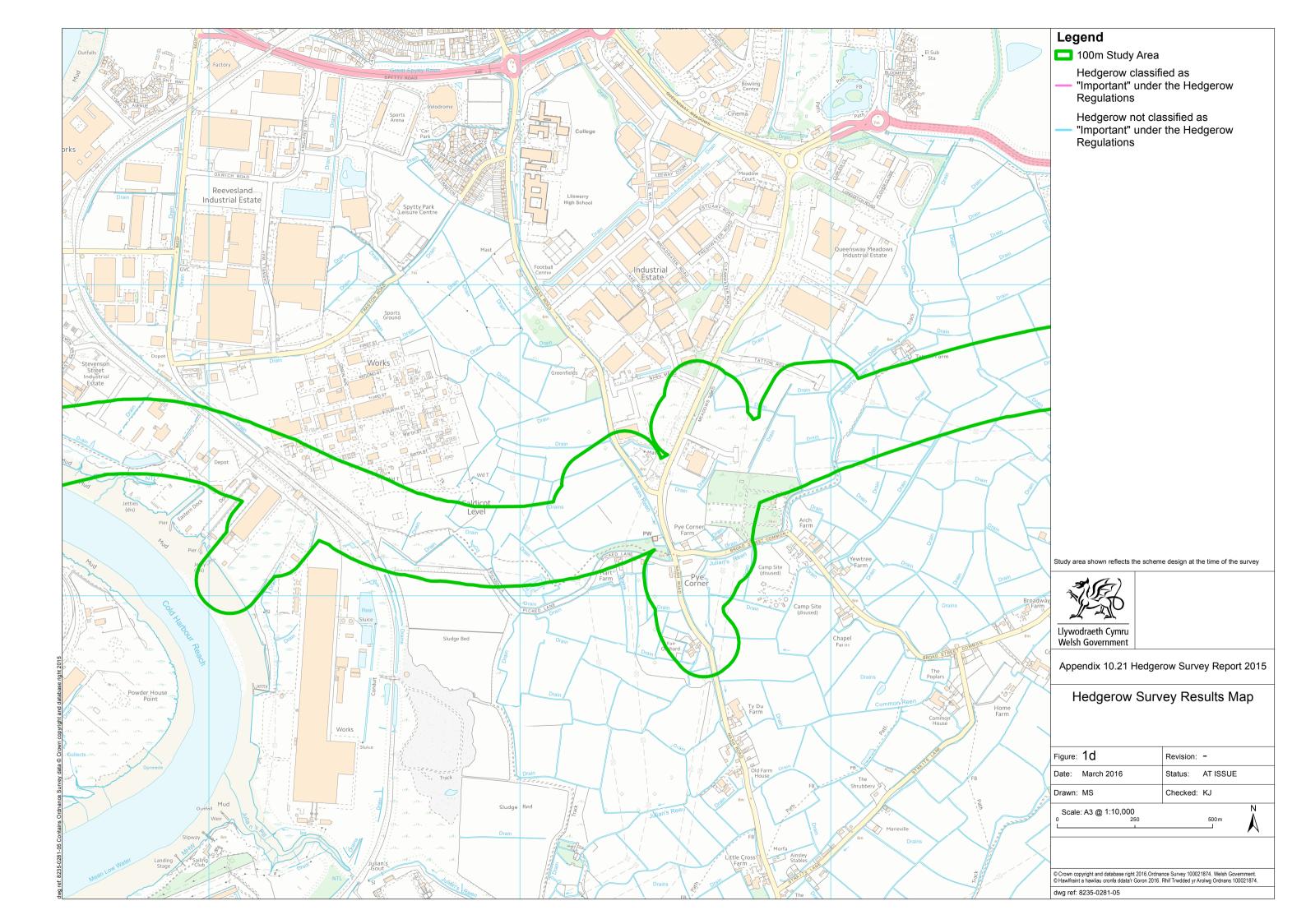
UK Biodiversity Action Plan (1994-2012)

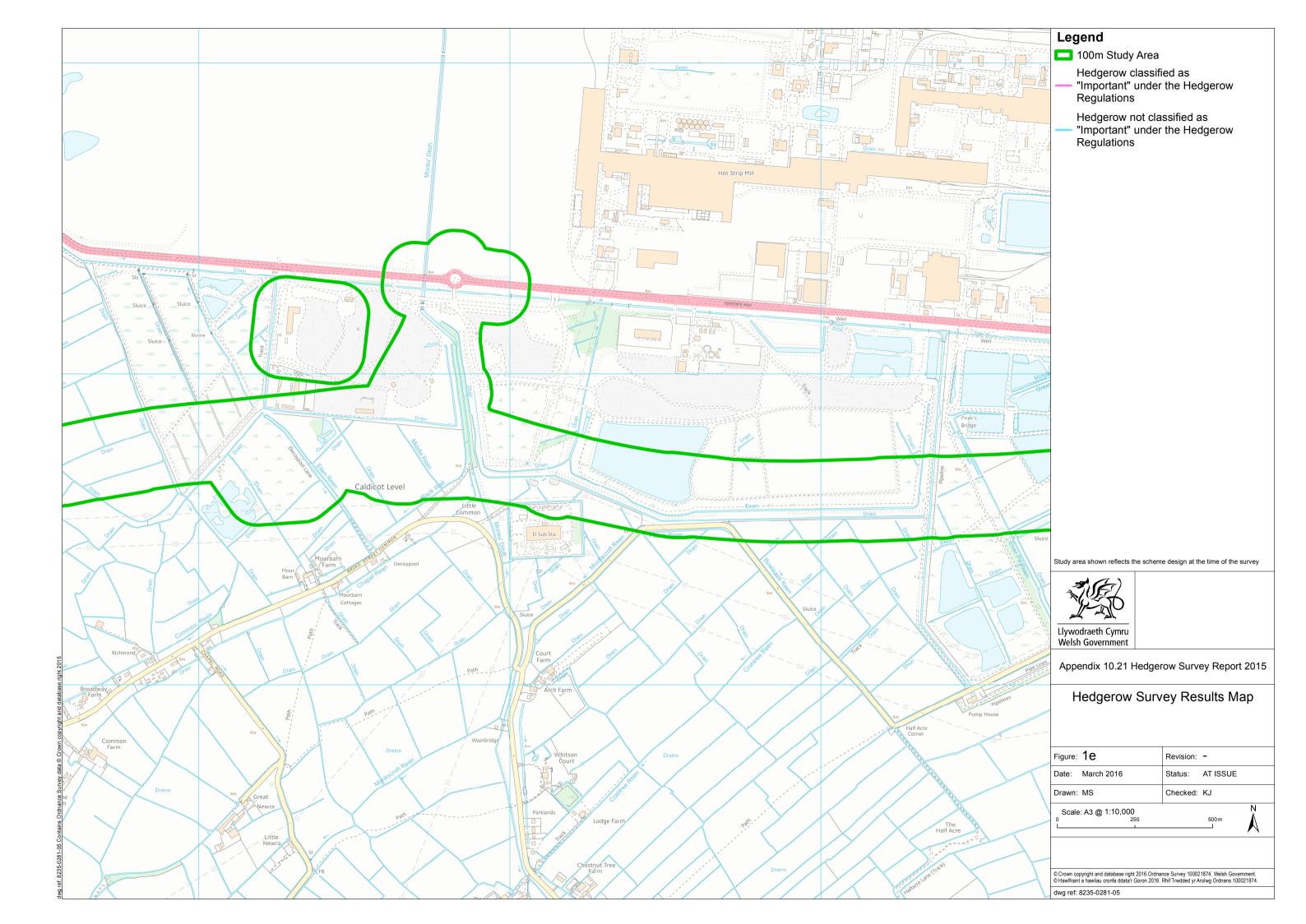
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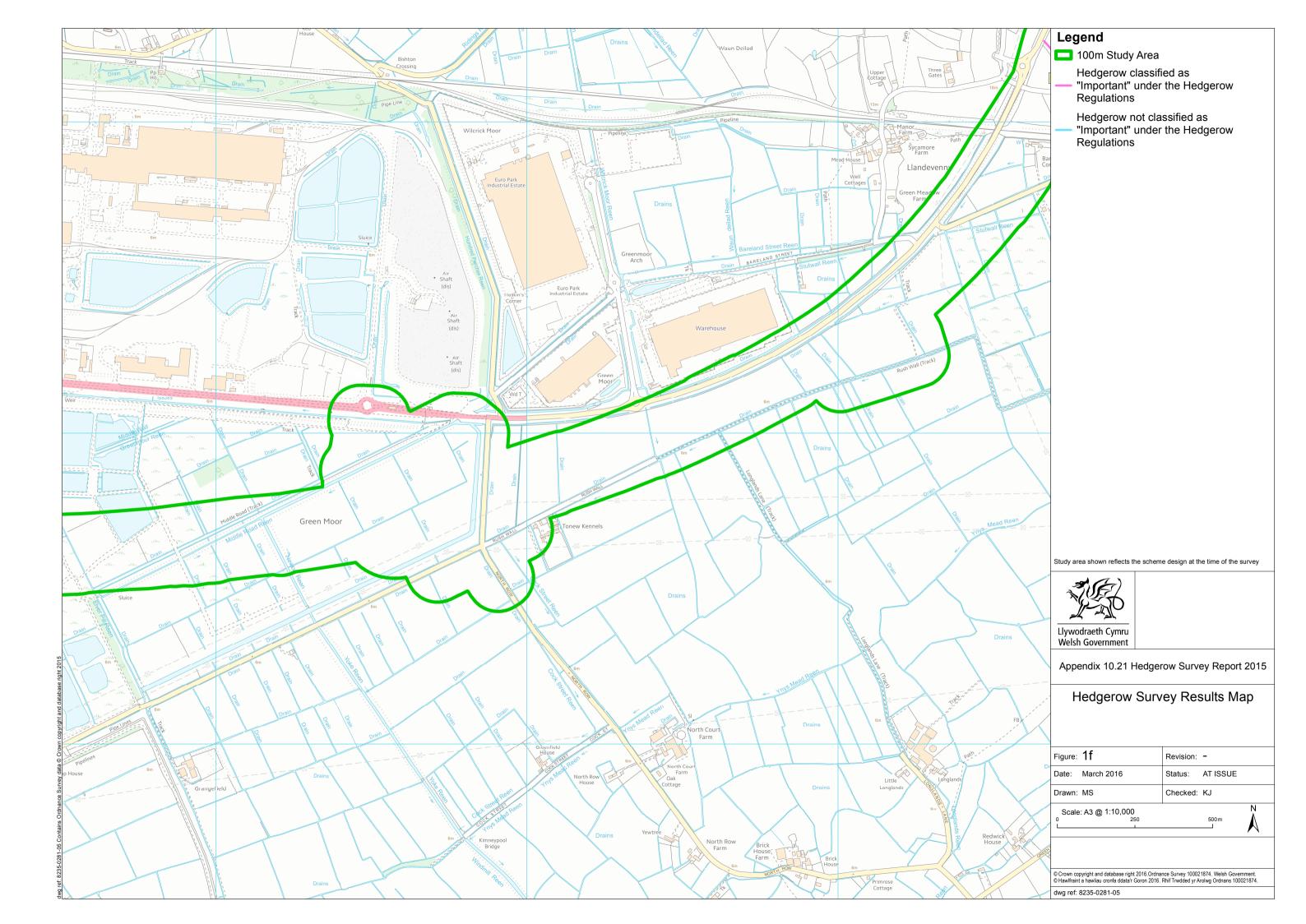


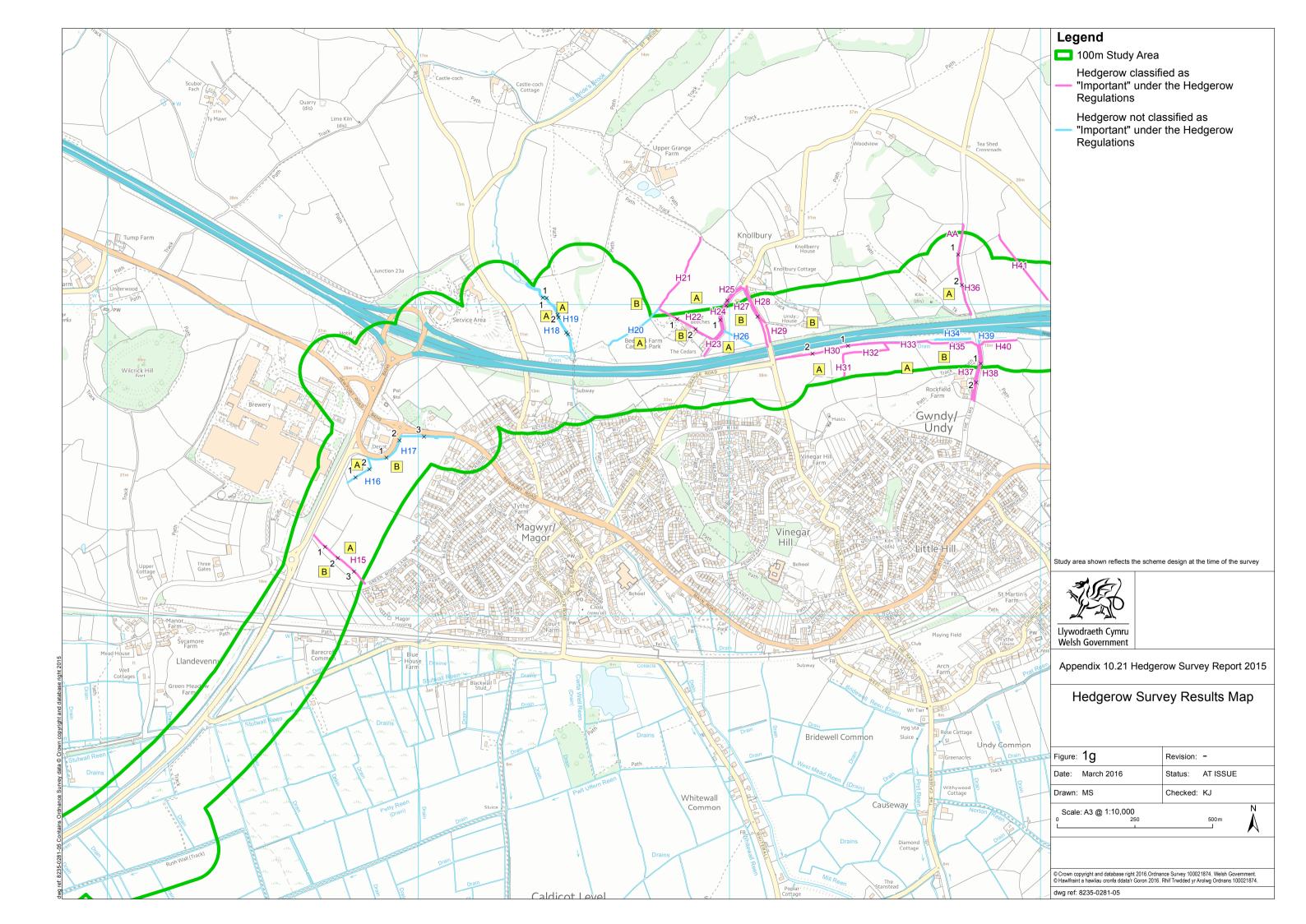


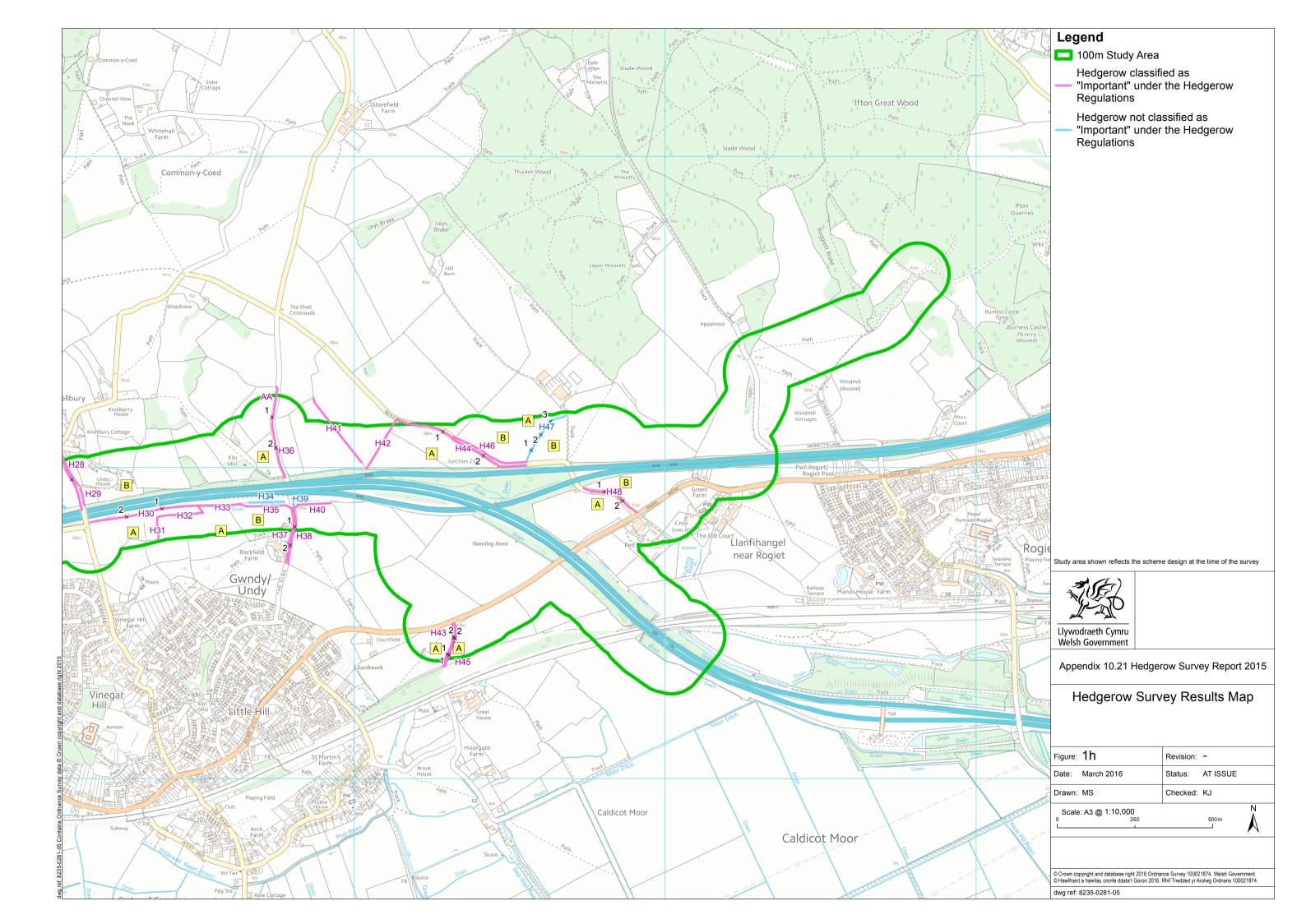












Annex A: Hedgerow Regulations Woody and Woodland Species Criteria

Woody Species

Apple, crab (Malus sylvestris)

Ash (Fraxinus excelsior)

Aspen (Populus tremula)

Beech (Fagus sylvatica)

Birch, downy (Betula pubescens)

Birch, silver (Betula pendula)

Black-poplar (Populus nigra sub-species betulifolia)

Blackthorn (Prunus spinosa)

Box (Buxus sempervirens)

Broom (Cytisus scoparius)

Buckthorn (Rhamnus cathartica)

Buckthorn, alder (Frangula alnus)

Butcher's-broom (Ruscus aculeatus)

Cherry, bird (Prunus padus)

Cherry, wild (Prunus avium)

Cotoneaster, wild (Cotoneaster integerrimus)

Currant, downy (Ribes spicatum)

Currant, mountain (Ribes alpinum)

Dogwood (Cornus sanguinea)

Elder (Sambucus nigra)

Elm (Ulmus species)

Gooseberry (Ribes uva-crispa)

Gorse (*Ulex europaeus*)

Gorse, dwarf (Ulex minor)

Gorse, western (Ulex gallii)

Guelder rose (Viburnum opulus)

Hawthorn (Crataegus monogyna)

Hawthorn, midland (Crataegus laevigata)

Hazel (Corylus avellana)

Holly (Ilex aquilfolium)

Hornbeam (Carpinus betulus)

Juniper, common (Juniperus communis)

Lime, large-leaved (Tilia platyphyllos)

Lime, small-leaved (Tilia cordata)

Maple, field (Acer campestre)

Mezereon (Daphne mezereum)

Oak, pedunculate (Quercus robur)

Oak, sessile (Quercus petraea)

Osier (Salix viminalis)

Pear. Plymouth (Pyrus cordata)

Pear, wild (Pyrus pyraster)

Poplar, grey (*Populus x canescens*)

Poplar, white (Populus alba)

Privet, wild (Ligustrum vulgare)

Rose (Rosa species)

Rowan (Sorbus aucuparia)

Sea-buckthorn (Hippophae rhamnnoides)

Service-tree, wild (Sorbus torminalis)

Spindle (Euonymus europaeus)

Spurge-laurel (*Daphne laureola*)
Walnut (*Juglans regia*)
Wayfaring-tree (*Viburnum lantana*)
Whitebeam (*Sorbus* species)
Willow (*Salix* species)
Yew (*Taxus baccata*)

Woodland Species

Barren strawberry (Potentilla sterilis)

Bluebell (Hyacinthoides non-scriptus)

Broad buckler fern (*Dryopteris dilatata*)

Broad-leaved helleborine (Epipactis helleborine)

Bugle (Ajuga reptans)

Common cow-wheat (Melampyrum pratense)

Common dog violet (Viola riviniana)

Common polypody (*Polypodium vulgare*)

Dog's mercury (Mercurialis perennis)

Early dog violet (Viola reichenbachiana)

Early purple orchid (Orchis mascula)

Enchanter's nightshade (Circaea lutetiana)

Giant fescue (Festuca gigantea)

Goldilocks buttercup (Ranunculus auricomus)

Great bell-flower (Campanula latifolia)

Greater wood-rush (Luzula sylvatica)

Hairy brome (Bromus ramosus)

Hairy woodrush (Luzula pilosa)

Hard fern (Blechnum spicant)

Hard shield fern (Polystichum aculeatum)

Hart's tongue (Asplenium scolopendrium)

Heath bedstraw (Galium saxatile)

Herb paris (Paris quadrifolia)

Herb-robert (Geranium robertianum)

Lady fern (*Athyrium filix-femina*)

Lords-and-ladies (Arum maculatum)

Male fern (Dryopteris filix-mas)

Moschatel (Adoxa moschatellina)

Narrow buckler-fern (*Dryopteris carthusiana*)

Nettle-leaved bell-flower (Campanula trachelium)

Oxlip (Primula elatior)

Pignut (Conopodium majus)

Primrose (Primula vulgaris)

Ramsons (Allium ursinum)

Sanicle (Sanicula europaea)

Scaly male-fern (*Dryopteris affinis*)

Small cow-wheat (Melampyrum sylvaticum)

Soft shield fern (Polystichum setiferum)

Sweet violet (Viola odorata)

Toothwort (Lathraea squamaria)

Tormentil (Potentilla erecta)

Wild strawberry (Fragaria vesca)

Wood anemone (Anemone nemorosa)

Wood avens/Herb bennet (Geum urbanum)

Wood false-brome (Brachypodium sylvaticum)

Wood horsetail (Equisetum sylvaticum)

Wood meadow-grass (Poa nemoralis)

Wood melic (Melica uniflora)

Wood millet (Millium effusum)
Wood sage (Teucrium scorodonia)
Wood sedge (Carex sylvatica)
Wood sorrel (Oxalis acetosella)
Wood speedwell (Veronica montana)
Wood spurge (Euphorbia amygdaloides)
Woodruff (Galium odoratum)
Yellow archangel (Lamiastrum galeobdolon)
Yellow pimpernel (Lysimachia nemorum)

Annex B: Hedgerow Regulations Survey Data

Field Survey Form – H1(1)

Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref	Grid Ref								
Date 2 3 0 9 2 0 1 5	Hedgerow No	C1				_			
Surveyor(s): Sean Flynn				Side S	Surveyed - Bo	th Y/ <u>N</u>			
2 - SURVEY TIMES AND WEA	THER/OTHER COND	ITIONS THAT	MAY A	FFECT THI	E SURVEY				
2d - Were there any difficulties	in surveying the hedge	erows? If so pl	ease de	scribe.	,	YES <u>NO</u>			
Difficulty(ies):									
3 - HEDGEROW TYPE									
3a - Shrubby hedgerow X	3b - Line of trees		3c - Sh	rubby with	line of trees				
4 - LENGTH (m) - between noo	des or intersections wit	th other hedge	rows, to	nearest 5m	า				
5 - CONNECTIONS - total num	ber of other hedgerow	s connected to	o E	nd 1	End 2	Total			
each end of the hedgerow									
6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X									
WHOLE HEDGEROW OR 30n	SURVEY SECTION	(Sections 7-16	5)						
7 - ADJACENT LAND USE									
	0:1					0:1			

WHOLE HEDGE	WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)								
7 - ADJACENT L	7 - ADJACENT LAND USE								
		Side A	Side B			Side A	Side B		
7a - Arable	Arable crop			7e - Road/Route	Major Road				
	Uncropped margin				Minor Road		Х		
7b - Grass	Improved				Track (unsurfaced)				
	Semi- improved	Х			Footpath				
	Unimproved				Rail				
7c - Woodland	Young				Canal				
	Semi-mature			7f - Water	River				
	Mature				Stream				
7d - Other					Lake/pond				

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm	0.5m		8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side					Side B			

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	2.5m	13b - Average Width (m)	
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH Species DBH (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
BADGER – push throughs
16b - Features (including evidence of recent planting)

30m SURVEY SECTION ONLY

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	30					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)	5		Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)									
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (Ulmus sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	70								
Hazel (Corylus avellana)	10								
Holly (Ilex aquifolium)	10								
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)			White Bryony	5					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10					
Oak, pedunculate (Quercus robur)	5		Honeysuckle (Lonicera periclymenum)	20					
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	50					
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
Woodland species		T							
Polypody sp.									
Herb Robert									
Dog's mercury									

		Fie	ld Su	rvey Form – H	1(2)				
Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 2 3 0	9 2 0 1 5 F	Hedgerov	v No	C2					
Surveyor(s): Sea	n Flynn				Side S	Surveyed - B	oth Y/N		
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT MA	Y AFFECT THE	SURVEY			
2d - Were there a	ny difficulties in s	surveying	the hed	dgerows? If so please	e describe.		YES	<u>NO</u>	
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	gerow X 3	Bb - Line	of trees	3c	- Shrubby with	line of trees			
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerows	s, to nearest 5m	1			
		of other	hedger	ows connected to	End 1	End 2	Tot	al	
each end of the h	edgerow				_				
					<u> </u>				
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)	Х		
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE								
		Side	Side				Side	Side	
		A	В				Α	В	
7a - Arable	Arable crop			7e - Road/Route	Major Road				
	Uncropped margin				Minor Road			X	
7b - Grass	Improved				Track (unsur	faced)			
7.5 0.000	Semi-	Х			Footpath				
	improved				. ootpatii				
	Unimproved				Rail				
7c - Woodland	Young				Canal				
	Semi-mature			7f - Water	River				

Stream

Lake/pond

Mature

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	1m		8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES										
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)										
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B		

12 - HEDGEROW SHAPE – See also Part B section 19a										
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy							
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch							

13 - DIMENSIONS							
13a - Average Height (m)	3m	13b - Average Width (m)	2m				
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm					

14 - INTEGRITY - Continuity and height of canopy along hedgerow							
14a – Estimated % GAPS - percentage gaps							
14b – Any gaps >5m? (Y/N)	Y (to south)	14c – Average height of base canopy (m) to nearest 25cm					

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH	Species	DBH				
	(cm)		(cm)				

16 – NOTES – Whole hedgerow or 30m survey section						
16a - Fauna (evidence of)						
BADGER – push through						
16b - Features (including evidence of recent planting)						

30m SURVEY SECTION ONLY

17 - WOODY SPECIES IN 30m SUR\	EY SECT	ION ON	LY - Add any others, including non-nati	ives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	2		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	1	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	3		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	40				
Hazel (Corylus avellana)	40				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony	10	
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	20	
Oak, pedunculate (Quercus robur)	1		Honeysuckle (Lonicera periclymenum)	5	
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species	1				
Herb Robert					
Dog's mercury					
Wood sage					
Lords-and-ladies					

Field Survey Form – H4										
Local Hedgerow Field Survey Form										
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)										
TITLE OF SURVEY: M4 Hedgerow regulation assessment										
Grid Ref										
	·									
Date 2 3 0	9 2 0 1 5 F	Hedgerov	v No	D						
Surveyor(s): Sea	n Flynn					Side S	urveyed - B	oth Y/	<u>v</u>	
	-						•			
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT	MAY AF	FECT THE	SURVEY			
				dgerows? If so ple				YES	NO	
Difficulty(ies):	,	, ,		<u> </u>						
									•	
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X 3	Bb - Line	of trees		3c - Shr	ubby with	line of trees	;		
						•				
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows, to r	earest 5m)			
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to	Er	nd 1	End 2	To	ıtal	
each end of the h			3 -		_					
							•			
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow		6b - 30m	Section(s)		Х	
-			0 -		I_		(-)			
WHOLE HEDGE	ROW OR 30m S	JRVEY S	SECTIO	N (Sections 7-16)	·			•		
7 - ADJACENT L				(000						
		Side	Side					Side	Side	
		Α	В					Α	В	
7a - Arable	Arable crop		Х	7e - Road/Route	e Ma	jor Road				
	Uncropped				Mir	nor Road		Х		
	margin									
7b - Grass	Improved					ick (unsur	faced)			
	Semi-				Fo	otpath				
	improved Unimproved				Ra	 iI				
7c - Woodland						nal				
70 - WOOGIANG	Young Somi mature			7f - Water						
	Semi-mature			71 - vvater	Riv	'el				

Stream

Lake/pond

Mature

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	20		8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.					
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS						
13a - Average Height (m)	3.5m	13b - Average Width (m)	2m			
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm				

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
BADGER – push throughs
16b - Features (including evidence of recent planting)

Species	Shrubs	Trees	Species	Shrubs	Trees
•	%	No.	'	%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	5		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	40		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	10				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)				5	
Maple, field (Acer campestre)	40		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)	5	
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	30	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Polypody sp.					
Dog's mercury					
Herb Robert					
Broad buckler fern					
Hart's tongue fern					

		Fi	eld S	urvey Form	<u> </u>	1 8			
Local Hedgerow Field Survey Form									
PART A - ESSEN	NTIAL ASSESSI	ЛENTS (Т	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerd	w regulat	ion asse	essment					
Grid Ref									
Date 2 3 0	9 2 0 1 5	Hedgerov	v No	E					
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N									
							•		
2 - SURVEY TIM	ES AND WEATI	HER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a								YES	NO
Difficulty(ies):	,			- 3					1
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow	3b - Line	of trees		3c -	Shrubby with	line of trees		Х
4 - LENGTH (m)	- between nodes	s or inters	ections	with other hedge	rows,	to nearest 5m	ı		
5 - CONNECTIO	NS - total numbe	er of other	hedger	ows connected t	0	End 1	End 2	To	tal
each end of the h	nedgerow		_						
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m	Section(s)		Х
	_						, ,	•	
WHOLE HEDGE	ROW OR 30m S	SURVEY S	SECTIO	N (Sections 7-16	5)				
7 - ADJACENT L					,				
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop	Х		7e - Road/Rou	te	Major Road			Х
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved					Track (unsurf	faced)		
	Semi-					Footpath			
	Improved					Rail			
7c - Woodland	Unimproved					Canal			
70 - Woodiand	Young Somi moture	+		7f \Motor					
	Semi-mature			7f - Water		River			

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	0.5m		8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							
30% 30%								

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species DBH (cm)						
Quercus robur	1.25m					
Fraxinus excelsior	0.3m					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Knopper Gall on oaks
Mature ivy on oak – Bats?
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-nat	ives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)	5		Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (Ulmus procera)					
Elm, wych (Ulmus glabra)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)	30				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)	30	
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	40	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		1		1	
Ruderal ground flora					

Field Survey Form - H12

PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 2 4 0 9 2 0 1 5 Hedgerow No H				Loca	l Hedge	row Field	Surve	ey Fo	rm				
TITLE OF SURVEY: M4 Hedgerow regulation assessment	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)												
Date 2 4 0 9 2 0 1 5 Hedgerow No										,			
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop Uncropped margin 7b - Grass Improved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Semi-improved Unimproved Semi-improved Unimproved Semi-improved Semi-impr	Grid Ref												
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop Uncropped margin 7b - Grass Improved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Unimproved Semi-improved Unimproved Semi-improved Unimproved Semi-improved Semi-impr													
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Uncropped margin 7b - Grass Improved X Track (unsurfaced) Semi-improved Improved Rail Unimproved Canal Unimproved Rail Tc - Woodland Young Canal Semi-mature 7f - Water River Mature Stream	Date 2 4 0	9 2 0 1 5	Hec	dgerov	v No	Н							
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 7ES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop Uncropped margin 7b - Grass Improved X Semi-improved Improved	Surveyor(s): Sea	n Flynn							Side S	urveyed - B	oth Y/N		
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 7ES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop Uncropped margin 7b - Grass Improved X Semi-improved Improved													
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Uncropped margin 7b - Grass Improved X Track (unsurfaced) Semi-improved Inproved Rail Unimproved Unimproved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream													
Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow	2 - SURVEY TIM	ES AND WEA	THER	R/OTH	ER CO	NDITIONS	THAT	MAY	AFFECT THE	SURVEY	T		
3 - HEDGEROW TYPE 3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow End 1 End 2 Total 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Minor Road Uncropped margin Minor Road Minor Road 7b - Grass Improved X Track (unsurfaced) Semi-improved Unimproved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream Stream Stream 1 - Arable Arable Arable 1 - Arable Arable Arable Arable 3 - Arable Arable Arable Arable 4 - Arable Arable Arable Arable 4 - Arable Arable Arable 5 - Arable Arable Arable 7 - Arable Arable Arable 8 - Arable Arable 9 - Arable Arable 1 - Arable Arable 1 - Arable Arable 1 - Arable Arable 1 - Arable Arable 2 - Arable Arable 3 - Arable Arable 4 - Arable Arable 5 - Arable Arable 6 - Arable Arable 6 - Arable Arable 6 - Arable Arable 8 - Arable Arable 9 - Arable 1 - Arable Arable 1 - Arable 1 - Arable 2 - Arable 3 - Arable 4 - Arable 4 - Arable 4 - Arable 5 - Arable 6 - Arable 8 - Arable 9 - Arable 9 - Arable 1 - Arable 2 - Arable 3 - Arable 4 -	2d - Were there a	any difficulties i	in sur	veying	the hed	dgerows?	lf so pl	lease	describe.		YES	<u>NO</u>	
3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6b - 30m Section(s) X 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Minor Road Minor Road Minor Road Uncropped margin Footpath Footpath improved Number Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream	Difficulty(ies):												
3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6b - 30m Section(s) X 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Minor Road Minor Road Minor Road Uncropped margin Footpath Footpath improved Number Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream													
3a - Shrubby hedgerow 3b - Line of trees X 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6b - 30m Section(s) X 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Minor Road Minor Road Minor Road Minor Road Minor Road Footpath Footpath Footpath Track (unsurfaced) Footpath Unimproved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream													
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Uncropped margin 7b - Grass Improved X Track (unsurfaced) Semi-improved Pootpath Unimproved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream			Ι				l	l -			I		
5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6 a - Whole hedgerow 6 b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B 7 a - Arable Arable crop X 7 e - Road/Route Major Road Uncropped margin 7 b - Grass Improved X Track (unsurfaced) Semi-improved Unimproved Unimproved Unimproved Semi-improved Semi-improved Semi-improved Semi-improved Semi-improved Semi-improved Semi-mature Mature 7 f - Water Stream	3a - Shrubby hed	lgerow	3b -	- Line	of trees		Х	3c -	Shrubby with I	ine of trees			
5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6 a - Whole hedgerow 6 b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B 7 a - Arable Arable crop X 7 e - Road/Route Major Road Uncropped margin 7 b - Grass Improved X Track (unsurfaced) Semi-improved Unimproved Unimproved Unimproved Semi-improved Semi-improved Semi-improved Semi-improved Semi-improved Semi-improved Semi-mature Mature 7 f - Water Stream	4 LENGTH ()			. ,		201 01							
each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B Side A B 7a - Arable Arable crop X 7e - Road/Route Major Road Uncropped margin 7b - Grass Improved X Track (unsurfaced) Semi-improved Provided Provide	4 - LENGTH (m)	- between nod	les or	interse	ections	with other	neage	rows,	to nearest 5m				
each end of the hedgerow 6 - EXTENT OF SURVEY 6 a - Whole hedgerow 6 b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B 7 a - Arable Arable crop X 7 e - Road/Route Major Road Uncropped margin 7 b - Grass Improved X Track (unsurfaced) Semi-improved Unimproved Rail 7 c - Woodland Young Canal Semi-mature 7 f - Water River Mature Stream	5 CONNECTIO	NC total num	hor of	f other	hodgor	OWO 0000	ootood te	0	End 1	End 2	Tot	o.l	
Column C			bei oi	ourier	neugei	OWS COITIE	ecteu t	U	End i	Ellu Z	100	Total	
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side B Side B Side A Side B		3											
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side B Side B Side A Side B									<u> </u>				
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side B Side B Side A Side B	6 - EXTENT OF	SURVEY	6a - \	Whole	hedger	OW			6b - 30m S	Section(s)		Χ	
7 - ADJACENT LAND USE Side A Side B Side B Side A Side B Side B Side A Side B Side B 7a - Arable Arable crop X 7e - Road/Route Major Road ————————————————————————————————————	-					-					<u>.</u>		
7 - ADJACENT LAND USE Side A Side B Side B Side A Side B Side B Side A Side B Side B 7a - Arable Arable crop X 7e - Road/Route Major Road ————————————————————————————————————	WHOLE HEDGE	ROW OR 30m	SUR	VEY S	SECTIO	N (Section	ıs 7-16	5)					
A B X 7e - Road/Route Major Road													
7a - Arable Arable crop X 7e - Road/Route Major Road Uncropped margin Minor Road 7b - Grass Improved X Track (unsurfaced) Semi-improved Footpath Unimproved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream			;	Side	Side						Side	Side	
Uncropped margin 7b - Grass Improved Semi-improved Unimproved Unimproved Tc - Woodland Semi-mature Mature Minor Road Minor Road Minor Road Minor Road A Track (unsurfaced) Footpath Footpath Canal Rail Canal Stream				Α							Α	В	
margin	7a - Arable				Х	7e - Roa	d/Rout	te					
Semi-improved Footpath Unimproved Rail 7c - Woodland Young Semi-mature 7f - Water Mature Stream									Minor Road				
improved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream	7b - Grass	Improved		X					Track (unsurf	aced)			
Unimproved Rail 7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream									Footpath				
7c - Woodland Young Canal Semi-mature 7f - Water River Mature Stream									Rail				
Semi-mature 7f - Water River Stream	7c - Woodland	i i											
Mature Stream			,			7f - Wate	er						
	7d - Other												

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm	Cut	Cut	8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE	12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) <u>Trimmed &</u> <u>dense</u> (with threes)	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	>15m	13b - Average Width (m)	4m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			
Lombardy Pop	50	Oak	100			

Lombardy Pop	40					
Lombardy Pop	40					
16 – NOTES – Whole hedgerow or 30m survey section						
16a - Fauna (evidence of)						
16b - Features (including evidence of recent plan	nting)					
	-					

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-nati	ives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	Х	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Oseir	x	
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	50		Lombardy Poplar	х	
Hazel (Corylus avellana)	30				
Holly (Ilex aquifolium)	15				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	1		Bramble (Rubus fruticosus agg.)	х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)	5		Ivy (Hedera helix)	х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
, , ,					
Woodland species		Γ			
Horsetail sp					
Herb Robert					

Field Survey Form - H14

				,ia	ii vey ru	7 1111					
		<u> </u>	Local	l Hedge	erow Field	Survey	Form				
PART A - ESSEI	NTIAL ASSES	SSMENT	TS (T	o be co	mpleted for	r all local	l hedge	row surve	ys)		
TITLE OF SURV	/EY: M4 Hedç	jerow re	gulati	ion asse	essment						
Grid Ref											
Date 1 7 0	9 2 0 1	5 Hedg	gerow	v No	I						
Surveyor(s): Geo	orgia Kelly and	d Sean F	Flynn					Side S	urveyed - B	oth Y/N	i
								Side A			W
								Side B			E
2 - SURVEY TIM	IES AND WE	ATHER/	/OTHI	ER CO	NDITIONS	THAT M	AY AF	FECT THE	SURVEY		
2d - Were there	any difficulties	s in surve	eying	the hea	dgerows? I	f so plea	se des	cribe.		YES	NO
Difficulty(ies):											
3 - HEDGEROW	/ TYPE										
3a - Shrubby hed	dgerow	3b -	Line	of trees		3	c - Shr	ubby with	line of trees		Х
4 - LENGTH (m)	- between no	des or ir	nterse	ections	with other I	nedgerov	ws, to r	earest 5m	1		
5 - CONNECTIO	NS - total nur	mber of	other	hedger	ows conne	cted to	Er	nd 1	End 2	To	tal
each end of the h											
6 - EXTENT OF	SURVEY	6a - W	Vhole	hedger	ow			6b - 30m	Section(s)		Х
WHOLE HEDGE	ROW OR 30	m SURV	/EY S	SECTIO	N (Sections	s 7-16)					
7 - ADJACENT L	AND USE										
		S	Side	Side						Side	Side
			Α	В						Α	В
7a - Arable	Arable crop)		<u> </u>	7e - Road	7e - Road/Route		jor Road			
	Uncropped margin						Mir	nor Road			
7b - Grass	Improved			<u> </u>			Tra	ck (unsur	faced)		
	Semi- improved			X			Fo	otpath			

7f - Water

Rail

Canal

River

Stream Lake/pond

Unimproved

Semi-mature

Young

Mature

7c - Woodland

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)	Χ				
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles	Side A	Side B	Side B 10b - Cleavers Side A Side B 10c - Docks Side A					Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	10m	13b - Average Width (m)	12m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DB (cn			
Oak	150					
Oak	50					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Potential for bats in tree hollow – check with endoscope pre-construction
16b - Features (including evidence of recent planting)
•

			LY – Add any others, including non-n		Ι_
Species	Shrubs	Trees	Species	Shrubs	Trees
	% 20)/or	No.		% 20V0r	No.
Alder, common (Alnus glutinosa)	cover		Plum, wild (<i>Prunus domestica</i>)	cover	
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (<i>Fraxinus excelsior</i>)			Privet, wild (<i>Ligustrum vulgare</i>)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)	10	
Blackthorn (<i>Prunus spinosa</i>)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)	20				
Buckthorn (<i>Rhamnus cathartica</i>)			Sycamore (Acer pseudoplatanus)		
Cherry, wild (<i>Prunus avium</i>)			Wayfaring-tree (<i>Viburnum lantana</i>) Willow, grey (<i>Salix cinerea</i>)	10	
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)	10	
Elder (Sambucus nigra)	10		vviiiow, goat (<i>Saiix Caprea)</i>		
Elm, English (<i>Ulmus procera</i>)	10				
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus) Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	20				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
, , ,					
Lime, large-leaved (<i>Tilia platyphyllos</i>) Lime, small-leaved (<i>Tilia cordata</i>)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (<i>Quercus robur</i>)	20		Honeysuckle (Lonicera periclymenum)	10	
Oak, sessile (Quercus petraea)	20		lvy (Hedera helix)	20	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	20	
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
i iiio, ocoto (i iiiuo ayiveatiia)			70 Gaparaccess openings		
Woodland species		l	1		
Herb Robert					
Hart's tongue fern					
Broad buckler fern					
Mosses					

Field Survey Form – H20									
Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 1 5 0	9 2 0 1 5 H	ledgerov	v No	J					
Surveyor(s): Geo	rgia Kelly				Side S	Surveyed - B	oth Y/N		
	-				·	-			
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS THAT M	AY AFFECT THI	SURVEY			
				dgerows? If so plea			YES	NO	
Difficulty(ies):	,	<u></u>	,	<u>адолотот п оо ртос</u>			0	1 1.0	
2 2									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	T T	b - Line	of trees		c - Shrubby with	line of trees			
ou omazzy	.90.0	2	0. 4.000	1 1-	o omazzy min			J	
4 - I FNGTH (m)	- hetween nodes	or inters	ections	with other hedgero	ws. to nearest 5m	1			
4 LENOTH (III)	- Detween nodes	Of Intoro.	COLIOTIC	With other neagers	WS; to floaroot on				
5 - CONNECTIO	NS - total number	of other	hedger	rows connected to	End 1	End 2	Tot	<u>ə</u> l	
each end of the h		OI OTHER	Tieugei	OWS COMPECTED TO	Liiu i	LIIU Z	100	aı	
						<u> </u>			
6 - EXTENT OF S	SLIPVEV 62	- Whole	hodgor	OW	6h - 30m	Section(s)		Х	
0-LATENT OF	SURVET TOA	- vviiole	neugei	OW	1 00 - 30111	Section(s)	<u> </u>	^	
WHOLE HEDGE		IDVEV 6	CECTIO	N (Coctions 7.16)	·				
		JKVETS	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE	Cido	Cida				Cida	Cido	
		Side A	Side B				Side A	Side B	
7a - Arable	Arable crop	,,,		7e - Road/Route	Major Road		,,,		
7 a 7 a doio	Uncropped			70 Rodd/Roddo	Minor Road				
	margin				Willion Road				
7b - Grass	Improved				Track (unsur	faced)			
	Semi-	Х	Х		Footpath	•			
	improved				·				
	Unimproved				Rail				
7c - Woodland	Young				Canal				
	Semi-mature			7f - Water	River				

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	30	30	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							
~80 ~80								

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	2.5m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Hawthorn 20							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
4.Ch. Footures (including suidenes of recent planting)
16b - Features (including evidence of recent planting)
166 - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SL	JRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	ı
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	40		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	30				
Hazel (Corylus avellana)	10				
Holly (<i>Ilex aquifolium</i>)	5				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			W Bryony	5	
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	5	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	5	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
			. , , , ,		
Woodland species	'			1	
White bryony					
Herb Robert					
Wood avens					

No hedgebank/ditch. Not av. 1 std tree. Does have gaps which <10%. No parallel hedge. Check connections

NOT SURVEYED

Lots of gaps. Intro species. Dist by caravan site.

Field Survey Form – H22(1)

Field Survey Fortil - HZZ(1)									
		Loca	al Hedge	erow Field Surv	ey Fo	rm			
PART A - ESSEI	NTIAL ASSESS	SMENTS (To be co	mpleted for all lo	ocal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedge	row regula	tion asse	essment					
Grid Ref									
		T							
Date 1 5 0	9 2 0 1 5	Hedgero	w No						
Surveyor(s): Geo	orgia Kelly					Side S	urveyed - B	oth Y/N	l
2 - SURVEY TIM	IES AND WEAT	THER/OTH	IER CO	NDITIONS THA	T MAY	AFFECT THE	SURVEY	ı	
2d - Were there	any difficulties i	n surveying	g the he	dgerows? If so p	olease	describe.		YES	NO
Difficulty(ies):									
	L	ots of gap	s. Intro	species. Dist b	y car	avan site.			
3 - HEDGEROW	T T	ı			1				
3a - Shrubby hed	dgerow	3b - Line	of trees		3c -	Shrubby with	line of trees		
4 - LENGTH (m)	- between node	es or inters	ections	with other hedge	erows,	to nearest 5m	l		
						-	I	1_	
5 - CONNECTIO each end of the h		per of othe	r hedger	ows connected	to	End 1	End 2	To	tal
each end of the f	leagerow								
C EVTENT OF	CLIDVEV	Co Mbala	. b.a.da.a.u			Ch 20m	Castian(a)		
6 - EXTENT OF	SURVEY	6a - Whole	neager	OW		6b - 30m	Section(s)		
WILOUE LIEDCE	'DOW OD 20m	CLIDVEV	CECTIO	M (Captions 7.4)	C)				
7 - ADJACENT L		SURVET	SECTIO	in (Sections 7-1)	0)				
7 - ADJACENT L	AND USE	Side	Side					Side	Side
		A	B					A	B
7a - Arable	Arable crop			7e - Road/Rou	ıte	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi- improved					Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			
	Mature					Stream			
7d - Other						Lake/pond			
						-			

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS		
13a - Average Height (m)	13b - Average Width (m)	
Excluding bank, to nearest 25cm	At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species D (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)
30m SURVEY SECTION ONLY

17 - WOODY SPECIES IN 30m SUF	RVEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)					
Hazel (Corylus avellana)					
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
Woodland species					

		Field	<u>d Sur</u>	vey Form –	H22	2(2)			
		Loca	l Hedge	erow Field Surve	y For	m			
PART A - ESSEN	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)								
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment					
Grid Ref									
Date 1 5 0	9 2 0 1 5 H	Hedgerov	v No	K2					
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	<u>I</u>
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS THAT	MAY.	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so ple	ease c	describe.		YES	NO
Difficulty(ies):								•	
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X 3	3b - Line	of trees		3c - S	Shrubby with I	ine of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows, t	to nearest 5m			
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to	,	End 1	End 2	To	tal
each end of the h	nedgerow				-			_	
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m S	Section(s)		Х
								•	
WHOLE HEDGE	ROW OR 30m SI	URVEY S	SECTIO	N (Sections 7-16)				-	
7 - ADJACENT L									
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Route	Э	Major Road			
	Uncropped					Minor Road			Х
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-	X				Footpath			
	Improved					Rail			
7c - Woodland	Unimproved					Canal			
70 - Woodiand	Young Somi moture	1		7f Motor					
	Semi-mature			7f - Water		River			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	0	20	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	30	20	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)		Х					
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B
	50 5							

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	1m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DBI (cm)						

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent planting)							

Species	Shrubs	Trees	Species	Shrubs	Trees
-1	%	No.		%	No.
	cover	110.		cover	110.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (<i>Populus tremula</i>)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	5		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	2				
Holly (<i>Ilex aquifolium</i>)	3				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	70	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	5	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)	5	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species - 6		1			
Wood avens					
Herb Robert					
Yellow archangel					

PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment			Fie	eld Su	ırvey Form –	H24			
TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date			Loca	l Hedge	row Field Survey	Form			
Date 1 5 0 9 2 0 1 5 Hedgerow No L	PART A - ESSEN	NTIAL ASSESSI	ΛΕΝΤS (Τ	o be co	mpleted for all loca	l hedgerow surve	eys)		
Date 1 5 0 9 2 0 1 5 Hedgerow No L Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow End 1 End 2 Total 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B Side Side A B Side A B B 7a - Arable Arable crop 7e - Road/Route Major Road X	TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment	-			
Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B A Side A B 7a - Arable Arable crop Te - Road/Route Major Road Minor Road Minor Road X Minor Road X X Minor Roa	Grid Ref	_							
Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B A Side A B 7a - Arable Arable crop Te - Road/Route Major Road Minor Road Minor Road X Minor Road X X Minor Roa									
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow	Date 1 5 0	9 2 0 1 5	Hedgerov	v No	L				
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B A B A B A B A B A B A B A B A B A	Surveyor(s): Geo	orgia Kelly	-		•	Side S	Surveyed - E	oth Y/N	
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B Side A B A B A B A B A B A B A B A B A B A						·	-		
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B Side A B A B A B A B A B A B A B A B A B A									
2d - Were there any difficulties in surveying the hedgerows? If so please describe. 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B Side A B A B A B A B A B A B A B A B A B A	2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS THAT M	AY AFFECT TH	E SURVEY		
Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow								YES	NO
3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B 7a - Arable Arable crop 7e - Road/Route Major Road Minor Road X Uncropped margin Minor Road X			, ,		<u> </u>				
3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6b - 30m Section(s) X 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A Side B 7a - Arable Arable crop 7e - Road/Route Major Road Minor Road X Uncropped margin Minor Road X	,								
3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6b - 30m Section(s) X 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A Side B 7a - Arable Arable crop 7e - Road/Route Major Road Minor Road X Uncropped margin Minor Road X									
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side B 7a - Arable Arable crop Uncropped Uncropped Minor Road V Minor Road X	3 - HEDGEROW	TYPE							
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side B 7a - Arable Arable crop Uncropped Uncropped Minor Road V Minor Road X	3a - Shrubby hed	dgerow X	3b - Line	of trees	3	c - Shrubby with	line of trees	,	
5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B 7a - Arable Arable crop Uncropped Minor Road V Minor Road X	-							-	
5 - CONNECTIONS - total number of other hedgerows connected to each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side A B 7a - Arable Arable crop Uncropped Minor Road V Minor Road X	4 - LENGTH (m)	- between nodes	s or inters	ections	with other hedgero	ws, to nearest 5n	n		
each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side B 7a - Arable Arable crop Uncropped Minor Road VX VX VX VX VX VX VX VX VX V								•	
each end of the hedgerow 6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side A B Side B 7a - Arable Arable crop Uncropped Minor Road VX VX VX VX VX VX VX VX VX V	5 - CONNECTIO	NS - total numbe	er of other	hedger	ows connected to	End 1	End 2	Tot	al
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B Side A				J					
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B Side A									
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B Side A						•	•	•	
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE Side Side A B Side A	6 - EXTENT OF	SURVEY 6	a - Whole	hedger	OW	6b - 30m	Section(s)		Х
7 - ADJACENT LAND USE Side A Side B Side A Side A Side B Side B Side A Side B Side B Side A Side B Side B <td></td> <td></td> <td></td> <td></td> <td>•</td> <td>•</td> <td>` '</td> <td>•</td> <td>•</td>					•	•	` '	•	•
7 - ADJACENT LAND USE Side A Side B Side A Side A Side B Side B Side A Side B Side B Side A Side B Side B <td>WHOLE HEDGE</td> <td>ROW OR 30m S</td> <td>SURVEY S</td> <td>SECTIO</td> <td>N (Sections 7-16)</td> <td></td> <td></td> <td>٠</td> <td></td>	WHOLE HEDGE	ROW OR 30m S	SURVEY S	SECTIO	N (Sections 7-16)			٠	
Side A Side B Si									
A B A B 7a - Arable Arable crop			Side	Side				Side	Side
Uncropped Minor Road X margin			Α	В				Α	В
margin	7a - Arable	Arable crop			7e - Road/Route	Major Road			
						Minor Road			Х
7b - Grass Improved Track (unsurfaced)									
	7b - Grass						faced)		
Semi- X Footpath improved			X			Footpath			
Unimproved Rail						Rail			
7c - Woodland Young Canal	7c - Woodland		+					 	
Semi-mature 7f - Water River		LYoung				Canai			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm		20	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm		20	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers Side A Side B 10c - Docks Side A					Side B
		5						

12 - HEDGEROW SHAPE – See also Part B section 19a										
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.										
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy							
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch							

13 - DIMENSIONS			
13a - Average Height (m)	1.5m	13b - Average Width (m)	1.5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species	DBH (cm)	Species	DBH (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)	5					
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)	20		Willow, goat (Salix caprea)						
Elder (Sambucus nigra)									
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (<i>Ulmus</i> sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	40								
Hazel (Corylus avellana)	10								
Holly (<i>Ilex aquifolium</i>)	10								
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)									
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	10					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	5					
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
			<u> </u>						
Woodland species									
Herb Robert			Hairy Brome						
Bracken									
Crane's bill									
Wood avens									
Creeping cinquefoil									
Vetch (Bush)									

		Field	<u>d Sur</u>	vey Form –	H24	4(2)				
		Loca	l Hedge	erow Field Surve	y Fo	rm				
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loc	al he	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment						
Grid Ref										
Date 1 5 0	9 2 0 1 5 I	Hedgerov	v No	L2						
Surveyor(s): Sea	Surveyor(s): Sean Flynn Side Surveyed - Both Y/N									
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so ple	ease	describe.		YES	NO	
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c -	Shrubby with I	line of trees			
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows,	to nearest 5m				
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to)	End 1	End 2	To	al	
each end of the h	nedgerow							_		
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m	Section(s)		Х	
								•		
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)				.		
7 - ADJACENT L										
		Side	Side					Side	Side	
		Α	В					Α	В	
7a - Arable	Arable crop			7e - Road/Route	Э	Major Road				
	Uncropped					Minor Road			X	
	margin									
7b - Grass	Improved					Track (unsurf	faced)			
	Semi-	X				Footpath				
	improved Unimproved					Rail				
70 Woodland										
7c - Woodland	Young Somi moture	1		7f Motor		Canal				
	Semi-mature			7f - Water		River				

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	25	25	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	30	30	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B
10 10								

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	1.5m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
4.Ch. Footures (including suidenes of recent planting)
16b - Features (including evidence of recent planting)
166 - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	RVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	5		Privet, wild (Ligustrum vulgare)	10	
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)	20	
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	5		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	20		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)					
Hazel (Corylus avellana)	40				
Holly (Ilex aquifolium)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	40	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
			. , , , , ,		
Woodland species		ı		·	
Herb Robert					
Greater stitchwort					
Wood avens					
Ground ivy					
Hairy brome					

7 Woody Species. Hedgebank. Parallel Hedge

		Fie	eld Su	ırvey Forn	<u> </u>	125			
Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 1 5 0	9 2 0 1 5	Hedgerov	w No	M1					
Surveyor(s): Sea	n Flynn					Side S	urveyed - B	oth Y/ <u>N</u>	
2 - SURVEY TIM	ES AND WEA	THER/OTH	IER COI	NDITIONS TH	'AM TA	Y AFFECT THE	SURVEY		
2d - Were there a	any difficulties	in surveying	g the hed	dgerows? If so	please	describe.		YES	NO
Difficulty(ies):		•							
,									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c -	- Shrubby with	line of trees		
	•	•				·		-	
4 - LENGTH (m)	- between noc	les or inters	ections	with other hed	gerows	, to nearest 5m			
						,			
5 - CONNECTION	NS - total num	ber of other	r hedaer	ows connected	l to	End 1	End 2	Tota	al
each end of the h			3 -					_	
							•	l.	
6 - EXTENT OF S	SURVEY	6a - Whole	hedger	ow		6b - 30m	Section(s)		
				 		0.0	(-)	<u> </u>	
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)									
7 - ADJACENT L				(00000000	,				
		Side	Side					Side	Side
		A	В					A	В
7a - Arable	Arable crop			7e - Road/Ro	ute	Major Road			
	Uncropped					Minor Road		Х	
	margin								
7b - Grass	Improved					Track (unsurf	aced)		

X

7f - Water

Footpath

Rail

Canal

River

Stream

Lake/pond

Semi-

7c - Woodland

7d - Other

improved Unimproved

Young

Mature

Semi-mature

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	0.5m	0.5m	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	20cm	20cm	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B	
<5%								

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	1m	13b - Average Width (m)	2.5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species	DBH (cm)	Species	DBH (cm)		

16 - NOTES - Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent plan	nting)						

17 - WOODY SPECIES IN 30m SUR	VEY SECT	ION ON	LY – Add any others, including non-na	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)	40	
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	30				
Hazel (Corylus avellana)	50				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)	5	
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	20	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	5	
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
, 2000 (0)					
Woodland species		I			
Hairy brome					
Herb Robert					
Wood avens					
Dog's mercury					

		Fie	eld Su	ırvey Form -	- H2	3			
		Loca	l Hedge	erow Field Surve	y Form	า			
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loc	al hed	gerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment					
Grid Ref	-								
Date 1 5 0	9 2 0 1 5 F	Hedgerov	v No	Р					
Surveyor(s): Sea	n Flynn	1.50				Side S	urveyed - B	oth Y/	<u>v</u>
						•	•	-	
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS THAT I	MAY A	FFECT THE	SURVEY		
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO							NO		
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	1 1	3b - Line	of trees		3c - SI	hrubby with	line of trees		
,						•			
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows. to	nearest 5m			
- ()					,				
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to		End 1	End 2	To	ital
each end of the h		. 0. 00.	nougo.				2110 2		
								II	
6 - EXTENT OF S	SURVEY 6a	a - Whole	hedger	OW		6b - 30m	Section(s)		Х
O EXTENT OF	3011721	* *********	noagon			100 00111	00011011(0)		Х
WHOLE HEDGE		IIR\/FY 9	SECTIO	N (Sections 7-16)		•			
7 - ADJACENT L		OKVET	<u>JEO 110</u>	14 (Occilons 7 10)					
1 - ADSAGENT E	AND OOL	Side	Side					Side	Side
		A	B					A	B
7a - Arable	Arable crop			7e - Road/Route	· N	/lajor Road			
	Uncropped					/linor Road			Х
	margin								
7b - Grass	Improved				Т	rack (unsurf	faced)		
	Semi-	X			F	ootpath			
	improved	1							
	Unimproved	1				Rail			
7c - Woodland	Young	1				Canal			
	Semi-mature			7f - Water	F	River			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	3m	13b - Average Width (m)	1.5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	0

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species	DBH (cm)	Species	DBH (cm)		

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Small mustelid (possibly weasel)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	IRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	30		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	20		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	20				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (<i>Tilia cordata</i>)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	20	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	10	
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings	1.5	
Woodland species					
Herb Robert					
Wood avens					
Hairy brome					

7 Woody species. Hedge bank. Hedge Parallel.

		Fie	eld Su	rvey Form	<u> – Н</u>	26				
		Loca	l Hedge	erow Field Surv	ey Fo	rm				
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment						
Grid Ref										
Date 1 5 0	Date 1 5 0 9 2 0 1 5 Hedgerow No Q									
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y	<u>'N</u>	
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so p	lease	describe.		YES	NO	
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow 3	3b - Line	of trees		3c -	Shrubby with	ine of trees		X	
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m				
5 - CONNECTIO		r of other	hedger	ows connected t	0	End 1	End 2	Т	otal	
each end of the h	nedgerow									
					ı					
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW		6b - 30m	Section(s)		Х	
	·				-					
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16	5)					
7 - ADJACENT L	AND USE							Γ		
		Side	Side					Side		
Zo Arabia	Arable area	A	В	Zo Dood/Dou	4.0	Major Dood		Α	В	
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road			_	
	Uncropped margin					Minor Road				
7b - Grass	Improved	х	Χ			Track (unsurf	aced)			
	Semi-					Footpath	,			
	improved									
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	20	20	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						
50 50 50								

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2.5m	13b - Average Width (m)	1.5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH Species (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)	5		Willow, goat (Salix caprea)						
Elder (Sambucus nigra)	40								
Elm, English (Ulmus procera)	5								
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (<i>Ulmus</i> sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	5								
Hazel (Corylus avellana)									
Holly (Ilex aquifolium)	40								
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)									
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	5					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
Woodland species - 6									
Herb Robert									

	Field Survey Form – H30(3)									
		Loca	l Hedge	erow Field Surve	ey Fo	rm				
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgerov	v regulat	ion asse	essment						
Grid Ref										
Date 1 6 0	Date 1 6 0 9 2 0 1 5 Hedgerow No T3									
Surveyor(s): Geo	orgia Kelly					Side S	urveyed - B	oth Y	<u>'N</u>	
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so p	lease	describe.		YES	NO	
Difficulty(ies):								•	· · ·	
•										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X 3	b - Line	of trees		3c -	Shrubby with	line of trees	;		
						-				
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	1			
,										
5 - CONNECTIO	NS - total number	of other	hedger	ows connected t	0	End 1	End 2	Т	otal	
each end of the h			J							
								-		
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow		6b - 30m	Section(s)		Х	
	•					•		l.		
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16	5)	•		•		
7 - ADJACENT L				(20000000000000000000000000000000000000	,					
		Side	Side					Side	Side	
		Α	В					Α	В	
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road			Х	
	Uncropped					Minor Road				
	margin									
7b - Grass	Improved	Х				Track (unsurf	faced)			
	Semi- improved					Footpath				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
70 - Woodland	Semi-mature			7f - Water		River				
	Jenn-mature	1		11 - VValei		IVIACI				

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	20	20	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)	X						
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	4m	13b - Average Width (m)	5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			
Ash	50					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

Species Shrubs % No. cover Alder, common (Alnus glutinosa) Apple, crab (Malus sylvestris) Ash (Fraxinus excelsior) Aspen (Populus tremula) Beech (Fagus sylvatica) Beech (Fagus sylvatica) Beech (Fagus sylvatica) Birch, downy (Betula pubescens) Birch, silver (Betula pubescens) Birch, silver (Betula pendula) Brown (Sorbus aucuparia) Blackthorn (Romus acuparius) Brown (Cytisus scoparius) Waylaring-tree (Viburnum lantana) Willow, grey (Salix cinerea) Willow, goat (Salix caprea) Ellm, English (Ulimus procera) Ellm, (Umus glubra) Ellm, (Umus glubra) Ellm, (Umus gabra) Ellm, (Umus gabra) Ellm, (Umus gabra) Ellm, (Umus gabra) Ellm, (Umus ps.) Gorse (Ulex ouropaeus) Gorse, western (Ulex galii) Guelder rose (Viburnum opulus) Havathorn (Crataegus Sp.) Alley (Cartaegus Sp.) Bramble (Rubus fruticosus agg.) Hothy (Hex aquifolium) Hornbeam (Carginus betulus) Lime, Israel-leaved (Tilia platyphyllos) Bramble (Rubus fruticosus agg.) Alley (Hercarae) Bramble (Rubus fruticosus agg.) Fraveller's-joy (Clematis vitalba) Fraveller's-joy (Clematis vitalba) Fraveller's-joy (C	17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.						
Alder, common (Alnus glutinosa) Apple, crab (Malius sylvestris) Ash (Fraxinus excelsior) Ash (Fraxinus excelsior) Aspen (Populus tremula) Beech (Fagus sylvatica) Birch, downy (Betula pubescens) Birch, downy (Betula pendula) Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Blackthorn (Prunus spinosa) Blockthorn (Prunus seuropaeus) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Buckthorn (Rhamnus cathartica) Buckthorn (Rhamnus cathartica) Buckthorn (Prunus avium) Buckthorn (Rhamnus cathartica) Buckthorn (Ramnus cathartica) Buckthorn (Rhamnus cathartica) Buckthorn (Romanus	Shrubs	Trees					
Alder, common (Alnus glutinosa) Apple, crab (Malus sylvestris) Apple, field (Acer campus lato) Apple, field (Acer sylvestris) Apple, field (Acer sylvestris	%	No.					
Apple, crab (Malus sylvestris) Ash (Fraxinus excelsior) Aspen (Populus tremula) Beech (Fagus sylvatica) Birch, downy (Betula pubescens) Birch, downy (Betula pubescens) Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Cherry, wild (Prunus avium) Dogwood (Cornus sanguinea) Elm, English (Ulmus procera) Elm, Willows sp.) Gorse (Ulex europaeus) Gorse, westem (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Popus (Clemus sylvestris) Poplar, wild (Ligustrum vulgare) Rose, dog-, (Rosa canina) Rose, (Rosa anun) Rose, (Rosa sp.) Rose (Rosa sp.) Sycamore (Rosa arvensis) Rose (Rosa parvensis) Rose (Rose parvensis) Rose (Rosa parvensis) Rose (Rosa parvensis) Rose (Rosa pa	cover						
Ash (Fraxinus excelsior) Aspen (Populus tremula) Beech (Fagus sylvatica) Birch, downy (Betula pubescens) Birch, downy (Betula pubescens) Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Cherry, wild (Prunus avium) Dogwood (Cornus sanguinea) Elider (Sambucus nigra) Elm, English (Ulmus procera) Elm, (Ulmus gabra) Elm, (Ulmus gabra) Elm, (Ulmus gabra) Beech (Viburnum opulus) Hawthorn (Crataegus sp.) 40 Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, Iarge-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Quercus robur) Pear (Pyrus communis sensu lato) Privet, wild (Ligustrum vulgare) Rose, dog- (Rosa acanina) Rose, (Rosa anvensis) Rose, (Rose a							
Aspen (Populus tremula) Beech (Fagus sylvatica) Birch, downy (Betula pubescens) Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Cherry, wild (Prunus avium) Dogwood (Cornus sanguinea) Elider (Sambucus nigra) Elm, Ellim, (Ulmus procera) Elm, (Ulmus spinos Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Havel (Corylus aveilana) Holly (Ilex aquifolium) Hornbeam (Caripus betulus) Lime, large-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, sessile (Quercus roburn) Pine, Scots (Pinus sylvestris) Pose (Prus sylvestris) Rose, (Age, Rosa arvensis) Rose, (Rosa sp.) Rose (Rosa sp.) Spindle (Rosn arvensis) Sylvean publica (Rosn arvensis) Rose (Rosa sp.) Spindle (Rosn arvensis) Sylvean publica (Ros arvensis) Rose (Rosa sp.) Rose (Rosa sp.) Spindle (Rosn arvensis) Sylvean publica (Rose publianus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Rose (Rosa sp.) Sylvean publica (Rose publianus) Rose (Rosa sp.) Rose (Rose sp.)							
Beech (Fagus sylvatica) Birch, downy (Betula pubescens) Birch, silver (Betula pubescens) Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Buckthorn (Romnus avium) Buckthorn (Romnus avium) Buckthorn (Ramnus avium) Buckthorn (Illowus av							
Birch, downy (Betula pubescens) Birch, silver (Betula pendula) Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Broom (Cytisus scoparius) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Cherry, wild (Prunus avium) Dogwood (Cornus sanguinea) Elder (Sambucus nigra) Elm, English (Ulmus procera) Elm, wych (Ulmus glabra) Elm, (Ulmus sp.) Gorse, Western (Ulex gallii) Guelder rose (Viburnum opulus) Haavthorn (Crataegus sp.) Haavthorn (Crataegus sp.) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedanculate (Quercus robur) Oak, sessile (Quercus petraea) Pine, Scots (Pinus sylvestris) Rose (Rosa sp.) Rowan (Sorbus aucuparia) Rowan (Sorbus aucuparia) Rowan (Sorbus aucuparia) Spindle (Euonymus europaeus) Wyllow, gev (Salix caprea) Willow, goat (Salix caprea) Bramble (Calix caprea) Rose (Rosa sp.) 20 Willow, goat (Salix caprea) Forally (Salix caprea) Bramble (Fulus gallii) Rose (Rosa sp.) Bramble (Euonymus europaeus) Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Fraveller's-joy (Clematis vitalba) Pine, Scots (Pinus sylvestris)							
Birch, silver (Betula pendula) Blackthorn (Prunus spinosa) Broom (Cytisus scoparius) Broom (Cytisus scoparius) Buckthorn (Rhamnus cathartica) Cherry, wild (Prunus avium) Dogwood (Cornus sanguinea) Elder (Sambucus nigra) Elm, English (Ulmus procera) Elm, (Vlmus glabra) Elm, (Ulmus glabra) Gorse (Ulex europaeus) Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, sessile (Quercus petraea) Pine, Scots (Pinus sylvestris) Royan (Sorbus aucuparia) Spindle (Euonymus europaeus) Sycamore (Acer pseudoplatanus) Wayfaring-tree (Viburnum lantana) Wayfaring-tree (Viburnum lantana) Wayfaring-tree (Viburnum lantana) Willow, grey (Salix cinerea) Willow, goat (Salix caprea) Bramble (Lunix caprea) Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Pear (Pyrus communis sensu lato) Traveller's-joy (Clematis vitalba) Pine, Scots (Pinus sylvestris)							
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Dogwood (Corrus sanguinea) Elder (Sambucus nigra) Elm, English (Ulmus procera) Elm, wych (Ulmus glabra) Elm, (Ulmus sp.) Gorse (Ulex europaeus) Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Willow, goat (Salix caprea) Flm, Scots (Pinus sylvestris) Willow, goat (Salix caprea) Willow, go							
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Elm, English (Ulmus procera) Elm, wych (Ulmus glabra) Elm, (Ulmus sp.) Gorse (Ulex europaeus) Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Elm, wych (Ulmus glabra) 20 Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Elm, wych (Ulmus glabra) Elm, (Ulmus sp.) Gorse (Ulex europaeus) Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris)							
Elm, (Ulmus sp.) Gorse (Ulex europaeus) Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Gorse (Ulex europaeus) 20 Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Gorse (Ulex europaeus) Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Guelder rose (Viburnum opulus) 20 Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Gorse, western (Ulex gallii) Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Dear (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Dear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) David Gaps/access openings							
Guelder rose (Viburnum opulus) Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) 20 Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba)							
Hawthorn (Crataegus sp.) Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) 20 Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Hazel (Corylus avellana) Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) 20 Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Holly (Ilex aquifolium) Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Hornbeam (Carpinus betulus) Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Hornbeam (Carpinus betulus) Lime, large-leaved (Tilia platyphyllos) Lime, small-leaved (Tilia cordata) Maple, field (Acer campestre) Oak, pedunculate (Quercus robur) Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Lime, large-leaved (<i>Tilia platyphyllos</i>) Lime, small-leaved (<i>Tilia cordata</i>) Maple, field (<i>Acer campestre</i>) Oak, pedunculate (<i>Quercus robur</i>) Oak, sessile (<i>Quercus petraea</i>) Pear (<i>Pyrus communis</i> sensu lato) Pine, Scots (<i>Pinus</i> sylvestris) Bramble (<i>Rubus fruticosus</i> agg.) Honeysuckle (<i>Lonicera periclymenum</i>) Ivy (<i>Hedera helix</i>) Traveller's-joy (<i>Clematis vitalba</i>)							
Lime, small-leaved (<i>Tilia cordata</i>) Maple, field (<i>Acer campestre</i>) Oak, pedunculate (<i>Quercus robur</i>) Oak, sessile (<i>Quercus petraea</i>) Pear (<i>Pyrus communis</i> sensu lato) Pine, Scots (<i>Pinus</i> sylvestris) Bramble (<i>Rubus fruticosus</i> agg.) Honeysuckle (<i>Lonicera periclymenum</i>) Ivy (<i>Hedera helix</i>) Traveller's-joy (<i>Clematis vitalba</i>) % Gaps/access openings							
Maple, field (Acer campestre) Bramble (Rubus fruticosus agg.) Oak, pedunculate (Quercus robur) Honeysuckle (Lonicera periclymenum) Oak, sessile (Quercus petraea) Ivy (Hedera helix) Pear (Pyrus communis sensu lato) Traveller's-joy (Clematis vitalba) Pine, Scots (Pinus sylvestris) % Gaps/access openings							
Oak, pedunculate (Quercus robur) Honeysuckle (Lonicera periclymenum) Oak, sessile (Quercus petraea) Ivy (Hedera helix) Pear (Pyrus communis sensu lato) Traveller's-joy (Clematis vitalba) Pine, Scots (Pinus sylvestris) % Gaps/access openings							
Oak, sessile (Quercus petraea) Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba) % Gaps/access openings	5						
Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Pear (Pyrus communis sensu lato) Pine, Scots (Pinus sylvestris) Traveller's-joy (Clematis vitalba) % Gaps/access openings							
Pine, Scots (<i>Pinus</i> sylvestris) % Gaps/access openings							
Woodland species - 7							
							

Field Survey Form – H30(4)									
Local Hedgerow Field Survey Form									
PART A - ESSEN	NTIAL ASSESSM	MENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 1 6 0 9 2 0 1 5 Hedgerow No T4									
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/	<u> </u>
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so p	lease	describe.		YES	NO
Difficulty(ies):									•
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow	3b - Line	of trees		3c -	Shrubby with	ine of trees		X
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	ı		
5 - CONNECTIO	NS - total numbe	er of other	hedger	ows connected t	0	End 1	End 2	То	tal
each end of the h	nedgerow								
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m	Section(s)		Χ
	<u> </u>								
WHOLE HEDGE	ROW OR 30m S	URVEY	SECTIO	N (Sections 7-16	5)	·		-	
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road			X
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved	X				Track (unsurf	aced)		
	Semi- improved					Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
70 - Woodland	Semi-mature	1		7f - Water		River			
	Semi-mature			71 - vvaler		KIVEI			

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	20	20	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)	X						
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	4m	13b - Average Width (m)	5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH (cm) DBH (cm)							
P. Oak 30							
P. Oak 30							
P. Oak 30							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	IRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)	10	
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
, , ,					
Woodland species - 7	•			•	
•					

Field Survey Form – H32(1)									
Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 1 6 0	9 2 0 1 5 1	Hedgerov	v No	U1					
Surveyor(s): Sea	n Flynn					Side S	urveyed - B	oth Y/N	<u>I</u>
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so pl	ease	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow :	3b - Line	of trees		3c -	Shrubby with I	line of trees		Х
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	1		
5 - CONNECTIO		r of other	hedger	ows connected to	o	End 1	End 2	To	tal
each end of the h	nedgerow								
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)		X
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16	5)				
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Rout	:e	Major Road			
Uncropped Minor Road									
7b - Grass	margin Improved	Х				Track (unsurf	faced)		
70 - Glass	Semi-		Х			Footpath	aceu)		
	improved		^			ι οσιραιτι			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	1.5m		8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)		Х					
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B	
60 60 20 20								

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS	
13a - Average Height (m)	13b - Average Width (m)
Excluding bank, to nearest 25cm	At the widest point of canopy; excluding bank, to
	nearest 25cm

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	5%

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH (cm) Species DBH (cm)							
Oak 50							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Grey squirrel
16b - Features (including evidence of recent planting)

Species	Shrubs	Trees	Species	Shrubs	Trees
-1	%	No.		%	No.
	cover	110.		cover	110.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	5		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	5		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	20				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	60				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			Wh Boyous	10	
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)	40	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)	1		Ivy (Hedera helix)	60	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)	5	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					
Lords-and-ladies					

		Fie	eld Su	irvey F	orm – H	<u>131</u>			
		Loca	l Hedge	row Field	Survey Fo	orm			
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted fo	r all local h	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerov	v regulat	ion asse	essment					
Grid Ref									
Date 1 6 0	9 2 0 1 5 H	Hedgerov	v No	VA					
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N									
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS	THAT MA'	Y AFFECT THE	SURVEY		
2d - Were there a								YES	NO
Difficulty(ies):	,		,	<u></u>	. оо р.ос.ос				1
2 2									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	Igerow 3	Bb - Line	of trees		3c ·	- Shrubby with	line of trees		Х
,	-					,			
4 - LENGTH (m)	- between nodes	or inters	ections	with other	hedgerows	, to nearest 5m		60	m
- ()					. . .	,			
5 - CONNECTION	NS - total number	of other	hedger	ows conne	cted to	End 1	End 2	To	tal
each end of the h		0. 0							
								<u> </u>	
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW		6b - 30m	Section(s)		Х
0 2/12/11 01 1	00111121	********	nougo			02 00	20011011(0)		χ
WHOLE HEDGE	ROW OR 30m SI	JRVFY S	SECTIO	N (Section	s 7-16)	·		.	
7 - ADJACENT L		J. (V E 1 C	220110	11 (00011011	01 10)				
7 ABOAGENTE	/ II OOL	Side	Side					Side	Side
		A	В					A	В
7a - Arable	Arable crop			7e - Roa	d/Route	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved		Х			Track (unsurf	aced)		
	Semi-	X				Footpath			
	improved								
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Wate	r	River			

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	50	50	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)	Х	Х						
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES										
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)										
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B		
	80	80		60	60					

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	15m	13b - Average Width (m)	10m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21									
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.									
Species	DBH (cm)	Species	DBH (cm)						
Oak	50	Oak	50						
Oak	50								
Oak	70								

16 - NOTES - Whole hedgerow or 30m survey section

16a - Fauna (evidence of)

Grey Squirrel

16b - Features (including evidence of recent planting)

Fence internal. Increased nutrient enrichment from adjacent improved grass

Species	Shrubs	Trees	LY – Add any others, including non-n Species	Shrubs	Trees
Ороско	%	No.	Opedies	%	No.
	cover	INO.		cover	INO.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)	20	
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (<i>Cornus sanguinea</i>)	5		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	1				
Elm, English (<i>Ulmus procera</i>)			Spindle	1	
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	40				
Hazel (Corylus avellana)					
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)	20		Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		ı			
Bureed					
Lords-and-ladies					
Herb Robert					

		Field	d Sur	vey For	<u>m – </u>	H3	3(1)			
		Loca	l Hedge	row Field	Surve	y Fo	rm			
PART A - ESSEN	ITIAL ASSESSM	ENTS (T	o be co	mpleted for	all loc	al he	dgerow surve	ys)		
TITLE OF SURVI	EY: M4 Hedgerov	v regulati	ion asse	essment						
Grid Ref										
Date 2 2 0	9 2 0 1 5 F	ledgerov	v No	V1						
										l NO
								<u> </u>		
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS 1	ГНАТ	MAY	AFFECT THE	SURVEY		
2d - Were there a									YES	NO
Difficulty(ies):	,	<u> </u>		<u> </u>						1
3 - HEDGEROW	TYPE									
3a - Shrubby hed	gerow X 3	b - Line	of trees			3c -	Shrubby with I	ine of trees		
							•			
4 - LENGTH (m)	- between nodes	or interse	ections	with other h	edger	ows,	to nearest 5m			
` '						•				
5 - CONNECTION	NS - total number	of other	hedger	ows connec	cted to)	End 1	End 2	То	tal
each end of the h	edgerow									
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	OW		Χ	6b - 30m S	Section(s)		
WHOLE HEDGE	ROW OR 30m Sl	JRVEY S	SECTIO	N (Sections	7-16))			-	
7 - ADJACENT L	AND USE			`						
		Side	Side						Side	Side
		Α	В						Α	В
7a - Arable	Arable crop			7e - Road	/Route	е	Major Road			X
	Uncropped						Minor Road			
	margin .							n.		
7b - Grass	Improved	.,					Track (unsurf	aced)		
	Semi- improved	Х					Footpath			
	Unimproved						Rail			
7c - Woodland	Young						Canal			
	Semi-mature			7f - Water			River			

Stream Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18									
	Side A	Side B							
8a - Bank - Height (in metres) to nearest 25cm		-	8f - Ditch - internal - Dry (tick)						
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)						
8c - Fence (tick)									
8d - Ditch - external - Dry (tick)									
8e - Ditch - external - Wet (tick)									

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B	
	Tour Hourse Glad Z Hos						

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	12m	13b - Average Width (m)	~4m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
BADGER – push through
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-nati	ves.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	Х		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	Х	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	Х		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)	Х		Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	Х				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)			Lords and Ladies		
Elm, (Ulmus sp.)			White head nettle		
Gorse (Ulex europaeus)			Hedge bed		
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	Х				
Hazel (Corylus avellana)	Х				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (<i>Tilia cordata</i>)					
Maple, field (Acer campestre)	х		Bramble (<i>Rubus fruticosus</i> agg.)	х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
, , , , , , , , , , , , , , , , , , , ,			,		
Woodland species				ı	
Lords-and-ladies					
White dead nettle					
Hedge bedstraw					

	Field Survey Form – H35(1)								
		Loca	l Hedge	row Field	Survey Fo	orm			
PART A - ESSEN	ITIAL ASSESSMI	ENTS (T	o be co	mpleted fo	r all local h	edgerow surve	ys)		
TITLE OF SURVI	EY: M4 Hedgerov	v regulati	ion asse	essment					
Grid Ref									
Date 1 6 0 9 2 0 1 5 Hedgerow No W1									
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N B									
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS	THAT MAY	AFFECT THE	SURVEY		
2d - Were there a	ny difficulties in s	urveying	the hed	dgerows? I	f so please	describe.		YES	NO
Difficulty(ies):					•				
3 - HEDGEROW	TYPE								
3a - Shrubby hed	gerow 3	b - Line	of trees		3c -	Shrubby with	ine of trees		Х
						-			
4 - LENGTH (m)	- between nodes	or interse	ections	with other	hedgerows	, to nearest 5m			
, ,									
5 - CONNECTION	NS - total number	of other	hedger	ows conne	ected to	End 1	End 2	Tot	al
each end of the h			J						
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	ow		6b - 30m	Section(s)		Х
					•	•	` '	•	
WHOLE HEDGE	ROW OR 30m SL	JRVEY S	SECTIO	N (Section	s 7-16)				
7 - ADJACENT L									
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Roa	d/Route	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved	Х				Track (unsurf	aced)		
	Semi- improved		X			Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Wate	r	River			

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm	10cm	10cm	8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)	Х					
8d - Ditch - external - Dry (tick) 3m to North		Х				
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B
	Tod Nettics Glac / Glac B Tob Gleavers Glac / Glac B Tob Books Glac / Glac B						

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	4m	13b - Average Width (m)	1m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			
Immature and saplings along entire length, see 17 for species	5-15cm					

16 - NOTES - Whole hedgerow or 30m survey s	section					
16a - Fauna (evidence of)						
Badger – Diggings covered by fence						
16b - Features (including evidence of recent planting)						

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-nati	ives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	% cover	No.		% cover	No.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	5		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)	10	
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (Ulmus glabra)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	50	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species - 8					

Field Survey Form - H34

	i iii iii iii iii iii iii iii iii iii									
Local Hedgerow Field Survey Form										
	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment									
	'EY: M4 Hedgerov	v regulat	ion asse	essment						
Grid Ref										
		ledgerov	V NO	X		0:4- 6	\) - (l-)//N		
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N										
-										
	1ES AND WEATH						SURVEY	T		
	any difficulties in s	surveying	the he	dgerows?	If so please	e describe.		YES	NO NO	
Difficulty(ies):										
3 - HEDGEROW										
3a - Shrubby he	dgerow X 3	b - Line	of trees		3c	- Shrubby with	line of trees	5		
4 - LENGTH (m)	- between nodes	or inters	ections [*]	with other	hedgerows	s, to nearest 5m	1			
							I			
5 - CONNECTION each end of the	NS - total number	of other	hedger	ows conne	ected to	End 1	End 2	Tot	al	
each end of the	neugerow									
						1				
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW		6b - 30m	Section(s)		Χ	
	ROW OR 30m St	JRVEY S	SECTIO	N (Section	s 7-16)					
7 - ADJACENT L	_AND USE	T	T					T		
		Side A	Side B					Side A	Side B	
7a - Arable	Arable crop			7e - Roa	d/Route	Major Road		X		
74 Madic	Uncropped			70 1100	arroute	Minor Road				
	margin					Willion Road				
7b - Grass	Improved					Track (unsur	faced)			
	Semi-					Footpath	•			
	improved					·				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Wate	er	River				
	Mature					Stream				
7d - Other	Motorway		Х			Lake/pond				
	balancing pond									
	η ρυτία	l				1				

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	30cm	30cm	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							
Tod Notified State 7. Clas B 100 Close 7. Clas B 100 Double 100 Do								

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	10m	13b - Average Width (m)	>5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	Connected to motorway verge

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species	DBH (cm)	Species	DBH (cm)		

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
Badger							
16b - Features (including evidence of recent planting)							
Part of motorway verge. Recently planted. High proportion non-native							

Species	Shrubs	Trees	Species	Shrubs	Trees
	% cover	No.		% cover	No.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)	5	
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					,
Elm, English (<i>Ulmus procera</i>)					,
Elm, wych (Ulmus glabra)					
Elm, (<i>Ulmus</i> sp.)					,
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					,
Guelder rose (Viburnum opulus)					,
Hawthorn (Crataegus sp.)	30				,
Hazel (Corylus avellana)					,
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					,
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)	30	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	10	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
vvoodiand species					

Most part of plantation w/l on motorway verge than hedgerow. NOT protected under hab regs

		Fie	eld Su	ırvey Form –	H37			
		Loca	l Hedge	erow Field Survey	Form			
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all local	hedgerow surve	ys)		
TITLE OF SURVEY: M4 Hedgerow regulation assessment								
Grid Ref								
Date 1 6 0	9 2 0 1 5 F	ledgerov	v No	Υ				
Surveyor(s): Geo	rgia Kelly				Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS THAT M	AY AFFECT THE	SURVEY		
2d - Were there a	any difficulties in s	urveying	the hed	dgerows? If so plea	se describe.		YES	NO
Difficulty(ies):								•
3 - HEDGEROW	TYPE							
3a - Shrubby hed	lgerow X 3	b - Line	of trees	3	c - Shrubby with	line of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerov	vs, to nearest 5m	1		
					·			
5 - CONNECTION	NS - total number	of other	hedger	ows connected to	End 1	End 2	Tot	al
each end of the h			J					
					•		•	
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)		Х
				•	•			
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16)	·		•	
7 - ADJACENT L				(22222				
		Side	Side				Side	Side
		Α	В				Α	В
7a - Arable	Arable crop			7e - Road/Route	Major Road			
	Uncropped				Minor Road		X	
	margin							
7b - Grass	Improved		Х		Track (unsur	faced)		
	Semi-				Footpath			
	improved				Dell			
70 \\\0.5 = 5 = 5	Unimproved				Rail			
7c - Woodland	Young			76 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Canal			
	Semi-mature			7f - Water	River			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	20		8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)		Х						
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	1.5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species	DBH (cm)	Species	DBH (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-na	tives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10		Prunus sp.	10	
Elm, English (Ulmus procera)					
Elm, wych (Ulmus glabra)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	10				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	20	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	10	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)	10	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
, , ,			,		
Woodland species	1				
Creeping cinquefoil					
Lords-and-ladies					
Garlic mustard					
Dog's mercury					
Pale toadflax					
Wood false brome					

		Fie	eld Su	rvey Form	<u> – Н</u>	40			
		Loca	l Hedge	row Field Surv	ey Fo	rm			
PART A - ESSEN	ITIAL ASSESSM	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref		-							
Date 1 6 0 9 2 0 1 5 Hedgerow No Z									
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N A									
,	,						•		<u> </u>
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a								YES	NO
Difficulty(ies):	arry arribantion in t	<i>3</i> 41	,	аделенте: н ее р	10000	400011001			1.10
Dimodity (100):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	T T	Bb - Line	of trees		3c -	Shrubby with	ine of trees		Х
<u> </u>	.90.0		<u> </u>		100	· · · · · · · · · · · · · · · · · · ·			
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows	to nearest 5m			
T LENGTH (III)	Dotwoon nodes	Of intoro	00110110	with other floage	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	rio modroot om	<u>'</u>		
5 - CONNECTION	NS - total numbe	r of other	hedger	ows connected t	·n	End 1	End 2	То	tal
each end of the h			neager	ows connected t	.0	Liid i	LIIG Z		tui .
								<u> </u>	
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	∩W		6b - 30m	Section(s)		Х
O EXTENT OF	301(12)	***************************************	noagon		1	100 00111	5000011(0)		Λ
WHOLE HEDGE		IRVEV 9	SECTIO	N (Sections 7-16	3)	•		•	
7 - ADJACENT L		DICVET	<u>JEOTIO</u>	14 (Sections 7-10	<i>)</i>				
1 - ADSAGENT E	AND OOL	Side	Side					Side	Side
		A	В					A	В
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved		X			Track (unsurf	aced)		
	Semi-	X				Footpath			
	improved								
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	20	20	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)		Х						
8d - Ditch - external - Dry (tick) 3m to North	X							
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B
Tod Notices Clad 7. Clad 5 105 Clad 7. Clad 5 105 Clad 7. Clad 5							

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	4m	13b - Average Width (m)	1m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Sapling and immature trees, as at 17	5-10						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Badger latrine to west
16b - Features (including evidence of recent planting)

			LY – Add any others, including non-n		T
Species	Shrubs	Trees	Species	Shrubs	Trees
	% cover	No.		% cover	No.
Alder, common (Alnus glutinosa)	COVE		Plum, wild (<i>Prunus domestica</i>)	COVE	
Apple, crab (Malus sylvestris)			Poplar, black (<i>Populus nigra betulifolia</i>)		
Ash (Fraxinus excelsior)			Privet, wild (<i>Ligustrum vulgare</i>)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	30		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (<i>Rhamnus cathartica</i>)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10		Prunus Sp.	10	
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	20				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (<i>Tilia cordata</i>)					
Maple, field (Acer campestre)	5		Bramble (<i>Rubus fruticosus</i> agg.)	10	
Oak, pedunculate (<i>Quercus robur</i>)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			lvy (Hedera helix)	10	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
, 20010 (00 5)//001110/					
Woodland species	1		1	1	
· · · · · · · · · · · · · · · · · · ·					
Lords-and-ladies					
Wood avens					

		Field	<u>d Sur</u>	vey Form –	H36(1)			
		Loca	l Hedge	erow Field Surve	y Form				
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loc	al hedge	erow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment					
Grid Ref									
Date 1 1 0	9 2 0 1 5 H	Hedgerov	v No	AA1					
Surveyor(s): Sea	n Flynn, Georgia	Kelly				Side S	urveyed - B	oth Y/	1
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT	MAY AF	FECT THE	SURVEY		
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so ple	ase des	cribe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c - Shı	ubby with	line of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows, to i	nearest 5m	1		
		r of other	hedger	ows connected to	E	nd 1	End 2	То	tal
each end of the h	nedgerow				\vdash				
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m	Section(s)		Χ
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Route		ajor Road			
	Uncropped margin				Mi	nor Road		Х	
7b - Grass	Improved		Х		Tr	ack (unsur	faced)		
75 01433	Semi-					otpath	laocaj		
	improved				' '	στρατιτ			
	Unimproved				Ra	nil			
7c - Woodland	Young				Ca	ınal			
	Semi-mature			7f - Water	Ri	ver			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	0.5		8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B
	5						

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) DBH (cm)						

16 - NOTES - Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	JRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	20		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	25				
Holly (<i>Ilex aquifolium</i>)	20				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	40		Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	20	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	10	
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
			,,		
Woodland species	1			1	
Hedge bedstraw			Creeping cinquefoil		
Lords-and-ladies			Wood sage		
Bracken			Wood avens		
Wood medic			Herb Robert		
Red fescue			Barren strawberry		
Dog violet					

		Field	d Sur	vey Form –	· H3	6(2)				
		Loca	l Hedge	erow Field Surve	ey Fo	rm				
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURV	TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref										
Date 1 1 0	9 2 0 1 5 F	Hedgerov	v No	AA2						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N		
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so pl	lease	describe.		YES	NO	
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X 3	Bb - Line	of trees		3c -	Shrubby with	line of trees			
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	1			
5 - CONNECTIO	NS - total number	of other	hedger	ows connected t	0	End 1	End 2	To	al	
each end of the h	nedgerow									
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow		6b - 30m	Section(s)		Х	
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16	5)					
7 - ADJACENT L	AND USE									
		Side	Side					Side	Side	
		Α	В					Α	В	
7a - Arable	Arable crop			7e - Road/Rout	te	Major Road				
	Uncropped					Minor Road			Х	
7h Cross	margin	V				Trools ((a a a d)			
7b - Grass	Improved	Х				Track (unsurf	aced)			
	Semi- improved					Footpath				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm	0.75m		8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm	20cm		8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cov	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B

12 - HEDGEROW SHAPE	E – See also Part B section	ı 19a							
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	1.5m	13b - Average Width (m)	1m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species DBH (cm)						

16 - NOTES - Whole hedgerow or 30m survey s	section	
16a - Fauna (evidence of)		
16b - Features (including evidence of recent plan	nting)	

17 - WOODY SPECIES IN 30m SUR	VEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	5		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	20		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	5				
Hazel (Corylus avellana)	40				
Holly (Ilex aquifolium)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)				5	
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	10	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	10	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	5	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species	•			•	
Herb Robert					
Hart's tongue					
Wood avens					
Lords-and-ladies					

Field Survey Form - H41

Local Hedgerow Field Survey Form									
PART A - ESSE	NTIAL ASSESSMI	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerov	v regulat	ion asse	essment					
Grid Ref									
									1
Date 2 4 0		ledgerov	w No	AB					
Surveyor(s): Sea	n Flynn					Side S	urveyed - B	oth Y/N	
	IES AND WEATH						SURVEY	I	1
	any difficulties in s	urveying	the he	dgerows? If so p	lease	describe.		YES	<u>NO</u>
Difficulty(ies):									
3 - HEDGEROW	TVPF								
3a - Shrubby hed		b - Line	of trees		30 -	Shrubby with I	ine of trees	T	
od Childbby Hee	agorow A o	D LITTO	01 11000		100	Ciliabby With I	inc or trees		
4 - I FNGTH (m)	- between nodes	or inters	ections	with other hedge	erows	to nearest 5m			
i EENOTH (III)	DOLWOOTI TIOGOO	01 1111010	00110110	With other floage	<i>7</i> 10 WO,	, to modroot om			J
5 - CONNECTIO	NS - total number	of other	· hedaer	rows connected t	to	End 1	End 2	Tot	al
each end of the h			3 -						
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow		6b - 30m S	Section(s)		X
WHOLE HEDGE	ROW OR 30m SL	JRVEY S	SECTIO	N (Sections 7-16	3)				
7 - ADJACENT L	AND USE		T						
		Side	Side					Side	Side
Zo Arobio	Arable arab	A	В	Zo Bood/Pou	ıto.	Major Bood		A	В
7a - Arable	Arable crop Uncropped			7e - Road/Rou	ile	Major Road Minor Road			
	margin					Willion Road			
7b - Grass	Improved					Track (unsurf	aced)		
	Semi- improved	X	Х			Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			
	Mature					Stream			
7d - Other						Lake/pond			

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	50	-	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	30	30	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers Side A Side B 10c - Docks Side A Side					Side B
	50 50							

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	pecies DBH Species DI (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Sheep under grazing. Rabbits
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY - Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)	50		Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)						
Elder (Sambucus nigra)	1								
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (Ulmus sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	60								
Hazel (Corylus avellana)	20								
Holly (Ilex aquifolium)									
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)									
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)	60					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			lvy (Hedera helix)	20					
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings	5					
Woodland species									
Lords-and-ladies									
Herb Robert									
Wood false brome									
Hedge bedstraw									
Jack by the hedge									

Field Survey Form – H42										
	Local Hedgerow Field Survey Form									
PART A - ESSEN	ITIAL ASSESSM	ENTS (T	o be co	mpleted for all loca	al hedgerow	surveys)				
TITLE OF SURV	EY: M4 Hedgerov	v regulat	ion asse	essment		•				
Grid Ref		-								
Date 2 4 0	Date 2 4 0 9 2 0 1 5 Hedgerow No AC									
Surveyor(s): Sea	n Flynn			•	5	Side Surveyed - I	Both Y/N			
, ,					<u>'</u>	,		- '		
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT I	/AY AFFEC	T THE SURVEY				
				dgerows? If so ple			YES	NO		
Difficulty(ies):	arry amioanace irre	<i>y</i>	,	agerene: n ee pre	400 40001100	·•	1.20			
Billiounty (100):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed		Bb - Line	of trees	T T	3c - Shrubby	with line of tree	s			
	9			l l						
4 - I FNGTH (m)	- hetween nodes	or inters	ections	with other hedgerd	ws to neare	est 5m				
T LENGTH (III)	Dotwoon nodes	01 111010	00110110	with other floagore	wo, to mound	0111				
5 - CONNECTIO	NS - total number	r of other	hedger	ows connected to	End 1	End 2	То	tal		
each end of the h		or ourier	neager	owo connected to	2110 1	LIIG Z		iai		
						I				
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	OW	6h -	30m Section(s)		Χ		
O EXTENT OF	3011121	**********	noagon		1 00	COM COCHOM(C)	_	X		
WHO! E HEDGE		IR\/FV 9	SECTIO	N (Sections 7-16)	•		•			
7 - ADJACENT L		JIV L I C	<u>JECTIO</u>	14 (Sections 7-10)						
7 - ADJACENT L	AND USE	Side	Side				Side	Side		
		A	B				A	B		
7a - Arable	Arable crop			7e - Road/Route	Major F	Road				
	Uncropped				Minor F					
	margin									
7b - Grass	Improved				Track (unsurfaced)				
	Semi-	X	X		Footpat	th				
	improved									
	Unimproved				Rail					
7c - Woodland	Young				Canal					
	Semi-mature			7f - Water	River					

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	25	25	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	30	30	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							
20 20								

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

2.5m	13b - Average Width (m)	3m
	At the widest point of canopy; excluding bank, to	
	2.5m	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH Species D (cm)							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Rabbits
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-nat	ives.	Ī
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	50		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	20		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	60				
Hazel (Corylus avellana)					
Holly (Ilex aquifolium)	1				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony	1	
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	40	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	30	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		_			
Herb Robert					
Hedge woundwort					
Wood avens					
Common dog violet					
Lords-and-ladies					

Field Survey Form – H44(1)										
Local Hedgerow Field Survey Form										
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURVEY: M4 Hedgerow regulation assessment										
Grid Ref										
				.						
Date 1 0 0	9 2 0 1 5 F	ledgerov	v No	AD1						
Surveyor(s): Sea	n Flynn					Side S	urveyed - B	oth Y/	<u>N</u>	
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY	ı		
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so p	lease	describe.		YES	<u>NO</u>	
Difficulty(ies):										
3 - HEDGEROW	l I				ı					
3a - Shrubby hed	lgerow X 3	b - Line	of trees		3c -	Shrubby with	ine of trees			
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m		2	50	
								1		
5 - CONNECTIO		of other	hedger	ows connected t	0	End 1	End 2	T	otal	
each end of the h	ieagerow									
						T.,				
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW		6b - 30m S	Section(s)		2	
WHOLE HEDGE		JRVEY S	SECTIO	N (Sections 7-16	5)					
7 - ADJACENT L	AND USE	I 0: 1	0:1	T				0:1	1 0: 1	
		Side A	Side B					Side A	Side B	
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road				
74 7 TUDIO	Uncropped			70 Roda/Rod		Minor Road			Х	
	margin					Willion Road				
7b - Grass	Improved					Track (unsurf	aced)			
	Semi-	X	X			Footpath				
	improved									
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm		0.25	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm		Cut	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B	
x x x x								

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	1.5m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH (cm) Species DE (cn)							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.					
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.	·	%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)	10	
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmu</i> s sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	10				
Holly (Ilex aquifolium)	5				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	30		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	40	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	10	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Dogs mercury			Barren strawberry		
Herb Robert					
Lords-and-ladies					
Jack by the hedge					
Red fescue					
Wood avens					

	Field Survey Form – H44(2)									
	Local Hedgerow Field Survey Form									
PART A - ESSEN	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment										
Grid Ref										
Date 1 0 0	Date 1 0 0 9 2 0 1 5 Hedgerow No AD2									
Surveyor(s): Sea	n Flynn				Side S	Surveyed - B	oth Y/N			
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT M	AY AFFECT THI	SURVEY				
2d - Were there a	any difficulties in s	urveying	the hed	dgerows? If so plea	se describe.		YES	NO		
Difficulty(ies):				•			•			
• ,										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X 3	b - Line	of trees	3	c - Shrubby with	line of trees				
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerov	vs, to nearest 5m	1		250		
				-						
5 - CONNECTIO	NS - total number	of other	hedger	ows connected to	End 1	End 2	Tot	al		
each end of the h	nedgerow		J		_					
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)		Х		
WHOLE HEDGE	ROW OR 30m Sl	JRVEY S	SECTIO	N (Sections 7-16)	·					
7 - ADJACENT L	AND USE									
		Side	Side				Side	Side		
		Α	В				Α	В		
7a - Arable	Arable crop			7e - Road/Route	Major Road		X			
	Uncropped				Minor Road					
	margin									
7b - Grass	Improved		Х		Track (unsur	faced)				
	Semi-				Footpath					
	improved Unimproved				Rail					
7c - Woodland	Young				Canal					
70 - WOOGIANG				7f Water						
	Semi-mature			7f - Water	River					

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	Cut		8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 – NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)						_	
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side E						Side B	
	X X X X X X X X X X X X X X X X X X X						Х

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DBI (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Rabbits
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	20					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)	10					
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)	10								
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (Ulmus sp.)	5								
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	30								
Hazel (Corylus avellana)									
Holly (Ilex aquifolium)									
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)									
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	60					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
Woodland species									
Hedge bedstraw									
Herb Robert									
Hogweed									
Silverweed									
False oat-grass									

Field Survey Form H46(1)

Local Hedgerow Field Survey Form											
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)											
TITLE OF SURVE	EY: M4 Hed	dgerov	v regulat	ion asse	essment						
Grid Ref											
Date 1 0 0	9 2 0 1	5 H	Hedgerov	v No	AE1						
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N											
	•								-		
2 - SURVEY TIM	ES AND W	EATH	ER/OTH	ER CON	NDITIONS	THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	ny difficulti	es in s	surveying	the hed	dgerows?	lf so pl	lease	describe.		YES	NO
Difficulty(ies):											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	gerow	X 3	b - Line	of trees			3c -	Shrubby with I	ine of trees		
4 - LENGTH (m)	- between r	nodes	or inters	ections v	with other	hedge	rows,	to nearest 5m			250
5 - CONNECTION		umber	of other	hedger	ows conne	ected t	0	End 1	End 2	Tot	al
each end of the h	edgerow										
6 - EXTENT OF S	SURVEY	6a	- Whole	hedger	wc			6b - 30m S	Section(s)		
WHOLE HEDGE	ROW OR 3	0m Sl	JRVEY S	SECTIO	N (Section	s 7-16	5)	·			
7 - ADJACENT L	AND USE										
			Side	Side						Side	Side
			Α	В						Α	В
7a - Arable	Arable cro	op	X (4.(2))	X	7e - Roa	d/Rou	te	Major Road			
	Unoronno	. d	(1/2)					Minor Road		Х	
	Uncroppe margin	;u						iviiiioi Road		^	
7b - Grass	Improved							Track (unsurf	aced)		
	Semi-							Footpath			
	improved										

7f - Water

Rail Canal

River Stream

Lake/pond

Unimproved

Semi-mature

Young

Mature

7c - Woodland

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	0.5		8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES										
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)										
10a – Nettles	Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Si						Side B			

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	1.5	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species	DBH (cm)	Species	DBH (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Rabbits
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	JRVEY SEC	CTION ON	ILY - Add any others, including non-n	atives.	ı
Species	Shrub	s Trees	Species	Shrubs	Trees
	%	No.		%	No.
	covei			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)	20	
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	25		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	10				
Holly (<i>Ilex aquifolium</i>)	30				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	20	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	40	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	20	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
			i i		
Woodland species			T		
Herb Robert					
Dog's mercury					
Lords-and-ladies					
Red fescue					
Creeping bent					
Yarrow					

Field Survey Form – H46(2)											
Local Hedgerow Field Survey Form											
PART A - ESSEN	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)										
TITLE OF SURVEY: M4 Hedgerow regulation assessment											
Grid Ref											
Date 1 0 0	9 2 0 1 5 H	Hedgerov	v No	AE2							
Surveyor(s):	Surveyor(s): Side Surveyed - Both Y/N										
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY				
				dgerows? If so ple				YES	NO		
Difficulty(ies):	,	, ,	,	<u> </u>				ı			
,											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	lgerow X 3	3b - Line	of trees		3c - 3	Shrubby with I	ine of trees				
,						•					
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows,	to nearest 5m			250m		
- ()					,						
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to)	End 1	End 2	To	ıtal		
each end of the h											
						•					
6 - EXTENT OF	SURVEY 6a	a - Whole	hedaer	ow		6b - 30m	Section(s)		Х		
	3		e e.gee								
WHOLE HEDGE	ROW OR 30m SI	URVFY S	SECTIO	N (Sections 7-16)				-			
7 - ADJACENT L		011121	220110	11 (0000011011 10)	<u>' </u>						
7 7 12 07 10 21 11 2		Side	Side					Side	Side		
		A	В					A	В		
7a - Arable	Arable crop			7e - Road/Route	Э	Major Road					
	Uncropped					Minor Road		Х			
	margin										
7b - Grass	Improved		Х			Track (unsurf	aced)				
	Semi-					Footpath					
	improved										
	Unimproved	1				Rail					
7c - Woodland	Young					Canal					
	Semi-mature			7f - Water		River					

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	0.5	0.5	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	Cut	Cut	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)	X	Х					
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						
X X X X							

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	2m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species DBH (cm) CDBH (cm)								

17 - WOODY SPECIES IN 30m SU	RVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)	х	
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	40		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	30				
Hazel (Corylus avellana)	Х				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	Х		Bramble (<i>Rubus fruticosus</i> agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					
False oat-grass					
White dead nettle					
Yarrow					
Creeping cinquefoil					
Slender St. John's wort					

PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 1 1 0 9 2 0 1 5 Hedgerow No AG1 Surveyor(s): Sean Flynn Side Surveyed - Both Y/N Side Surveyed - Both Y/N Surveyed - Were there any difficulties in surveying the hedgerows? If so please describe. PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 1 1 0 9 2 0 1 5 Hedgerow No AG1 Side Surveyed - Both Y/N NO NO AG1 Side Surveyed - Both Y
TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 1 1 0 9 2 0 1 5 Hedgerow No AG1 Surveyor(s): Sean Flynn Side Surveyed - Both Y/N Side Surveyed - Both Y/N Surveyer Surveyer Side Surveyed - Both Y/N Side Surveyed - Both Y/N Surveyer Side Surveyed - Both Y/N Side Surveyed - Both
Grid Ref Date 1 1 0 9 2 0 1 5 Hedgerow No AG1 Surveyor(s): Sean Flynn Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
Date 1 1 0 9 2 0 1 5 Hedgerow No AG1 Surveyor(s): Sean Flynn Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO
, , , , , , , , , , , , , , , , , , , ,
Difficulty(ies):
3 - HEDGEROW TYPE
3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 200
5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
each end of the hedgerow
6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)
7 - ADJACENT LAND USE
Side Side Side Side
A B A B
7a - Arable Arable crop 7e - Road/Route Major Road
Uncropped Minor Road X
margin
7b - Grass Improved X Track (unsurfaced)
Semi- improved Footpath
Unimproved Rail
7c - Woodland Young Canal
Semi-mature 7f - Water River

Stream

Lake/pond

Mature

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	1m		8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						
60 60 X X							

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2m	13b - Average Width (m)	1.5m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species DE (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)
No

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-na	tives.	
Species	Shrubs	Shrubs Trees Species		Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)	Х		Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	Х		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	Х		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	Х				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)	Х		H Bindweed		
Elm, (Ulmus sp.)			Cpars		
Gorse (Ulex europaeus)			FOG		
Gorse, western (Ulex gallii)			Nettle		
Guelder rose (Viburnum opulus)			H Wound		
Hawthorn (Crataegus sp.)			Wood Avens		
Hazel (Corylus avellana)	Х				
Holly (Ilex aquifolium)	Х				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)	Х	
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
, , ,					
Woodland species - 3				•	
Herb Robert			False oat-grass		
Lords-and-ladies			Common nettle		
Wood sage			Hedge woundwort		
Wood avens					
Hedge bindweed					
Cow parsley					

Hedgebank. No gaps. Parallel hedge w/in 15m

Field Survey Form – H13

Local Hedgerow Field Survey Form

DADTA ECCE	NTIAL ASSESSM			mpleted for all le	•	orow, our	\(\alpha\)		
	EY: M4 Hedgerov	,		•	carrieug	elow sulve	ys)		
Grid Ref	E1. W4 Heagerov	v regulat	1011 a550	2551116111					
Gliu Kei									
Date 1 7 0	9 2 0 1 5 H	ledgerov	v No	IA					
	orgia Kelly and Se			, , , , , , , , , , , , , , , , , , ,		Side S	Surveyed - B	oth Y/N	
Garveyor(a). Gee	rgia reny ana oc	arr r ryriir				Side A		0111 1714	E
						Side B			w
						Olde E	<u> </u>		
2 - SLIRVEY TIM	IES AND WEATH	FR/OTH	ER CO	NDITIONS THAT	ΓΜΔΥ ΔΕ	FECT THE	= SLIRVEY		
	any difficulties in s						LOURVET	YES	NO
Difficulty(ies):	arry difficulties in s	oui ve yii iç	ine ne	agerows: II so p	icase ues	SCHOO.		ILO	INO
Difficulty (163).									
3 - HEDGEROW	TYPE								
3a - Shrubby hed		b - Line	of trees		3c - Sh	rubby with	line of trees		Х
<u> </u>	.90.011 10		0		00 0			ı	
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows, to	nearest 5m	1		
1 22110111(111)	Dottied in Frage	01 1111010	00110110	mar care. neage	10110, 10	11001001011			
5 - CONNECTIO	NS - total number	of other	hedaei	rows connected t	0 F	nd 1	End 2	Tota	al
each end of the h		0. 00.	nougo.		<u> </u>		2110 2		``
6 - EXTENT OF	SURVEY 6a	- Whole	hedaer	ow		6b - 30m	Section(s)		Χ
					1		· · · · · · · · · · · · · · · · · · ·		
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16	5)				
7 - ADJACENT L					,				
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Rou		ajor Road			
	Uncropped				Mi	nor Road			
7h 0:	margin	v	V				(l\		
7b - Grass	Improved X X Track (unsurfaced)								
	Semi- improved				FC	ootpath			
	Unimproved				Ra	ail			
7c - Woodland	Young					anal			
	Semi-mature			7f - Water		ver			
	Mature					ream			
7d - Other						ke/pond			
	•	•		•					

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)	Х		
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)	Х		
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side E						Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS				
13a - Average Height (m)	15	13b - Average Width (m)	12	
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm		

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DBH (cm)						
Oak	50					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY - Add any others, including non-natives.										
Species	Shrubs	Trees	Species	Shrubs	Trees					
	%	No.		%	No.					
	cover			cover						
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)							
Apple, crab (Malus sylvestris)	10		Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)							
Aspen (Populus tremula)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	20						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)	20						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)	10									
Elm, English (Ulmus procera)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (Ulmus sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (Crataegus sp.)	10									
Hazel (Corylus avellana)										
Holly (Ilex aquifolium)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (Tilia cordata)										
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	20						
Oak, pedunculate (Quercus robur)	20		Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	20						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)							
Pine, Scots (Pinus sylvestris)			% Gaps/access openings							
Woodland species										
Broad buckler fern										
Hart's tongue										
Herb Robert										
Wood dock										

Field Survey Form – H21										
		Loca	l Hedge	erow Field Surve	ey For	rm				
PART A - ESSEN	NTIAL ASSESS	MENTS (T	o be co	mpleted for all lo	cal he	dgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedger	ow regulat	ion asse	essment						
Grid Ref										
Date 1 5 0 9 2 0 1 5 Hedgerow No JA										
Surveyor(s): Sean Flynn Side Surveyed - Both Y/N										
	-						•			
2 - SURVEY TIM	ES AND WEAT	HER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there a								YES	NO	
Difficulty(ies):	,		,	<u>адолонгон н оо р.</u>					1	
2 2										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	1 1	3b - Line	of trees	х	3c -	Shrubby with I	ine of trees			
ou om ussy mod	.90.011	00 20	0. 1.000		00	om abby with				
4 - LENGTH (m)	- hetween node	e or inters	ections	with other hedge	rows	to nearest 5m				
+ LENOTH (III)	between node	3 OF ITTO S	COLIOTIS	with other neage	1043,	to ricarest orri				
5 - CONNECTIO	NS - total numb	or of other	hodger	rows connected to	0	End 1	End 2	Tot	al	
each end of the h		ei oi oillei	rieugei	ows connected to	U	Elia i	Ellu Z	100	aı	
	3									
6 - EXTENT OF S	SLIDVEV 6	Sa - Whole	hodgor	014/		6b - 30m S	Soction(s)		Х	
0-LATENT OF	SORVET (Da - WIIOIE	neugei	OW		1 00 - 30111 3	Section(s)		^	
WHOLE HEDGE	DOW OD 20m	CLIDVEV C	CECTIO	N (Castiana 7 16	•\	·		·		
WHOLE HEDGE		SURVEY	SECTIO	iv (Sections 7-16	<u>) </u>					
7 - ADJACENT L	AND USE	Cido	Cida					Cida	Cido	
		Side A	Side B					Side A	Side B	
7a - Arable	Arable crop			7e - Road/Rout	te	Major Road		,,		
74 7114515	Uncropped			, o read, read		Minor Road				
	margin					milet read				
7b - Grass	Improved					Track (unsurf	aced)			
	Semi-	Х	Х			Footpath	•			
	improved					•				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm	30	30	8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles	Side A	Side B	10b - Cleavers Side A Side B 10c - Docks Side A					Side B	
60 60									

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	10m	13b - Average Width (m)	4m
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species	DBH (cm)	Species	DBH (cm)					
Ash	50							

16 – NOTES – Whole hedgerow or 30m survey section						
16a - Fauna (evidence of)						
16b - Features (including evidence of recent planting)						
16b - Features (including evidence of recent planting)						

Species	Shrubs	Trees	Species	Shrubs	Trees
-1	%	No.		%	No.
	cover	110.		cover	110.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (<i>Populus tremula</i>)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	20	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	5		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10				
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (<i>Ulex europaeus</i>)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	60				
Hazel (Corylus avellana)					
Holly (<i>Ilex aquifolium</i>)	20				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony	5	
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	20	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	30	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					
Wood melick					
Wood avens					

		Fie	eld Su	irvey F	orm – H	<u>131</u>				
		Loca	l Hedge	row Field	Survey Fo	orm				
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted fo	r all local h	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgerov	v regulat	ion asse	essment						
Grid Ref										
Date 1 6 0 9 2 0 1 5 Hedgerow No										
Surveyor(s): Sea	Surveyor(s): Sean Flynn Side Surveyed - Both Y/N									
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS	THAT MA'	Y AFFECT THE	SURVEY			
2d - Were there a								YES	NO	
Difficulty(ies):	,		,	<u></u>	. оо р.ос.ос				1	
2 2										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	Igerow 3	Bb - Line	of trees		3c ·	- Shrubby with	line of trees		Х	
,	 					,				
4 - LENGTH (m)	- between nodes	or inters	ections	with other	hedgerows	, to nearest 5m		60	m	
- ()					. . .	,				
5 - CONNECTION	NS - total number	of other	hedger	ows conne	cted to	End 1	End 2	To	tal	
each end of the h		0. 0								
								<u> </u>		
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW		6b - 30m	Section(s)		Х	
0 2/12/11 01 1	00111121	********	nougo			02 00	20011011(0)		χ	
WHOLE HEDGE	ROW OR 30m SI	JRVFY S	SECTIO	N (Section	s 7-16)	·		.		
7 - ADJACENT L		J. (V E 1 C	220110	11 (00011011	01 10)					
7 ABOAGENTE	/ II OOL	Side	Side					Side	Side	
		A	В					A	В	
7a - Arable	Arable crop			7e - Roa	d/Route	Major Road				
	Uncropped					Minor Road				
	margin									
7b - Grass	Improved		Х			Track (unsurf	aced)			
	Semi-	X				Footpath				
	improved									
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Wate	r	River				

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm	50	50	8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)	X	Х					
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B
	80	80		60	60			

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS						
13a - Average Height (m)	15m	13b - Average Width (m)	10m			
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm				

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Oak	50	Oak	50				
Oak	50						
Oak	70						

16 - NOTES - Whole hedgerow or 30m survey section

16a - Fauna (evidence of)

Grey Squirrel

16b - Features (including evidence of recent planting)

Fence internal. Increased nutrient enrichment from adjacent improved grass

Species	Shrubs	Trees	Species	Shrubs	Trees
2,53332	%	No.	Sp. St. St.	%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)	20	
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	5		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	1		, , ,		
Elm, English (<i>Ulmus procera</i>)			Spindle	1	
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	40				
Hazel (Corylus avellana)					
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)	20		Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
. ,					
Woodland species					
Burdock					
Lords-and-ladies					
Herb Robert					

		Field	<u>d Sur</u>	vey Form – H	38(1)			
		Loca	l Hedge	erow Field Survey	Form			
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)								
TITLE OF SURVEY: M4 Hedgerow regulation assessment								
Grid Ref								
Date 1 6 0	9 2 0 1 5 H	Hedgerov	v No	YA1				
Surveyor(s): Sea	n Flynn				Side S	Surveyed - B	oth Y/N	<u>N</u>
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT M	AY AFFECT THE	SURVEY		
2d - Were there a	any difficulties in s	surveying	the he	dgerows? If so plea	se describe.		YES	<u>NO</u>
Difficulty(ies):								
3 - HEDGEROW	TYPE							
3a - Shrubby hed	Igerow X 3	Bb - Line	of trees	30	c - Shrubby with	line of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerov	vs, to nearest 5m	1		
							1	
		of other	hedger	ows connected to	End 1	End 2	Tot	al
each end of the h	nedgerow							
					1		-	1
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW	6b - 30m	Section(s)		Χ
		JRVEY S	SECTIO	N (Sections 7-16)				
7 - ADJACENT L	AND USE		l	Г			Ι	
		Side	Side				Side	Side
Zo Arabia	Arabla aras	A	В	Zo Dood/Doute	Major Dood		A	В
7a - Arable	Arable crop			7e - Road/Route	Major Road		v	
	Uncropped margin				Minor Road		Х	
7b - Grass	Improved		Х		Track (unsur	faced)		
	Semi-				Footpath			
	improved				,			
	Unimproved				Rail			
7c - Woodland	Young				Canal			
	Semi-mature			7f - Water	River			

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	25cm	25cm	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B	
	<5%	<5%							

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS						
13a - Average Height (m)	2.5m	13b - Average Width (m)	2.5m			
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm				

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21				
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.				
Species	DBH (cm)	Species	DBH (cm)	

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Badger Road Crossing Points
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY – Add any others, including non-nat	ives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)	5	
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Spindle	1	
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)			False Brome		
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	30				
Hazel (Corylus avellana)	30				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			Wh Bryony	5	
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	20	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	30	
Pear (<i>Pyrus communis</i> sensu lato)	1		Traveller's-joy (Clematis vitalba)	30	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species	Ι	· I		·	
Dog's mercury					
Hedge bedstraw					
Lords-and-ladies					
Herb Robert					
Wood false brome					

Field Survey Form – H38(2)								
Local Hedgerow Field Survey Form								
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)								
TITLE OF SURVEY: M4 Hedgerow regulation assessment								
Grid Ref								
Date 1 6 0	9 2 0 1 5 H	Hedgerov	v No	YA2				
Surveyor(s): Sea	n Flynn				Side S	Surveyed - B	oth Y/N	
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER CO	NDITIONS THAT M	AY AFFECT TH	SURVEY		
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so plea	se describe.		YES	NO
Difficulty(ies):								
3 - HEDGEROW	TYPE							
3a - Shrubby hed	lgerow X 3	Bb - Line	of trees	30	c - Shrubby with	line of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerow	vs, to nearest 5m	1		
		of other	hedger	ows connected to	End 1	End 2	Tot	al
each end of the h	nedgerow							
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)		Χ
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16)				
7 - ADJACENT L	AND USE							
		Side	Side				Side	Side
		Α	В				Α	В
7a - Arable	Arable crop			7e - Road/Route	Major Road			
	Uncropped				Minor Road		Х	
75 0	margin				Track (fI\		
7b - Grass	Improved				Track (unsur	iaced)		
	Semi- improved				Footpath			
	Unimproved		Х		Rail			
7c - Woodland	Young				Canal			
	Semi-mature			7f - Water	River			

7d - Other

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18					
	Side A	Side B			
8a - Bank - Height (in metres) to nearest 25cm	0.5m	0.5m	8f - Ditch - internal - Dry (tick)		
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)		
8c - Fence (tick)					
8d - Ditch - external - Dry (tick)					
8e - Ditch - external - Wet (tick)					

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	er of each	species with	nin a 2m wide band	alongside	the hedge	erow (to nearest	5%)	
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B
	5%	5%						

12 - HEDGEROW SHAPE – See also Part B section 19a				
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.	
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy	
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch	

13b - Average Width (m)	2.5m
At the widest point of canopy; excluding bank, to	
	, ,

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21				
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.				
Species	DBH (cm)	Species	DBH (cm)	

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Badger / Fox push through to the south
16b - Features (including evidence of recent planting)

Species	Shrubs	Trees	Species	Shrubs	Trees
2,533.53	%	No.	Specific Control of the Control of t	%	No.
	cover	110.		cover	110.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	30				
Hazel (Corylus avellana)	10				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	20	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)	20	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Ground ivy			Creeping cinquefoil		
Herb Robert			and an all and a second a second and a second a second and a second a second and a second and a second and a		
Hedge bedstraw					
Dog's mercury					
Wood false brome					

Parallel hedge – Check connectivity

		F	ield S	Survey Form	- H43(1)				
		Loca	l Hedge	erow Field Survey	Form				
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loca	al hedgerow surv	eys)			
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5 I	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly				Side	Surveyed - E	Both Y/N	N	
2 - SURVEY TIM	2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY								
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so plea	ase describe.		YES	NO	
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c - Shrubby witl	n line of trees	6		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerd	ws, to nearest 5	m			
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to	End 1	End 2	Tot	al	
each end of the h	edgerow								
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow	6b - 30n	Section(s)	Х		
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)	,		-		
7 - ADJACENT L									
		Side	Side				Side	Side	
		Α	В				Α	В	
7a - Arable	Arable crop			7e - Road/Route	Major Road				
	Uncropped				Minor Road			X	
	margin								
7b - Grass	Improved	Х			Track (unsu	ırfaced)			
	Semi-				Footpath				
	improved Unimproved				Rail				
7a Woodland									
7c - Woodland	Young Somi moture			7f \\/\otor	Canal				
	Semi-mature			7f - Water	River				

Stream

Lake/pond

Mature

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm		25m	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Da – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side					Side B		
Total Florida District Class Distric								

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	1.5m	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Hazel	20						
Holly bush	15						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

Species	Shrubs	Trees	LY – Add any others, including non-n Species	Shrubs	Trees
Species			Species	Shrubs %	
	% cover	No.		cover	No.
Alder, common (Alnus glutinosa)	33.0.		Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	5		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (Ulmus procera)					
Elm, wych (Ulmus glabra)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	5				
Hazel (Corylus avellana)	75				
Holly (Ilex aquifolium)	5				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)	х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		T			
Herb Robert					
		ļ			
		ļ			

		F	ield S	Survey Form	<u> </u>	143(2)			
		Loca	l Hedge	erow Field Surve	y For	m			
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loc	al hed	dgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5 1	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY									
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so ple	ase c	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c - S	Shrubby with I	ine of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows, t	to nearest 5m			
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to		End 1	End 2	Tot	al
each end of the h	nedgerow				-				
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х	
								-	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Route)	Major Road			
	Uncropped					Minor Road			X
	margin								
7b - Grass	Improved	X				Track (unsurf	aced)		
	Semi- improved					Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
75 VVOGILATIO	Semi-mature			7f - Water		River			
	Semi-mature			11 - Walei		IZIVEI			

Stream

Lake/pond

Mature

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm		25m	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.					
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	1.5m	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	JRVEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	5				
Hazel (Corylus avellana)	75				
Holly (Ilex aquifolium)	5				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)	5		Bramble (Rubus fruticosus agg.)	Х	
Oak, pedunculate (<i>Quercus robur</i>)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
			. , , , , ,		
Woodland species	•			•	
Herb Robert					

(2)

		F	ield S	Survey	Form –	H45(2)			
Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 1 9 1	0 2 0 1 5 H	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS	THAT MAY	Y AFFECT THE	SURVEY		
2d - Were there a	any difficulties in s	surveying	the he	dgerows? I	f so please	describe.		YES	NO
Difficulty(ies):					•				
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow 3	Bb - Line	of trees		3c -	- Shrubby with	line of trees		
					_	•			
4 - LENGTH (m)	- between nodes	or inters	ections	with other	hedgerows	, to nearest 5m	ı		
					<u> </u>			_	•
5 - CONNECTION	NS - total numbe	r of other	hedger	ows conne	cted to	End 1	End 2	Tot	al
each end of the h			J						
							•	•	
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	ow		6b - 30m	Section(s)	Х	
					•	•			
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Section	s 7-16)	•			
7 - ADJACENT L									
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Roa	d/Route	Major Road			
	Uncropped					Minor Road			X
	margin								
7b - Grass	Improved	Х				Track (unsur	faced)		
	Semi-					Footpath			
	improved Unimproved					Rail			
7c - Woodland	Young					Canal			
70 - Woodiand	Semi-mature			7f \\/\0+0	r				
	Semi-mature	1		7f - Wate	I	River			

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm		75	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2	13b - Average Width (m)	4
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH (cm) Species DE (cr					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.								
Species	Shrubs	Trees	Species	Shrubs	Trees			
	%	No.		%	No.			
	cover			cover				
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)					
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)					
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)					
Aspen (Populus tremula)			Rose, dog- (Rosa canina)					
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)					
Birch, downy (Betula pubescens)			Rose (Rosa sp.)					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)					
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)					
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)					
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)					
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)					
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)					
Elder (Sambucus nigra)	5							
Elm, English (Ulmus procera)								
Elm, wych (<i>Ulmus glabra</i>)								
Elm, (Ulmus sp.)								
Gorse (Ulex europaeus)								
Gorse, western (Ulex gallii)								
Guelder rose (Viburnum opulus)								
Hawthorn (Crataegus sp.)	10							
Hazel (Corylus avellana)	70							
Holly (Ilex aquifolium)	10							
Hornbeam (Carpinus betulus)								
Lime, large-leaved (Tilia platyphyllos)								
Lime, small-leaved (Tilia cordata)			White Bryony					
Maple, field (Acer campestre)	5		Bramble (<i>Rubus fruticosus</i> agg.)					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)					
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х				
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)					
Pine, Scots (Pinus sylvestris)			% Gaps/access openings					
Woodland species								
Herb Robert								
Bracken								
Yellow archangel								
Red campion								

		Fiel	<u>d Sur</u>	vey Form - I	H45	(1)			
		Loca	l Hedge	erow Field Surve	y Forr	m			
PART A - ESSEN	ITIAL ASSESSM	MENTS (T	o be co	mpleted for all loc	al hed	lgerow surve	ys)		
TITLE OF SURVI	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	Date 1 9 1 0 2 0 1 5 Hedgerow No								
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N								N	
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER COI	NDITIONS THAT I	MAY A	AFFECT THE	SURVEY		
2d - Were there a	ny difficulties in	surveying	the hed	dgerows? If so ple	ase d	lescribe.		YES	NO
Difficulty(ies):	,	, ,	,						
, ,									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	gerow X	3b - Line	of trees		3c - S	Shrubby with I	ine of trees		
,						·		•	•
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows, t	o nearest 5m			
- ()					, -				
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to		End 1	End 2	Tot	al
each end of the h			nougoi		_	Liid i	LIIG Z		ui
6 - EXTENT OF S	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х	
0 2/12/11 01 (3011721	4 1111010	nougo			00 00111	20011011(0)		
WHOLE HEDGE	ROW OR 30m S	LIRVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L		OKVET	<u>JEO 110</u>	14 (Occilona 7 10)					
7 ABOAGENT E	1110 002	Side	Side					Side	Side
		A	В					A	В
7a - Arable	Arable crop			7e - Road/Route) I	Major Road			
	Uncropped					Minor Road			Х
	margin								
7b - Grass	Improved	X			-	Track (unsurf	aced)		
	Semi-					Footpath			
	improved								
	Unimproved					Rail			
7c - Woodland	Young				(Canal			
	Semi-mature			7f - Water		River			

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm		75m	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	2	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species C (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

	Shrubs	Trees	LY – Add any others, including non-n Species	Shrubs	Trees
Species			Species		
	% cover	No.		% cover	No.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	5				
Elm, English (Ulmus procera)					
Elm, wych (Ulmus glabra)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	5				
Hazel (Corylus avellana)	70				
Holly (Ilex aquifolium)	5				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species	T	T		T	
Herb Robert					
Yellow archangel					

		Fiel	<u>d Sur</u>	vey Form – H	47(1)			
		Loca	l Hedge	erow Field Survey	Form			
PART A - ESSEN	NTIAL ASSESSIV	IENTS (T	o be co	mpleted for all local	hedgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment				
Grid Ref								
Date 1 9 1	0 2 0 1 5 1	Hedgerov	v No					
Surveyor(s): Geo	rgia Kelly				Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT M	AY AFFECT THE	SURVEY		
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO								
Difficulty(ies):								
3 - HEDGEROW	TYPE							
3a - Shrubby hed	lgerow X	3b - Line	of trees	3	c - Shrubby with	line of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerov	vs, to nearest 5m	1		
		r of other	hedger	ows connected to	End 1	End 2	Tota	al
each end of the h	nedgerow							
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow	6b - 30m	Section(s)	X	
							_	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)				
7 - ADJACENT L	AND USE							
		Side	Side				Side	Side
		Α	В				Α	В
7a - Arable	Arable crop			7e - Road/Route	Major Road			
	Uncropped				Minor Road			
7h Cross	margin	X	Х		Trook (upour	facad)		
7b - Grass	Improved Semi-	^	^		Track (unsur	laceu)		
	improved				Footpatri			
	Unimproved				Rail			
7c - Woodland	Young				Canal			
	Semi-mature			7f - Water	River			

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B		

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	2	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DBH (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.
	INO.		, -	INO.
				1
		Plum, wild (Prunus domestica)		
		Poplar, black (Populus nigra betulifolia)		
		Privet, wild (Ligustrum vulgare)		
		Rose, dog- (Rosa canina)		
		Rose, field- (Rosa arvensis)		
		Rose (Rosa sp.)		
		Rowan (Sorbus aucuparia)		
10		Spindle (Euonymus europaeus)		
		Sycamore (Acer pseudoplatanus)		
		Wayfaring-tree (Viburnum lantana)		
		Willow, grey (Salix cinerea)		
		Willow, goat (Salix caprea)		
10				
80				
		White Bryony		
		Bramble (Rubus fruticosus agg.)	х	
		Honeysuckle (Lonicera periclymenum)		
		Ivy (Hedera helix)	Х	
		Traveller's-joy (Clematis vitalba)		
		% Gaps/access openings		
	T			
	10	10	Rose (Rosa sp.) Rowan (Sorbus aucuparia) Spindle (Euonymus europaeus) Sycamore (Acer pseudoplatanus) Wayfaring-tree (Viburnum lantana) Willow, grey (Salix cinerea) Willow, goat (Salix caprea) 10 10 White Bryony Bramble (Rubus fruticosus agg.) Honeysuckle (Lonicera periclymenum) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba)	Rose (Rosa sp.) Rowan (Sorbus aucuparia) Spindle (Euonymus europaeus) Sycamore (Acer pseudoplatanus) Wayfaring-tree (Viburnum lantana) Willow, grey (Salix cinerea) Willow, goat (Salix caprea) 10 80 White Bryony Bramble (Rubus fruticosus agg.) Ivy (Hedera helix) Traveller's-joy (Clematis vitalba)

		Field	<u>d Sur</u>	vey Form – H	47(2)			
		Loca	l Hedge	erow Field Survey	Form			
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all local	hedgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment				
Grid Ref								
Date 1 9 1	0 2 0 1 5 1	Hedgerov	v No					
Surveyor(s): Geo	rgia Kelly				Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS THAT M	AY AFFECT THE	SURVEY		
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO								
Difficulty(ies):								
3 - HEDGEROW	TYPE							
3a - Shrubby hed	lgerow X	3b - Line	of trees	30	c - Shrubby with	line of trees	,	
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerov	vs, to nearest 5m	1		
		r of other	hedger	ows connected to	End 1	End 2	Tota	al
each end of the h	nedgerow							
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow	6b - 30m	Section(s)	Х	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)				
7 - ADJACENT L	AND USE							
		Side	Side				Side	Side
		A	В				Α	В
7a - Arable	Arable crop			7e - Road/Route	Major Road			
	Uncropped				Minor Road			
7h Cross	margin	X	Х		Trook (upour	facad)		
7b - Grass	Improved Semi-	^	^		Track (unsur	iaceu)		
	improved				Footpatri			
	Unimproved				Rail			
7c - Woodland	Young				Canal			
	Semi-mature			7f - Water	River			

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B								

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	2	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species D (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SL	JRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	5		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)	10				
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	70				
Hazel (Corylus avellana)					
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	х	
Oak, pedunculate (<i>Quercus robur</i>)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
			. , , , ,		
Woodland species	•			•	
Herb Robert					

Field Survey Form – H47(3)								
Local Hedgerow Field Survey Form								
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all local	hedgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment				
Grid Ref								
Date 1 9 1	0 2 0 1 5 H	Hedgerov	v No					
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N								
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT MA	AY AFFECT THE	SURVEY		
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so pleas	se describe.		YES	NO
Difficulty(ies):								
3 - HEDGEROW	TYPE							
3a - Shrubby hed	lgerow X	3b - Line	of trees	30	- Shrubby with	line of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerow	s, to nearest 5m	1		
		r of other	hedger	ows connected to	End 1	End 2	Tota	al
each end of the h	edgerow							
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)	X	
	<u>.</u>			<u>.</u>	·			
WHOLE HEDGE	ROW OR 30m S	JRVEY S	SECTIO	N (Sections 7-16)				
7 - ADJACENT L	AND USE		T				T	
		Side	Side				Side	Side
7 4 11	A 1.1	A	В	7 0 1/0 (M : D .		А	В
7a - Arable	Arable crop			7e - Road/Route	Major Road			
	Uncropped margin				Minor Road			
7b - Grass	Improved	Х	Х		Track (unsur	faced)		
	Semi-				Footpath			
	improved				. оофа			
	Unimproved				Rail			
7c - Woodland	Young				Canal			
	Semi-mature			7f - Water	River			

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B								

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	1.5	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH Species DI (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)
, , ,
<u> </u>

Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (<i>Alnus glutinosa</i>)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (<i>Fraxinus excelsior</i>)			Privet, wild (Ligustrum vulgare)		
Aspen (<i>Populus tremula</i>)			Rose, dog- (Rosa canina)		
Beech (<i>Fagus sylvatica</i>)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (<i>Betula pendula</i>)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (<i>Rhamnus cathartica</i>)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (<i>Cornus sanguinea</i>)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmu</i> s sp.)	10				
Gorse (Ulex europaeus)					
Gorse, western (<i>Ulex gallii</i>)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	70				
Hazel (Corylus avellana)					
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (<i>Carpinus betulus</i>)					
Lime, large-leaved (<i>Tilia platyphyllos</i>)					
Lime, small-leaved (<i>Tilia cordata</i>)			White Bryony		
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	Х	
Oak, pedunculate (<i>Quercus robur</i>)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
,/			, , ,		
Woodland species	•			•	
•					

Local Hedgerow Field Survey Form PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date
TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 1 9 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies):
Date 1 9 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies):
Date 1 9 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies):
Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies):
Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies):
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO 3 - HEDGEROW TYPE
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE
Difficulty(ies): 3 - HEDGEROW TYPE
3 - HEDGEROW TYPE
3a - Shrubby hedgerow 3b - Line of trees 3c - Shrubby with line of trees X
oa - officially field crown ob Efficient cos ob officially with fine of field
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m
5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
each end of the hedgerow
6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)
7 - ADJACENT LAND USE
Side Side Side Side
A B A B
7a - Arable Arable crop X 7e - Road/Route Major Road
Uncropped Minor Road margin
7b - Grass Improved Track (unsurfaced)
Semi- X Footpath
Unimproved Rail
7c - Woodland Young Canal
Semi-mature 7f - Water River

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)		X				
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cov	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)						
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B					Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

5	13b - Average Width (m)	1.5
	At the widest point of canopy; excluding bank, to	
	5	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH (cm) Species DB (ci					
E Oak	40				
Hawthorn x2	40				

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)	10								
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (<i>Ulmus</i> sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	30								
Hazel (Corylus avellana)	20								
Holly (Ilex aquifolium)	10								
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)			White Bryony						
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	Х					
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х					
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
Woodland species				T					
Herb Robert									
				1					

Field Survey Form – H16(2)										
		Loca	l Hedge	erow Field Surve	y Fo	rm				
PART A - ESSEN	NTIAL ASSESSIV	IENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment						
Grid Ref										
Date 1 9 1 0 2 0 1 5 Hedgerow No										
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N	
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so pl	ease	describe.		YES	NO	
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow :	3b - Line	of trees		3c -	Shrubby with I	line of trees		Χ	
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	l			
5 - CONNECTIO		r of other	hedger	ows connected to)	End 1	End 2	Tota	al	
each end of the h	nedgerow									
F									ı	
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m	Section(s)	Х		
r	<u>.</u>							<u>.</u>		
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE									
		Side	Side					Side	Side	
		Α	В					Α	В	
7a - Arable	Arable crop		Х	7e - Road/Rout	e	Major Road				
	Uncropped margin					Minor Road				
7b - Grass	Improved					Track (unsurf	faced)			
	Semi- improved	X				Footpath				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
. 5 Woodiana	Semi-mature			7f - Water		River				
	Comminatoro			71 114101		111101				

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)		X						
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side					Side B		
Tour House Glad 71 Glad B 102 Glod Vole Glad B 102								

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	10

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Ash (coppiced)	40						
и и	"						
Ash	52						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.								
Species	Shrubs	Trees	Species	Shrubs	Trees			
	%	No.		%	No.			
	cover			cover				
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)					
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)					
Ash (Fraxinus excelsior)	30		Privet, wild (Ligustrum vulgare)					
Aspen (Populus tremula)			Rose, dog- (Rosa canina)					
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)					
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10				
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)					
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)					
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)					
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)					
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)					
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)					
Elder (Sambucus nigra)								
Elm, English (<i>Ulmus procera</i>)								
Elm, wych (<i>Ulmus glabra</i>)								
Elm, (<i>Ulmus</i> sp.)								
Gorse (Ulex europaeus)								
Gorse, western (Ulex gallii)								
Guelder rose (Viburnum opulus)								
Hawthorn (Crataegus sp.)	30							
Hazel (Corylus avellana)								
Holly (<i>Ilex aquifolium</i>)	20							
Hornbeam (Carpinus betulus)								
Lime, large-leaved (Tilia platyphyllos)								
Lime, small-leaved (Tilia cordata)			White Bryony					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10				
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)					
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)					
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)					
Pine, Scots (Pinus sylvestris)			% Gaps/access openings					
Woodland species		1						
Herb Robert								

Field Survey Form – H17(1)											
		Loca	l Hedge	erow Field Surve	y Fo	rm					
PART A - ESSEN	NTIAL ASSESSM	MENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)				
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment							
Grid Ref											
Date 1 9 1 0 2 0 1 5 Hedgerow No											
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N		
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY				
2d - Were there a	any difficulties in	surveying	the he	dgerows? If so pl	ease	describe.		YES	NO		
Difficulty(ies):											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	lgerow	3b - Line	of trees		3c -	Shrubby with	ine of trees		Χ		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	ı				
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to)	End 1	End 2	Tot	al		
each end of the h	nedgerow					-					
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m	Section(s)	Х			
	-							-			
WHOLE HEDGE	ROW OR 30m S	URVEY	SECTIO	N (Sections 7-16)	·		·			
7 - ADJACENT L				,							
		Side	Side					Side	Side		
		А	В					Α	В		
7a - Arable	Arable crop		X	7e - Road/Rout	e	Major Road					
	Uncropped					Minor Road		X			
	margin										
7b - Grass	Improved					Track (unsurf	aced)				
	Semi-					Footpath					
	Improved					Rail					
7c - Woodland	Unimproved					Canal					
70 - Woodiand	Young Somi moture			7f Motor							
	Semi-mature			7f - Water		River					

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			
N20 Ash Trees	20-30					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	RVEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.
Alder, common (Alnus glutinosa)	3373.		Plum, wild (<i>Prunus domestica</i>)	30701	
Apple, crab (Malus sylvestris)			Poplar, black (<i>Populus nigra betulifolia</i>)		
Ash (Fraxinus excelsior)	20		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)	-		Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			, ,		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	40				
Hazel (Corylus avellana)					
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)	20		Bramble (Rubus fruticosus agg.)	Х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)	20		Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					

		Fiel	<u>d Sur</u>	vey Fo	<u>rm – H1</u>	7(2)			
		Loca	l Hedge	erow Field	Survey Fo	orm			
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 1 9 1	0 2 0 1 5	Hedgerov	v No						
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N									
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS	THAT MA'	Y AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the he	dgerows? I	f so please	e describe.		YES	<u>NO</u>
Difficulty(ies):									
3 - HEDGEROW									
3a - Shrubby hed	lgerow :	3b - Line	of trees		3c ·	- Shrubby with	line of trees	5	X
									1
4 - LENGTH (m)	 between nodes 	or inters	ections	with other	hedgerows	s, to nearest 5m			
							<u> </u>	1	1
5 - CONNECTIO		r of other	hedger	ows conne	cted to	End 1	End 2	Tot	al
each end of the h	ieagerow								
						1	()	1	
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	OW		6b - 30m	Section(s)	Х	
				/5				<u>-</u>	
WHOLE HEDGE		URVEY S	SECTIO	N (Section	s 7-16)				
7 - ADJACENT L	AND USE	Tarr	0:1			Т		T 0: 1	0:1
		Side A	Side B					Side A	Side B
7a - Arable	Arable crop	- / (X	7e - Roa	d/Route	Major Road			
74 7114210	Uncropped			70 1100	a, i to a to	Minor Road		Х	
	margin								
7b - Grass	Improved					Track (unsurf	faced)		
	Semi-					Footpath			
	improved								
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Wate	r	River			

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TR	EES - See also Part E	3 section 21				
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH Species DB (cm)					
Ash	30					
Sycamore 30						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	IRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)	20	
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)	10	
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)					
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					

		Fiel	d Sur	vey Fo	rm – H1	7(3)			
Local Hedgerow Field Survey Form									
PART A - ESSEN	NTIAL ASSESSIV	IENTS (T	o be co	mpleted fo	r all local h	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5 1	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - E	Both Y/N	N
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS	THAT MA	Y AFFECT THE	SURVEY	T	
2d - Were there a	any difficulties in	surveying	the he	dgerows? I	f so please	e describe.		YES	<u>NO</u>
Difficulty(ies):									
3 - HEDGEROW	T		_		T -			1	
3a - Shrubby hed	lgerow ;	3b - Line	of trees		3c	- Shrubby with	line of trees	5	X
4 - LENGTH (m)	- between nodes	or inters	ections '	with other	nedgerows	s, to nearest 5m			
F CONNECTIO	NO total accepts				-41 4-	End 4	F	T-4	-1
5 - CONNECTIO each end of the h		r of otner	neager	ows conne	ectea to	End 1	End 2	Tota	aı
	.ougo.on								
						_		<u> </u>	
6 - EXTENT OF S	SURVEY 6	a - Whole	hedger	OW		6b - 30m	Section(s)	Х	
O EXTENT OF	SORVET OC	a vviioio	ricagei	OW	I	TOD COM	occion(s)		<u> </u>
WHOLE HEDGE	ROW OR 30m S	URVFY S	SECTIO	N (Section	s 7-16)	·		-	
7 - ADJACENT L		011121	<u> </u>	11 (0000001	<u> </u>				
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop		X	7e - Roa	d/Route	Major Road			
	Uncropped					Minor Road		X	
	margin .								
7b - Grass	Improved					Track (unsurf	aced)		
Semi- improved Footpath									
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Wate	r	River			

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	4
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DBH (cm)						
Sycamore N10	20-30					
Ash N5 10-20						

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent planting)							

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY - Add any others, including non-natives.										
Species	Shrubs	Trees	Species	Shrubs	Trees					
	%	No.		%	No.					
	cover			cover						
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)							
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)	20		Privet, wild (Ligustrum vulgare)							
Aspen (Populus tremula)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)							
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)	20						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)							
Elder (Sambucus nigra)										
Elm, English (<i>Ulmus procera</i>)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (<i>Ulmus</i> sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (<i>Crataegus</i> sp.)	40									
Hazel (Corylus avellana)										
Holly (Ilex aquifolium)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (Tilia cordata)			White Bryony							
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	20						
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	х						
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings							
			, , , , , ,							
Woodland species	•		•	•						
•										

		F	<u>ield Su</u>	rvey Form -	· H15	5(1)			
		Lo	ocal Hedg	erow Field Surv	ey Fo	rm			
PART A - ESSE	NTIAL ASSES	SMENTS	G (To be co	ompleted for all lo	cal he	dgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedge	erow regi	ulation ass	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5	5 Hedge	erow No						
Surveyor(s): Geo	orgia Kelly					Side S	urveyed - E	Both Y/N	N
F									
2 - SURVEY TIM	IES AND WEA	ATHER/C	THER CC	NDITIONS THAT	ГМАҮ	AFFECT THE	SURVEY	T	
2d - Were there	any difficulties	in surve	ing the he	edgerows? If so p	lease	describe.		YES	<u>NO</u>
Difficulty(ies):									
3 - HEDGEROW		1			ı				
3a - Shrubby hed	dgerow	3b - Li	ne of trees	S	3c -	Shrubby with	ine of trees	;	X
									1
4 - LENGTH (m)	- between noo	des or int	ersections	with other hedge	erows,	to nearest 5m			
									1
5 - CONNECTIO each end of the h		nber of ot	her hedge	rows connected	to	End 1	End 2	Tot	al
each end of the f	leagerow								
C EVIENT OF		C = \//-				Cl- 20	2 + : (-)		
6 - EXTENT OF	SURVEY	6a - vvn	ole hedge	row		6b - 30m	Section(s)	Х	
WILLOUE LIEDOE	DOW OD 20:-	- CLID\/E	V OF OTIO	DN (Continue 7.44	-	•		•	
WHOLE HEDGE		n SURVE	Y SECTIO	DN (Sections 7-16	o)				
7 - ADJACENT L	AND USE	Cia	la Cida					Cida	Cido
		Sid						Side A	Side B
7a - Arable	Arable crop			7e - Road/Rou	ite	Major Road			
	Uncropped					Minor Road		Х	
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-	Х				Footpath			
	improved								
7. \\/. !!	Unimproved	I				Rail			
7c - Woodland	Young			74 \\/		Canal			
	Semi-mature	е		7f - Water		River			
	Mature					Stream			

X

Allotments

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)		X						
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side I							Side B	
Tour Helines Glad 71 Glad B 102 Glad 71 Glad B 102 Glad 71 Glad B									

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Ash	50	Oak	50				
Oak	20						
Ash x2	30						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

Species	Shrubs	Trees	Species	Shrubs	Trees
•	%	No.	'	%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	30		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)					
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	10	
Oak, pedunculate (Quercus robur)	30		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					

Field Survey Form – H15(2)										
		Loca	l Hedge	erow Field Surve	y For	rm				
PART A - ESSEI	NTIAL ASSESSI	ΛΕΝΤS (Τ	o be co	mpleted for all lo	cal he	dgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment						
Grid Ref										
Date 1 9 1	0 2 0 1 5	Hedgerov	v No							
Surveyor(s): Geo	Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N									
2 - SURVEY TIM	IES AND WEATH	HER/OTH	IER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there	any difficulties in	surveying	the he	dgerows? If so pl	ease (describe.		YES	NO	
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	dgerow	3b - Line	of trees		3c - 3	Shrubby with I	ine of trees	;	Х	
						•		•		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m				
								•		
5 - CONNECTIO	NS - total numbe	er of other	hedaer	ows connected to	0	End 1	End 2	Tot	al	
each end of the l						_				
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х		
						•				
WHOLE HEDGE	ROW OR 30m S	SURVEY	SECTIO	N (Sections 7-16)			·		
7 - ADJACENT L					<i>,</i>					
		Side	Side					Side	Side	
		Α	В					Α	В	
7a - Arable	Arable crop			7e - Road/Rout	:e	Major Road				
	Uncropped					Minor Road		X		
	margin									
7b - Grass	Improved					Track (unsurf	aced)			
	Semi- improved	X				Footpath				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				
	Mature					Stream				

Allotments

Lake/pond

Χ

8 - ASSOCIATED FEATURES – See also Part B section 18							
Side Side A B							
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B								
	100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS	
13a - Average Height (m)	13b - Average Width (m)
Excluding bank, to nearest 25cm	At the widest point of canopy; excluding bank, to
	nearest 25cm

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH (cm) Cpecies DBH (cm)							
Ash 3x coppiced 30							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY – Add any others, including non-nativ	es.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	20		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)					
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
			. <u> </u>		
Woodland species	•			•	

Local Hedgerow Field Survey Form	Field Survey Form – H15(3)									
Local Hedgerow Field Survey Form										
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)										
TITLE OF SURVEY: M4 Hedgerow regulation assessment										
Grid Ref										
Date 1 9 1 0 2 0 1 5 Hedgerow No										
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N										
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY										
2d - Were there any difficulties in surveying the hedgerows? If so please describe.	0									
Difficulty(ies):										
3 - HEDGEROW TYPE										
3a - Shrubby hedgerow 3b - Line of trees 3c - Shrubby with line of trees X										
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m										
5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total										
each end of the hedgerow										
6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s) X										
ZATERT OF CONVET OR WINDIC HOUGHOW OD - SOITH COCHON(S)										
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)										
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16) 7 - ADJACENT LAND USE										
7 - ADJACENT LAND USE	ide									
7 - ADJACENT LAND USE Side Side Side Side S	ide B									
7 - ADJACENT LAND USE Side Side Side Side S	_									
7 - ADJACENT LAND USE Side A Side B Side A Side A <td>_</td>	_									
7 - ADJACENT LAND USE Side A Side B Side A Side A <td>_</td>	_									
7 - ADJACENT LAND USE Side A Side B Side A Side A <td>_</td>	_									
7 - ADJACENT LAND USE Side A Side B A Side	_									
7 - ADJACENT LAND USE Side A B Side B Side A Side	_									
7 - ADJACENT LAND USE Side A Side B A Side	_									

Lake/pond

Mature

X

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B								
	100 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS	
13a - Average Height (m)	13b - Average Width (m)
Excluding bank, to nearest 25cm	At the widest point of canopy; excluding bank, to
	nearest 25cm

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH (cm) CDBH (cm)					
Elm x2	20				

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUR	VEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (<i>Populus tremula</i>)			Rose, dog- (<i>Rosa canina</i>)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10		, ,		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)	20				
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)	10		Bramble (<i>Rubus fruticosus</i> agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					

		Field	<u>d Sur</u>	vey Form –	- H18	3(3)			
		Loca	l Hedge	erow Field Surve	ey For	m			
PART A - ESSE	NTIAL ASSESS	MENTS (T	o be co	mpleted for all lo	cal he	dgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgeı	row regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5	Hedgerov	v No						
Surveyor(s): Geo	orgia Kelly					Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIM	ES AND WEAT	THER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties i	n surveying	the he	dgerows? If so p	lease (describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	dgerow	3b - Line	of trees		3c - 3	Shrubby with I	ine of trees	i	X
4 - LENGTH (m)	- between node	es or inters	ections	with other hedge	rows,	to nearest 5m			
,				J					•
5 - CONNECTIO	NS - total numb	per of other	hedger	ows connected t	0.	End 1	End 2	Tota	al
each end of the h	nedgerow								
								_	
6 - EXTENT OF	SURVEY	6a - Whole	hedger	ow		6b - 30m S	Section(s)	Х	
	•				•	•	` '	•	•
WHOLE HEDGE	ROW OR 30m	SURVEY S	SECTIO	N (Sections 7-16	5)				
7 - ADJACENT L				(22212	,				
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi- improved	X				Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			
	Mature					Stream			
7d - Other			X			Lake/pond			

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)	Х					
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)		1m				

10 – NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Cpecies DBH (cm)						
Hawthorn	30	Oak				
Hazel	20					
Alder	30					

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent planting)							

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.										
Species	Shrubs % cover	Trees No.	Species	Shrubs %	Trees No.					
Alder, common (Alnus glutinosa)	10		Plum, wild (<i>Prunus domestica</i>)	cover						
Apple, crab (<i>Malus sylvestris</i>)	10		Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)			Privet, wild (<i>Ligustrum vulgare</i>)							
Aspen (Populus tremula)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)							
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (<i>Prunus spinosa</i>)			Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)	10		······································							
Elm, English (<i>Ulmus procera</i>)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (<i>Ulmus</i> sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (<i>Crataegus</i> sp.)	30									
Hazel (Corylus avellana)	20									
Holly (Ilex aquifolium)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (<i>Tilia platyphyllos</i>)										
Lime, small-leaved (Tilia cordata)			White Bryony	30						
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)							
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)							
Pine, Scots (Pinus sylvestris)			% Gaps/access openings							
Woodland species										
Herb Robert										

Field Survey Form – H18(2)											
	Local Hedgerow Field Survey Form										
PART A - ESSEI	NTIAL ASSES	SMENT	S (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedge	row req	gulat	ion asse	essment						
Grid Ref											
Date 1 9 1	0 2 0 1 5	Hedg	gerov	w No							
Surveyor(s): Geo	orgia Kelly						Side S	urveyed - B	oth Y/N	N	
2 - SURVEY TIM	IES AND WEA	THER/	ОТН	IER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY			
2d - Were there	any difficulties	in surve	eying	the he	dgerows? If so p	lease	describe.		YES	NO	
Difficulty(ies):											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	dgerow X	3b - I	Line	of trees		3c -	Shrubby with I	ine of trees	;		
	•				_		•		•		
4 - LENGTH (m)	- between nod	les or ir	nters	ections	with other hedge	erows,	to nearest 5m				
					<u> </u>	,					
5 - CONNECTIO	NS - total num	ber of o	other	hedger	ows connected t	:0	End 1	End 2	Tota	al	
each end of the l				3							
									•		
6 - EXTENT OF	SURVEY	6a - W	'hole	hedger	OW		6b - 30m \$	Section(s)	Х		
							•	· /			
WHOLE HEDGE	ROW OR 30m	SURV	ΈΥ	SECTIO	N (Sections 7-16	 6)			•		
7 - ADJACENT L						,					
		S	ide	Side					Side	Side	
			A	В					Α	В	
7a - Arable	Arable crop				7e - Road/Rou	te	Major Road				
	Uncropped						Minor Road				
	margin										
7b - Grass	Improved						Track (unsurf	aced)			
	Semi-		X				Footpath				
	improved						Doil				
70 Moodland	Unimproved						Rail				
7c - Woodland	Young Somi moture	$\overline{}$			7f Motor		Canal				
	Semi-mature	;			7f - Water		River				
7d Othor	Mature	_		v			Stream Lake/pand				
7d - Other				X			Lake/pond				

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)		X						
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)		75						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	- Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side					Side B		

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	30

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Willow x3	10-20						

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent planting)							

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.										
Species	Shrubs	Trees	Species	Shrubs	Trees					
	%	No.		%	No.					
	cover			cover						
Alder, common (Alnus glutinosa)	10		Plum, wild (Prunus domestica)							
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)							
Aspen (Populus tremula)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)							
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)	10		Willow crack	20						
Elm, English (Ulmus procera)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (Ulmus sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (Crataegus sp.)	10									
Hazel (Corylus avellana)										
Holly (Ilex aquifolium)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (Tilia cordata)			White Bryony							
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	30						
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)							
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)							
Pine, Scots (Pinus sylvestris)			% Gaps/access openings	30						
Woodland species										

Field Survey Form – H18(1)											
	Local Hedgerow Field Survey Form										
PART A - ESSEI	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)										
TITLE OF SURV	EY: M4 Hedge	row regulat	tion asse	essment							
Grid Ref											
		_									
Date 1 9 1 0 2 0 1 5 Hedgerow No											
Surveyor(s): Geo	orgia Kelly					Side S	urveyed - B	oth Y/N	N		
2 - SURVEY TIM	IES AND WEA	THER/OTH	IER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY				
2d - Were there	any difficulties	in surveying	g the he	dgerows? If so p	lease	describe.		YES	NO		
Difficulty(ies):											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	dgerow X	3b - Line	of trees		3c -	Shrubby with I	ine of trees	;			
				-		-		-			
4 - LENGTH (m)	- between nod	es or inters	ections	with other hedge	erows,	to nearest 5m					
				· ·	•			_	'		
5 - CONNECTIO	NS - total num	ber of other	r hedger	ows connected t	:0	End 1	End 2	Tota	al		
each end of the l			J								
								•			
6 - EXTENT OF	SURVEY	6a - Whole	hedger	·OW		6b - 30m S	Section(s)	Х			
					ı	•	· /				
WHOLE HEDGE	ROW OR 30m	SURVEY	SECTIO	N (Sections 7-16	5)			•			
7 - ADJACENT L				(· /						
		Side	Side					Side	Side		
		A	В					Α	В		
7a - Arable	Arable crop			7e - Road/Rou	te	Major Road					
	Uncropped					Minor Road					
	margin										
7b - Grass	Improved					Track (unsurf	aced)				
	Semi-	Х				Footpath					
	improved Unimproved					Rail					
7c - Woodland	Young					Canal					
70 - VVOOdiand	Semi-mature	_		7f - Water		River					
	Mature	,		71 - VValei		Stream					
7d - Other	Mature		Х			Lake/pond					
7 U = Oli 161	1					Lake/pullu					

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)		75						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	50

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Willow x2	20						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10					
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)			Willow crack	10					
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (Ulmus sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)									
Hazel (Corylus avellana)									
Holly (Ilex aquifolium)									
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)			White Bryony						
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)	30					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings	50					
, , ,									
Woodland species	•	-		•					

Field Survey Form – H19(3)

rieid Survey Form - H19(3)										
Local Hedgerow Field Survey Form										
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)										
TITLE OF SURV	EY: M4 Hedgerov	v regulat	ion asse	essment			,			
Grid Ref	Grid Ref									
Date 1 9 1	0 2 0 1 5 H	Hedgerov	v No							
Surveyor(s): Geo						Side S	urveyed - B	oth Y/N	N	
2 - SLIBVEV TIM	IES AND WEATH	ER/OTH	IER COI	NDITIONS THAT	ΓΜΔΥ	ΔEEECT THE	: SLIBVEV			
	any difficulties in s						OUNTE	YES	NO	
Difficulty(ies):	arry difficulties in s	surveyin	j ille llei	ugerows: II so p	iease c	iescribe.		TES	<u>INO</u>	
Difficulty(les).										
3 - HEDGEROW	TVDE									
3a - Shrubby hed		Bb - Line	of troop		30 - 9	Shrubby with I	ine of trees		Х	
Sa - Shrubby nec	agerow 3	bb - Line	oi iiees		30 - 3	SHIUDDY WILH I	ine or trees		^	
4 FNOTH ()	hatusan nadaa	o# !mto#o	ti			o nooroot Em				
4 - LENGTH (M)	- between nodes	or inters	ections	with other neage	erows, t	o nearest 5m				
5 00NNEOTIO	NO () I					5 14		Ι+.		
each end of the l	NS - total number	of other	r nedger	ows connected t	:0	End 1	End 2	Tota	aı	
Caon cha or the r	leagerow									
o EVENTOR	OLIDVEV O	\A/I I			1	0, 00 (.	1,,		
6 - EXTENT OF	SURVEY 6a	- Whole	nedger	OW		6b - 30m S	Section(s)	Х		
								-		
	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16	5)					
7 - ADJACENT L	AND USE	I	I							
		Side	Side B					Side	Side	
7a - Arable	Arable crop	Α	ь	7e - Road/Rou	to	Major Road		Α	В	
ra - Alabie	Uncropped			7e - Noau/Nou		Minor Road				
	margin					WIIIOI Road				
7b - Grass	Improved					Track (unsurf	aced)			
	Semi-	Х				Footpath				
	improved					. остран.				
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				
	Mature					Stream				
7d - Other			Х			Lake/pond				

Stream

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)		75						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH (cm) DBH (cm)					
Small Hazel x3	10				

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUR	VEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.
Alder, common (Alnus glutinosa)	33.3.		Plum, wild (Prunus domestica)	33.0.	
Apple, crab (Malus sylvestris)			Poplar, black (<i>Populus nigra betulifolia</i>)		
Ash (Fraxinus excelsior)			Privet, wild (<i>Ligustrum vulgare</i>)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)			Spindle (Euonymus europaeus)	10	
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (<i>Viburnum lantana</i>)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10		, ,		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	40				
Hazel (Corylus avellana)	40				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					

		Fi	eld S	urvey Form	1 - X	X			
	Local Hedgerow Field Survey Form								
PART A - ESSEN	NTIAL ASSESS	SMENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgeı	row regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5	Hedgerov	v No						
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N								N	
2 - SURVEY TIM	ES AND WEAT	THER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties i	n surveying	the hed	dgerows? If so p	lease	describe.		YES	<u>NO</u>
Difficulty(ies):									
3 - HEDGEROW	TYPE				_				
3a - Shrubby hed	lgerow	3b - Line	of trees		3c -	Shrubby with I	ine of trees		X
4 - LENGTH (m)	- between node	es or inters	ections	with other hedge	rows,	to nearest 5m			
									ı
5 - CONNECTIO		per of other	hedger	ows connected t	0	End 1	End 2	Tot	al
each end of the h	nedgerow								
									1
6 - EXTENT OF	SURVEY	6a - Whole	hedger	ow		6b - 30m	Section(s)	Х	
					-	•		-	
WHOLE HEDGE		SURVEY S	SECTIO	N (Sections 7-16	5)				
7 - ADJACENT L	AND USE			I					
		Side	Side					Side	Side
7a - Arable	Arable crop	A	В	7e - Road/Rou	to	Major Road		A	В
7a - Alabie	Uncropped			7e - Roau/Rou	ıe	Minor Road			
	margin					WIIIOI ROAU			
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-	Х				Footpath	,		
	improved					·			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River		1	

Mature

X

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)		75				

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS		
13a - Average Height (m)	13b - Average Width (m)	10
Excluding bank, to nearest 25cm	At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH (cm) Species DBH (cm)							
Willow	20						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.					
Alder, common (Alnus glutinosa)	20		Plum, wild (Prunus domestica)							
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)							
Aspen (<i>Populus tremula</i>)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (<i>Prunus spinosa</i>)			Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (<i>Rhamnus cathartica</i>)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)			Willow Crack	20						
Elm, English (<i>Ulmus procera</i>)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (<i>Ulmus</i> sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (Crataegus sp.)	30									
Hazel (Corylus avellana)	20									
Holly (<i>Ilex aquifolium</i>)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (Tilia cordata)			White Bryony							
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)							
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)							
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)							
Pine, Scots (Pinus sylvestris)			% Gaps/access openings	10						
Woodland species										
Yellow archangel										

Field Survey Form – H19(1)									
		Loca	l Hedge	erow Field	Survey Fo	orm			
PART A - ESSEN	ITIAL ASSESSM	IENTS (T	o be co	mpleted fo	r all local h	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 1 9 1	0 2 0 1 5 1	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS	THAT MAY	Y AFFECT THE	SURVEY		
2d - Were there a	2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO								
Difficulty(ies):	•	, ,	•						
									'
3 - HEDGEROW	TYPE								
3a - Shrubby hed	gerow :	3b - Line	of trees		3c -	Shrubby with	ine of trees		Χ
4 - LENGTH (m)	- between nodes	or inters	ections	with other I	hedgerows	, to nearest 5m			
, ,									
5 - CONNECTION	NS - total numbe	r of other	hedger	ows conne	cted to	End 1	End 2	Tota	al
each end of the h			J						
						_		•	•
6 - EXTENT OF S	SURVEY 6a	a - Whole	hedger	ow		6b - 30m	Section(s)	Х	
					•	•	\	•	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Section	s 7-16)			-	
7 - ADJACENT L					,				
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road	d/Route	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-	X				Footpath			
	Inimproved					Poil			
70 Moodland	Unimproved					Rail			
7c - Woodland	Young			76 \\/-1-		Canal			
	Semi-mature			7f - Wate	r	River			

Lake/pond

Mature

X

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)		75					

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side						Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	20

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Willow x3	10						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUR	17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.					
Alder, common (Alnus glutinosa)	10		Plum, wild (<i>Prunus domestica</i>)	COVE						
Apple, crab (Malus sylvestris)	10		Poplar, black (<i>Populus nigra betulifolia</i>)							
Ash (Fraxinus excelsior)			Privet, wild (<i>Ligustrum vulgare</i>)							
Aspen (<i>Populus tremula</i>)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)							
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (<i>Prunus spinosa</i>)	30		Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)			Willow Crack		20					
Elm, English (<i>Ulmus procera</i>)			Willow Grack		20					
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (<i>Ulmus</i> sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (<i>Crataegus</i> sp.)	40									
Hazel (Corylus avellana)										
Holly (<i>Ilex aquifolium</i>)										
Hornbeam (<i>Carpinus betulus</i>)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (Tilia cordata)			White Bryony							
Maple, field (Acer campestre)			Bramble (<i>Rubus fruticosus</i> agg.)							
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)							
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)							
Pine, Scots (Pinus sylvestris)			% Gaps/access openings	20						
, ,										
Woodland species	·									

Field Survey Form – H5(1)										
		Loca	l Hedge	erow Field Survey	Form					
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loca	ıl hedgerow surve	eys)				
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment						
Grid Ref										
Date 2 0 1	Date 2 0 1 0 2 0 1 5 Hedgerow No									
Surveyor(s): Geo	rgia Kelly				Side S	Surveyed - B	oth Y/N	N		
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT I	MAY AFFECT TH	E SURVEY				
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO										
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c - Shrubby with	line of trees				
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgero	ws, to nearest 5n	า				
		r of other	hedger	ows connected to	End 1	End 2	Tota	al		
each end of the h	nedgerow									
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow	6b - 30m	Section(s)	X			
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)						
7 - ADJACENT L	AND USE									
		Side	Side				Side	Side		
		A	В				Α	В		
7a - Arable	Arable crop	X		7e - Road/Route	Major Road					
	Uncropped margin				Minor Road					
7b - Grass	Improved				Track (unsur	faced)				
76 01433	Semi-		Х		Footpath	iaccaj				
	improved		^		Tootpatii					
	Unimproved				Rail					
7c - Woodland	Young				Canal					
	Semi-mature		-	7f - Water	River					

Stream Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)	X							
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.								
Species	Shrubs	Trees	Species	Shrubs	Trees			
	%	No.	·	%	No.			
	cover			cover				
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)					
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)					
Ash (Fraxinus excelsior)	15		Privet, wild (Ligustrum vulgare)					
Aspen (Populus tremula)			Rose, dog- (Rosa canina)					
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)					
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5				
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)					
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)					
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)					
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)					
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)					
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)					
Elder (Sambucus nigra)			Willow Crack					
Elm, English (<i>Ulmus procera</i>)								
Elm, wych (<i>Ulmus glabra</i>)								
Elm, (<i>Ulmus</i> sp.)								
Gorse (Ulex europaeus)								
Gorse, western (Ulex gallii)								
Guelder rose (Viburnum opulus)								
Hawthorn (Crataegus sp.)	20							
Hazel (Corylus avellana)	20							
Holly (<i>Ilex aquifolium</i>)	10							
Hornbeam (Carpinus betulus)								
Lime, large-leaved (Tilia platyphyllos)								
Lime, small-leaved (Tilia cordata)			White Bryony					
Maple, field (Acer campestre)	20		Bramble (<i>Rubus fruticosus</i> agg.)	х				
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)					
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х				
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)					
Pine, Scots (Pinus sylvestris)			% Gaps/access openings					
Woodland species	,	1						
_								
		ļ						

Field Survey Form – H5(2)									
		Loca	l Hedge	erow Field Survey	Form				
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 2 0 1	0 2 0 1 5 H	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly				Side S	urveyed - B	oth Y/N	N	
2 - SURVEY TIM	ES AND WEATH	ER/OTH	ER COI	NDITIONS THAT M	AY AFFECT THE	SURVEY			
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so plea	se describe.		YES	NO	
Difficulty(ies):									
, ,									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X 3	b - Line	of trees	30	c - Shrubby with	line of trees	i		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerov	vs, to nearest 5m	1			
							-		
5 - CONNECTIO	NS - total numbei	of other	hedger	ows connected to	End 1	End 2	Tota	al	
each end of the h	nedgerow		_						
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)	Х		
							-		
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16)			-		
7 - ADJACENT L									
		Side	Side				Side	Side	
		Α	В				Α	В	
7a - Arable	Arable crop	Х		7e - Road/Route	Major Road				
	Uncropped				Minor Road				
	margin								
7b - Grass	Improved				Track (unsur	faced)			
	Semi- improved				Footpath				
	Unimproved				Rail				
7c - Woodland	Young				Canal				
70 VVOOdialid	Semi-mature			7f - Water	River				
	John mature	ļ		, 1 VVUICI	171401				

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)	X							
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH Species D (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Badger latrines
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUF	17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.							
Species	Shrubs	Trees	Species	Shrubs	Trees			
	%	No.		%	No.			
	cover			cover				
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)					
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)					
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)					
Aspen (Populus tremula)			Rose, dog- (Rosa canina)					
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)					
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10				
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)					
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)					
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)					
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)					
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)					
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)					
Elder (Sambucus nigra)			Willow Crack					
Elm, English (Ulmus procera)								
Elm, wych (<i>Ulmus glabra</i>)								
Elm, (<i>Ulmus</i> sp.)								
Gorse (Ulex europaeus)								
Gorse, western (Ulex gallii)								
Guelder rose (Viburnum opulus)								
Hawthorn (Crataegus sp.)	20							
Hazel (Corylus avellana)	20							
Holly (Ilex aquifolium)	20							
Hornbeam (Carpinus betulus)								
Lime, large-leaved (Tilia platyphyllos)								
Lime, small-leaved (Tilia cordata)			White Bryony					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	Х				
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)					
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х				
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)					
Pine, Scots (Pinus sylvestris)			% Gaps/access openings					
Woodland species			-					

Field Survey Form – H3(2)									
	Local Hedgerow Field Survey Form								
PART A - ESSEN	ITIAL ASSESSI	MENTS (T	o be co	mpleted fo	r all local h	edgerow surve	ys)		
TITLE OF SURVI	EY: M4 Hedgerd	w regulat	ion asse	essment					
Grid Ref									
Date 2 0 1	Date 2 0 1 0 2 0 1 5 Hedgerow No								
Surveyor(s): Geo	Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N								
2 - SURVEY TIM	ES AND WEATI	HER/OTH	ER CO	NDITIONS	THAT MAY	Y AFFECT THE	SURVEY		
2d - Were there a	ny difficulties in	surveying	the he	dgerows? I	f so please	describe.		YES	NO
Difficulty(ies):	•								
3 - HEDGEROW	TYPE								
3a - Shrubby hed	gerow	3b - Line	of trees		3c -	- Shrubby with	ine of trees		X
4 - LENGTH (m)	- between nodes	s or inters	ections	with other l	nedgerows	, to nearest 5m	l		
5 - CONNECTION	NS - total numbe	er of other	hedger	ows conne	cted to	End 1	End 2	Tota	al
each end of the h	edgerow								
6 - EXTENT OF S	SURVEY 6	a - Whole	hedger	ow		6b - 30m	Section(s)	Х	
WHOLE HEDGE	ROW OR 30m S	SURVEY S	SECTIO	N (Section	s 7-16)	·			
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop	Х		7e - Road	d/Route	Major Road			
	Uncropped					Minor Road			
7h Cross	margin					Trools (consumb	in and\		
7b - Grass	Improved					Track (unsurf	acea)		
	Semi- improved					Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Wate	r	River			

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS						
13a - Average Height (m)	5	13b - Average Width (m)	3			
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm				

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species	DBH (cm)	Species	DBH (cm)		
Ash	20				

16 - NOTES - Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)			Willow Crack	10					
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (Ulmus sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	10								
Hazel (Corylus avellana)	20								
Holly (Ilex aquifolium)	10								
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)			White Bryony						
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	20					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х					
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
, , ,									
Woodland species		· I							
Herb Robert									

Field Survey Form – H6(2)									
		Loca	l Hedge	erow Field Surve	y Fo	rm			
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loo	cal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment					
Grid Ref									
Date 2 0 1 0 2 0 1 5 Hedgerow No									
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/ <u>N</u>	N
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in s	surveying	the hed	dgerows? If so plo	ease	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow 3	3b - Line	of trees		3c -	Shrubby with	ine of trees		Χ
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	rows,	to nearest 5m	ı		
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connected to)	End 1	End 2	Tota	al
each end of the h	nedgerow					-		-	
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m	Section(s)	Х	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16))	·		-	
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop	X		7e - Road/Rout	е	Major Road			
	Uncropped					Minor Road			
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi- improved		X			Footpath			
	Unimproved					Rail			
7c - Woodland	Young	+				Canal			
70 - Woodland	Semi-mature	1		7f - Water		River			
	Semi-mature			71 - vvater		Kivei			

Stream Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)		х					

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	es Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Sid					Side B		
Tour House Glad 71 Glad B 102 Glod Vole Glad B 102								

12 - HEDGEROW SHAPE – See also Part B section 19a										
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
	Table Market Strate Control of the All All All All All All All All All Al									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy							
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch							

13 - DIMENSIONS			
13a - Average Height (m)	7	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	5

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
Coppiced Willows x2	30						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
4.Ch. Footures (including suidenes of recent planting)
16b - Features (including evidence of recent planting)
166 - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUI	7 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.								
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.				
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)	10					
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)			Willow Crack						
Elm, English (<i>Ulmus procera</i>)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (<i>Ulmus</i> sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	10								
Hazel (Corylus avellana)	10								
Holly (<i>Ilex aquifolium</i>)	10								
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (Tilia cordata)			White Bryony						
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	40					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)						
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings						
Woodland species									
<u> </u>									

Field Survey Form – H6(1)									
		Loca	l Hedge	erow Field Surve	y Fo	rm			
PART A - ESSEN	NTIAL ASSESSIV	IENTS (T	o be co	mpleted for all loc	al he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 2 0 1 0 2 0 1 5 Hedgerow No									
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/ <u>N</u>	N
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so ple	ease	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow :	3b - Line	of trees		3c -	Shrubby with I	ine of trees		Χ
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows,	to nearest 5m	l		
5 - CONNECTIO		r of other	hedger	ows connected to)	End 1	End 2	Tota	al
each end of the h	nedgerow					—			
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m	Section(s)	X	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16))				
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		A	В					Α	В
7a - Arable	Arable crop	X		7e - Road/Route	е	Major Road			
	Uncropped margin					Minor Road			
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-		Х			Footpath			
	improved								
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			

Stream Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)	X							
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	7	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			
E. Oak	40					
Hazel N10 20						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.								
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.			
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)					
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)					
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)					
Aspen (Populus tremula)			Rose, dog- (Rosa canina)					
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)					
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10				
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)					
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)					
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)					
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)					
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)					
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)					
Elder (Sambucus nigra)			Willow Crack					
Elm, English (<i>Ulmus procera</i>)								
Elm, wych (<i>Ulmus glabra</i>)								
Elm, (<i>Ulmus</i> sp.)								
Gorse (Ulex europaeus)								
Gorse, western (Ulex gallii)								
Guelder rose (Viburnum opulus)								
Hawthorn (Crataegus sp.)	20							
Hazel (Corylus avellana)	20							
Holly (<i>Ilex aquifolium</i>)	10							
Hornbeam (Carpinus betulus)								
Lime, large-leaved (Tilia platyphyllos)								
Lime, small-leaved (Tilia cordata)			White Bryony					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	10				
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)					
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х				
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)					
Pine, Scots (Pinus sylvestris)			% Gaps/access openings					
Woodland species		1		1				

		Fi	eld S	urvey Form	<u> </u>	12			
		Loca	l Hedge	erow Field Surve	ey Fo	orm			
PART A - ESSE	NTIAL ASSESSI	MENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 2 0 1	0 2 0 1 5	Hedgerov	v No						
Surveyor(s): Geo	orgia Kelly					Side S	urveyed - E	Both Y/N	N
2 - SURVEY TIM	IES AND WEAT	HER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the he	dgerows? If so pl	lease	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	dgerow X	3b - Line	of trees		3c -	Shrubby with	ine of trees	6	
4 - LENGTH (m)	- between node	s or inters	ections	with other hedge	rows,	to nearest 5m			
5 - CONNECTIO	NS - total numb	er of other	hedger	ows connected to	0	End 1	End 2	Tot	al
each end of the h	nedgerow		_						
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х	
WHOLE HEDGE	ROW OR 30m S	SURVEY	SECTIO	N (Sections 7-16	5)				
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Rout	te	Major Road			
	Uncropped					Minor Road		X	
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-					Footpath			
	improved			+		D-il			
7- \\/	Unimproved			+		Rail			
7c - Woodland	Young			76 \\\/-1==		Canal			
	Semi-mature			7f - Water		River			
	Mature					Stream			

Residential

Lake/pond

X

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm	50		8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH Species DBH (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Mammal path – likely badger
16b - Features (including evidence of recent planting)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUI	RVEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (Ulmus glabra)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)	20				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)			White Bryony		
Maple, field (Acer campestre)	20		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					

		Fi	iel	d Sur	vey Form -	<u>- XX</u>	A1			
		Lo	oca	l Hedge	erow Field Surve	ey Fo	rm			
PART A - ESSEN	NTIAL ASSES	SMENTS	S (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedge	erow regi	ulati	ion asse	essment					
Grid Ref										
Date 2 0 1	0 2 0 1 5	5 Hedge	erov	v No						
Surveyor(s): Geo	rgia Kelly						Side S	urveyed - E	oth Y/	N N
2 - SURVEY TIM	ES AND WEA	ATHER/C	TH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties	in surve	ying	the hed	dgerows? If so p	lease	describe.		YES	NO NO
Difficulty(ies):										
3 - HEDGEROW	TYPE									
3a - Shrubby hed	lgerow X	3b - Li	ne	of trees		3c -	Shrubby with	line of trees	;	
4 - LENGTH (m)	- between noc	des or int	erse	ections	with other hedge	rows,	to nearest 5m	1		
5 - CONNECTIO		nber of ot	her	hedger	ows connected t	0	End 1	End 2	To	tal
each end of the h	nedgerow									
6 - EXTENT OF	SURVEY	6a - Wh	ole	hedger	ow		6b - 30m	Section(s))	(
WHOLE HEDGE	ROW OR 30m	n SURVE	Y S	SECTIO	N (Sections 7-16	6)				
7 - ADJACENT L	AND USE									
		Sid	le	Side					Side	Side
		A		В					Α	В
7a - Arable	Arable crop				7e - Road/Rou	te	Major Road			
	Uncropped margin						Minor Road		X	
7b - Grass	Improved						Track (unsur	faced)		
	Semi- improved						Footpath			
	Unimproved						Rail			
7c - Woodland	Young						Canal			
	Semi-mature	Δ			7f - Water		River			

Residential

X

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm	50		8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B					Side B			

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES -	See also Part E	3 section 21			
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species	DBH (cm)	Species	DBH (cm)		
Ash	20				

17 - WOODY SPECIES IN 30m SU	17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY - Add any others, including non-natives.										
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.						
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)								
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)								
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)								
Aspen (Populus tremula)			Rose, dog- (Rosa canina)								
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)								
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10							
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)								
Blackthorn (<i>Prunus spinosa</i>)	20		Spindle (Euonymus europaeus)								
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)								
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)								
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)								
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)								
Elder (Sambucus nigra)			Willow Crack								
Elm, English (<i>Ulmus procera</i>)											
Elm, wych (<i>Ulmus glabra</i>)											
Elm, (<i>Ulmus</i> sp.)											
Gorse (Ulex europaeus)											
Gorse, western (Ulex gallii)											
Guelder rose (Viburnum opulus)											
Hawthorn (Crataegus sp.)	20										
Hazel (Corylus avellana)	20										
Holly (Ilex aquifolium)											
Hornbeam (Carpinus betulus)											
Lime, large-leaved (Tilia platyphyllos)											
Lime, small-leaved (Tilia cordata)			White Bryony								
Maple, field (Acer campestre)	20		Bramble (Rubus fruticosus agg.)								
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)								
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)								
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)								
Pine, Scots (Pinus sylvestris)			% Gaps/access openings								
Woodland species											
Herb Robert											
Wood avens											
	l l	l	l .								

Field Survey Form – H11(2)										
		Loca	l Hedge	row Field Surve	ey Fo	rm				
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all lo	cal he	edgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment						
Grid Ref										
Date 2 0 1	0 2 0 1 5 H	Hedgerov	v No							
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N	
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY										
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO										
Difficulty(ies):										
3 - HEDGEROW					•					
3a - Shrubby hed	lgerow 3	3b - Line	of trees		3c -	Shrubby with I	line of trees		X	
								_	1	
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedge	rows,	to nearest 5m	l			
							ı		-	
5 - CONNECTIO		r of other	hedger	ows connected t	0	End 1	End 2	Tota	al	
each end of the h	nedgerow									
									1	
6 - EXTENT OF	SURVEY 6a	- Whole	hedger	OW		6b - 30m	Section(s)	X		
WHOLE HEDGE		JRVEY S	SECTIO	N (Sections 7-16	5)					
7 - ADJACENT L	AND USE	T		I				Γ		
		Side	Side B					Side	Side B	
7a - Arable	Arable crop	A	ь	7e - Road/Rou	to	Major Road		A	X	
7a - Alabie	Uncropped			7e - Road/Rod	ıc	Minor Road			^	
	margin					WIIIIOI Road				
7b - Grass	Improved					Track (unsurf	faced)			
	Semi-	Х				Footpath	,			
	improved									
	Unimproved					Rail				
7c - Woodland	Young					Canal				
	Semi-mature			7f - Water		River				

Stream Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES									
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)									
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B	
100 110000 0100 1 0100 1 0100 1 0100 1									

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.									
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species	pecies DBH Species (cm)							
Ash	40							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.										
Species	Shrubs	Trees	Species	Shrubs	Trees					
	%	No.		%	No.					
	cover			cover						
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)							
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)							
Aspen (Populus tremula)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)			Willow Crack							
Elm, English (Ulmus procera)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (Ulmus sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (Crataegus sp.)	70									
Hazel (Corylus avellana)										
Holly (Ilex aquifolium)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (Tilia cordata)			Conifer	5						
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	5						
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	Х						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings							
Woodland species	1			·						
Herb Robert										

Local Hedgerow Field Survey Form											
	NTIAL ASSESSM	,		•	all loca	ıl hedger	ow surve	ys)			
	EY: M4 Hedgerov	w regulat	ion asse	essment							
Grid Ref											
D-(- 0 0 4		1. 1	NI.								
		Hedgerov	V INO				0:4- 0		- th- \//NI		
Surveyor(s): Geo	orgia Kelly						Side S	urveyed - B	oth Y/ <u>N</u>	N	
2 - SLIBVEV TIM	IES AND WEATH	IER/OTH	ER COI	ADITIONS T	ΉΔΤΙΛ	1AV AFE	ECT THE	SUBVEV			
	any difficulties in s							LOURVET	YES	NO	
Difficulty(ies):	arry difficulties in s	sui ve yii iç	j tile riet	agerows: II	30 piec	356 0630	iibe.		ILO	140	
Dimodity (100).											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	dgerow	3b - Line	of trees		3	3c - Shru	bby with	line of trees		Х	
,				•			•		•	•	
4 - LENGTH (m)	- between nodes	or inters	ections	with other he	edgero	ws, to ne	earest 5m	l			
5 - CONNECTIO	NS - total numbe	r of other	hedger	ows connec	ted to	End	d 1	End 2	Total		
each end of the h	nedgerow										
6 - EXTENT OF	SURVEY 6a	ı - Whole	hedger	ow		6	6b - 30m	Section(s)	Х		
						<u> </u>					
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections	7-16)						
7 - ADJACENT L	AND USE		I								
		Side A	Side B						Side A	Side B	
7a - Arable	Arable crop		В	7e - Road/	Route	Mai	or Road		Α	ь	
7a Alabic	Uncropped			7C Road/	rtoute		or Road				
	margin					141111	or reduc				
7b - Grass	Improved					Trac	ck (unsur	faced)			
	Semi-	X				Foo	tpath				
	improved										
	Unimproved					Rail					
7c - Woodland	Young					Can					
	Semi-mature			7f - Water		Rive					
- 1 011	Mature		,,,			Stre					
7d - Other			X			Lak	e/pond				
			Orcha	rd							

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)		Х						
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	5	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			
Ash 50						
Oak E 40						
Alder 50						

6 – NOTES – Whole hedgerow or 30m survey section
6a - Fauna (evidence of)
6b - Features (including evidence of recent planting)
6b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY - Add any others, including non-nati	ves.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)	10		Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	20		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)	10	
Elder (Sambucus nigra)			Willow Crack		
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	10				
Holly (<i>Ilex aquifolium</i>)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	Х	
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	Х	
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		<u>-</u>			
Lords-and-ladies					
Wood avens					

		Field	<u>d Sur</u>	vey Form –	<u>H10</u>	(3)			
Local Hedgerow Field Survey Form									
PART A - ESSEN	NTIAL ASSESSM	MENTS (T	o be co	mpleted for all loc	al hec	dgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 2 0 1 0 2 0 1 5 Hedgerow No									
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N									
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS THAT	MAY A	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so ple	ase d	lescribe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c - S	Shrubby with I	ine of trees	i	
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows, t	o nearest 5m	l		
		er of other	hedger	ows connected to		End 1	End 2	Tot	al
each end of the h	nedgerow				-				
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE	_							
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Route		Major Road			
	Uncropped margin					Minor Road			X
7b - Grass	Improved					Track (unsurf	aced)		
76 01433	Semi-	Х				Footpath	accu)		
	improved				'	гоогран			
	Unimproved					Rail			
7c - Woodland	Young				(Canal			
	Semi-mature			7f - Water		River			

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)		X						
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	1.2	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH (cm) Species DBI (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY – Add any others, including non-nativ	es.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	30				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (<i>Rubus fruticosus</i> agg.)	Х	
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
			. <u> </u>		
Woodland species	1			1	
Herb Robert					

Field Survey Form – H10(2)								
Local Hedgerow Field Survey Form								
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)								
TITLE OF SURVEY: M4 Hedgerow regulation assessment								
Grid Ref								
Date 2 0 1 0 2 0 1 5 Hedgerow No								
Surveyor(s): Georgia Kelly Side Surveyed - E	3oth Y/N	N						
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY								
2d - Were there any difficulties in surveying the hedgerows? If so please describe.	YES	NO						
Difficulty(ies):								
3 - HEDGEROW TYPE								
3a - Shrubby hedgerow3b - Line of trees3c - Shrubby with line of trees	s	X						
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m								
5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2	Tot	al						
each end of the hedgerow								
6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s)	Х							
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)	•							
7 - ADJACENT LAND USE								
Side Side	Side	Side						
A B	Α	В						
7a - ArableArable crop7e - Road/RouteMajor Road								
Uncropped Minor Road		Х						
margin								
margin Track (unsurfaced)								
margin 7b - Grass Improved Track (unsurfaced) Semi- X Footpath								
margin 7b - Grass Improved Track (unsurfaced) Semi- improved Footpath								
margin 7b - Grass Improved Track (unsurfaced) Semi- X Footpath								

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B		

12 - HEDGEROW SHAPE	E – See also Part B section	19a	
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch

13 - DIMENSIONS			
13a - Average Height (m)	4	13b - Average Width (m)	4
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21					
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.					
Species DBH Species DB (cm)					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.									
Species	Shrubs	Trees	Species	Shrubs	Trees				
	%	No.		%	No.				
	cover			cover					
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)						
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)						
Ash (Fraxinus excelsior)	20		Privet, wild (Ligustrum vulgare)						
Aspen (Populus tremula)			Rose, dog- (Rosa canina)						
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)						
Birch, downy (Betula pubescens)			Rose (Rosa sp.)						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)						
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)						
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)						
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)						
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)						
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)						
Elder (Sambucus nigra)			Willow Crack						
Elm, English (Ulmus procera)									
Elm, wych (<i>Ulmus glabra</i>)									
Elm, (Ulmus sp.)									
Gorse (Ulex europaeus)									
Gorse, western (Ulex gallii)									
Guelder rose (Viburnum opulus)									
Hawthorn (Crataegus sp.)	30								
Hazel (Corylus avellana)	30								
Holly (Ilex aquifolium)									
Hornbeam (Carpinus betulus)									
Lime, large-leaved (Tilia platyphyllos)									
Lime, small-leaved (<i>Tilia cordata</i>)									
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	20					
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)						
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х					
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	Х					
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings						
			, , , , , , , , , , , , , , , , , , , ,						
Woodland species	1	ı		1					
·									

Field Survey – H10(1)										
		Loca	l Hedge	erow Field Survey I	-orm					
PART A - ESSEN	NTIAL ASSESSM	ENTS (T	o be co	mpleted for all local	hedgerow surve	ys)				
TITLE OF SURV	EY: M4 Hedgerov	w regulat	ion asse	essment						
Grid Ref										
Date 2 0 1	0 2 0 1 5 H	Hedgerov	v No							
Surveyor(s): Geo	rgia Kelly				Side S	urveyed - B	oth Y/N	N		
2 - SURVEY TIM	ES AND WEATH	IER/OTH	ER COI	NDITIONS THAT MA	AY AFFECT THE	SURVEY				
2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO										
Difficulty(ies):										
,										
3 - HEDGEROW	TYPE									
3a - Shrubby hedgerow 3b - Line of trees 3c - Shrubby with line of trees X										
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgerow	s, to nearest 5m	1				
							•			
5 - CONNECTION	NS - total numbe	r of other	hedger	ows connected to	End 1	End 2	Tot	al		
each end of the h			J		_					
							-			
6 - EXTENT OF S	SURVEY 6a	- Whole	hedger	ow	6b - 30m	Section(s)	х			
				•	•	· · · · · · · · · · · · · · · · · · ·				
WHOLE HEDGE	ROW OR 30m SI	JRVEY S	SECTIO	N (Sections 7-16)	·		•			
7 - ADJACENT L				,						
		Side	Side				Side	Side		
		Α	В				Α	В		
7a - Arable	Arable crop			7e - Road/Route	Major Road					
	Uncropped				Minor Road			Х		
	margin									
7b - Grass	Improved				Track (unsur	faced)				
	Semi- improved	X			Footpath					
	Unimproved				Rail					
7c - Woodland	Young				Canal					
70 VVOOdialid	Semi-mature			7f - Water	River					
	John mature	1		11 VValoi	131701					

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B

12 - HEDGEROW SHAPE – See also Part B section 19a										
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy							
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch							

13 - DIMENSIONS			
13a - Average Height (m)	4	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21								
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.								
Species DBH (cm) Species DB (cm								
E Oak	50							

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.										
Species	Shrubs	Trees	Species	Shrubs	Trees					
	%	No.		%	No.					
	cover			cover						
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)							
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)							
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)							
Aspen (Populus tremula)			Rose, dog- (Rosa canina)							
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)							
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10						
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)							
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)							
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)							
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)							
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)							
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)							
Elder (Sambucus nigra)			Willow Crack							
Elm, English (Ulmus procera)										
Elm, wych (<i>Ulmus glabra</i>)										
Elm, (Ulmus sp.)										
Gorse (Ulex europaeus)										
Gorse, western (Ulex gallii)										
Guelder rose (Viburnum opulus)										
Hawthorn (Crataegus sp.)	20									
Hazel (Corylus avellana)	20									
Holly (Ilex aquifolium)										
Hornbeam (Carpinus betulus)										
Lime, large-leaved (Tilia platyphyllos)										
Lime, small-leaved (<i>Tilia cordata</i>)										
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	10						
Oak, pedunculate (Quercus robur)	10		Honeysuckle (Lonicera periclymenum)							
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х						
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)	Х						
Pine, Scots (Pinus sylvestris)			% Gaps/access openings							
, , ,										
Woodland species		· I								
Herb Robert										
Lords-and-ladies										

Field Survey Form – H9(3)											
		Loca	l Hedge	erow Field Surve	y Fo	rm					
PART A - ESSEN	NTIAL ASSESSM	MENTS (T	o be co	mpleted for all loc	al he	edgerow surve	ys)				
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment							
Grid Ref											
Date 2 0 1	0 2 0 1 5	Hedgerov	v No								
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/N	N		
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY				
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so ple	ease	describe.		YES	<u>NO</u>		
Difficulty(ies):											
3 - HEDGEROW	TYPE										
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c -	Shrubby with I	line of trees				
4 - LENGTH (m)	 between nodes 	or inters	ections	with other hedger	ows,	to nearest 5m					
		r of other	hedger	ows connected to)	End 1	End 2	Tot	al		
each end of the h	nedgerow										
6 - EXTENT OF	SURVEY 6a	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х			
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)							
7 - ADJACENT L	AND USE							Г			
		Side	Side					Side	Side		
Zo Arabia	Arabla aran	A	В	Zo Dood/Doute		Major Dood		A	В		
7a - Arable	Arable crop	X		7e - Road/Route	Э	Major Road		v			
	Uncropped margin					Minor Road		X			
7b - Grass	Improved					Track (unsurf	aced)				
	Semi-					Footpath	,				
	improved					•					
	Unimproved					Rail					
7c - Woodland	Young					Canal					
	Semi-mature			7f - Water		River					

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)		Х						
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B

12 - HEDGEROW SHAPE – See also Part B section 19a									
What shape is the hedger	What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy						
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch						

13 - DIMENSIONS						
13a - Average Height (m)	1.5	13b - Average Width (m)	2			
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to				
		nearest 25cm				

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species	DBH (cm)	Species	DBH (cm)			

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent planting)							

Species	Shrubs	Trees	Species	Shrubs	Trees
·	%	No.	·	%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	5	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)	5	
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	60				
Holly (Ilex aquifolium)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species			T		
Herb Robert					
Dog's mercury					
Lords-and-ladies					

		Fie	d Su	rvey Form –	· H9	(2)			
Local Hedgerow Field Survey Form									
PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)									
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
Date 2 0 1	0 2 0 1 5	Hedgerov	v No						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - B	oth Y/ <u>N</u>	N
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so ple	ease	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c -	Shrubby with I	ine of trees		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedger	ows,	to nearest 5m	l		
5 - CONNECTIO		er of other	hedger	ows connected to)	End 1	End 2	Tota	al
each end of the h	nedgerow					—			
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m	Section(s)	X	
r	<u>-</u>			<u>.</u>				_	
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)					
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		A	В					A	В
7a - Arable	Arable crop	X		7e - Road/Route	Э	Major Road			
	Uncropped margin					Minor Road			X
7b - Grass	Improved					Track (unsurf	aced)		
	Semi-					Footpath	<u></u>		
	improved								
	Unimproved					Rail			
7c - Woodland	Young					Canal			
	Semi-mature			7f - Water		River			

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	1.5	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				

16 – NOTES – Whole hedgerow or 30m survey section							
16a - Fauna (evidence of)							
16b - Features (including evidence of recent planting)							

Species	Shrubs	Trees	Species	Shrubs	Trees
5,23.00	%	No.	Specific Control of the Control of t	%	No.
	cover	110.		cover	110.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)					
Hazel (Corylus avellana)	60				
Holly (<i>Ilex aquifolium</i>)					
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)		
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species					
Herb Robert					
Lords-and-ladies					
Dog's mercury					

PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 2 0 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys) TITLE OF SURVEY: M4 Hedgerow Regulation assessment Side Surveyed - Both Y/N N N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO NO NO NO NO NO NO N
TITLE OF SURVEY: M4 Hedgerow regulation assessment Grid Ref Date 2 0 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m
Date 2 0 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m
Date 2 0 1 0 2 0 1 5 Hedgerow No Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X
Surveyor(s): Georgia Kelly 2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY 2d - Were there any difficulties in surveying the hedgerows? If so please describe. YES NO Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
2d - Were there any difficulties in surveying the hedgerows? If so please describe. Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
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Difficulty(ies): 3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
3 - HEDGEROW TYPE 3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees 4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m 5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
5 - CONNECTIONS - total number of other hedgerows connected to End 1 End 2 Total
each end of the hedgerow
6 - EXTENT OF SURVEY 6a - Whole hedgerow 6b - 30m Section(s)
WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)
7 - ADJACENT LAND USE
Side Side Side Side
A B A B
7a - Arable Arable crop X 7e - Road/Route Major Road
Uncropped Minor Road X
Uncropped Minor Road X margin
Uncropped Minor Road X 7b - Grass Improved Track (unsurfaced)
Uncropped Minor Road X 7b - Grass Improved Track (unsurfaced) Semi- Footpath
Uncropped Minor Road X 7b - Grass Improved Track (unsurfaced) Semi- improved Footpath
Uncropped Minor Road X 7b - Grass Improved Track (unsurfaced) Semi- Footpath

Stream

Lake/pond

Mature

8 - ASSOCIATED FEATURES – See also Part B section 18						
	Side A	Side B				
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)			
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)			
8c - Fence (tick)						
8d - Ditch - external - Dry (tick)						
8e - Ditch - external - Wet (tick)						

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	Side A	Side B	10b - Cleavers	Side A	Side B	10c - Docks	Side A	Side B

12 - HEDGEROW SHAPE	12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.							
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	2	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species	DBH (cm)	Species	DBH (cm)				
E Oak	10						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SUR	VEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)	10	
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)			Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	50				
Hazel (Corylus avellana)					
Holly (Ilex aquifolium)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (<i>Tilia cordata</i>)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	15	
Oak, pedunculate (Quercus robur)	5		Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		1			
Herb Robert					
Lords-and-ladies					

Field Survey Form – H7

	Local Hedgero	w Field Surve	ey Form				
PART A - ESSENTIAL ASSES	SMENTS (To be comp	oleted for all lo	cal hedge	row surv	eys)		
TITLE OF SURVEY: M4 Hedge	erow regulation assess	ment					
Grid Ref							
Date 2 0 1 0 2 0 1 5	Hedgerow No						
Surveyor(s): Georgia Kelly				Side	Surveyed - Bo	oth Y/ <u>N</u>	N
2 - SURVEY TIMES AND WEA	THER/OTHER COND	ITIONS THAT	MAY AFF	ECT TH	IE SURVEY		
2d - Were there any difficulties	in surveying the hedge	erows? If so p	lease desc	cribe.		YES	<u>NO</u>
Difficulty(ies):							
3 - HEDGEROW TYPE							
3a - Shrubby hedgerow	3b - Line of trees		3c - Shru	ubby with	line of trees		X
4 - LENGTH (m) - between noo	les or intersections wit	h other hedge	rows, to n	earest 5ı	m		
5 - CONNECTIONS - total num	ber of other hedgerow	s connected t	o En	d 1	End 2	Tota	I
each end of the hedgerow							
6 - EXTENT OF SURVEY	6a - Whole hedgerow	1		6b - 30m	Section(s)	Х	
					. ,	-	
WHOLE HEDGEROW OR 30m	SURVEY SECTION ((Sections 7-16	5)				
7 - ADJACENT LAND USE							
	Sida Sida					Side	Sido

WHOLE HEDGE	WHOLE HEDGEROW OR 30m SURVEY SECTION (Sections 7-16)								
7 - ADJACENT LAND USE									
		Side A	Side B			Side A	Side B		
7a - Arable	Arable crop	X		7e - Road/Route	Major Road				
	Uncropped margin				Minor Road				
7b - Grass	Improved				Track (unsurfaced)				
	Semi- improved		X		Footpath				
	Unimproved				Rail				
7c - Woodland	Young				Canal				
	Semi-mature			7f - Water	River				
	Mature				Stream				
7d - Other					Lake/pond				

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							Side B	
100 100 100 100 100 100 100 100 100 100								

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS						
13a - Average Height (m)	5	13b - Average Width (m)	3			
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to nearest 25cm				

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DBH (cm)						
Ash	20					

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

17 - WOODY SPECIES IN 30m SU	RVEY SECT	ION ON	LY - Add any others, including non-na	atives.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow, crack	10	
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	20				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)			Bramble (Rubus fruticosus agg.)	20	
Oak, pedunculate (<i>Quercus robur</i>)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (<i>Clematis vitalba</i>)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
Woodland species		1			
Herb Robert					

Field Survey Form – H27

Local Hedge	erow Field Surve	ey Form								
PART A - ESSENTIAL ASSESSMENTS (To be co	mpleted for all lo	cal hedgero	w surveys)							
TITLE OF SURVEY: M4 Hedgerow regulation asse	essment									
Grid Ref										
Date 2 3 1 0 2 0 1 5 Hedgerow No										
Surveyor(s): Georgia Kelly		Side Surveyed - Both Y/N N								
2 - SURVEY TIMES AND WEATHER/OTHER CONDITIONS THAT MAY AFFECT THE SURVEY										
2d - Were there any difficulties in surveying the he	be.	YES	<u>NO</u>							
Difficulty(ies):										
3 - HEDGEROW TYPE										
3a - Shrubby hedgerow X 3b - Line of trees 3c - Shrubby with line of trees										
4 - LENGTH (m) - between nodes or intersections with other hedgerows, to nearest 5m										
5 - CONNECTIONS - total number of other hedgerows connected to			1 End	12 To	otal					
each end of the hedgerow										
6 - EXTENT OF SURVEY 6a - Whole hedgerow		6k	b - 30m Section(s)		(
WHOLE HEDGEROW OR 30m SURVEY SECTION	N (Sections 7-16	5)								
7 - ADJACENT LAND USE										
Side Side				Side	Side					

WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)			
7 - ADJACENT L	LAND USE						
		Side A	Side B			Side A	Side B
7a - Arable	Arable crop			7e - Road/Route	Major Road		
	Uncropped margin				Minor Road		Х
7b - Grass	Improved	X			Track (unsurfaced)		
	Semi- improved				Footpath		
	Unimproved				Rail		
7c - Woodland	Young				Canal		
	Semi-mature			7f - Water	River		
	Mature				Stream		
7d - Other					Lake/pond		

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm		50	8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedgerow? - Circle diagram of cross-section that most closely resembles hedgerow.								
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	1.5	13b - Average Width (m)	2
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH Species I (cm)						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Bird nest in hedge
16b - Features (including evidence of recent planting)

30m SURVEY SECTION ONLY

Species	Shrubs	Trees	Species	Shrubs	Trees
Species			Species		
	% cover	No.		% cover	No.
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (<i>Rosa canina</i>)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	10		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	20				
Hazel (Corylus avellana)	30				
Holly (Ilex aquifolium)	20				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	Х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (<i>Pinus</i> sylvestris)			% Gaps/access openings		
Woodland species		1			
Herb Robert					
Dog's mercury					
		ļ			

		Fie	ld Su	ırvey Form -	<u>– Н2</u>	28			
Local Hedgerow Field Survey Form									
PART A - ESSEN	NTIAL ASSESSI	MENTS (T	o be co	mpleted for all loc	al he	dgerow surve	ys)		
TITLE OF SURV	EY: M4 Hedgerd	w regulat	ion asse	essment					
Grid Ref									
Date 2 3 1	0 2 0 1 5	Hedgerov	v No						
Surveyor(s): Georgia Kelly Side Surveyed - Both Y/N N									
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER CO	NDITIONS THAT	MAY	AFFECT THE	SURVEY		
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so ple	ease	describe.		YES	NO
Difficulty(ies):									
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees		3c -	Shrubby with I	ine of trees		
4 - LENGTH (m)	- between nodes	s or inters	ections	with other hedger	ows,	to nearest 5m	ı		
5 - CONNECTIO	NS - total numbe	er of other	hedger	ows connected to)	End 1	End 2	Tot	al
each end of the h	nedgerow								
6 - EXTENT OF	SURVEY 6	a - Whole	hedger	ow		6b - 30m S	Section(s)	Х	
								-	
WHOLE HEDGE	ROW OR 30m S	SURVEYS	SECTIO	N (Sections 7-16)				·	
7 - ADJACENT L	AND USE								
		Side	Side					Side	Side
		Α	В					Α	В
7a - Arable	Arable crop			7e - Road/Route	Э	Major Road			
	Uncropped					Minor Road		X	
	margin								
7b - Grass	Improved					Track (unsurf	aced)		
	Semi- improved					Footpath			
	Unimproved					Rail			
7c - Woodland	Young					Canal			
70 - VVOOdiand	Semi-mature			7f - Water		River			
	Semi-mature			11 - Walei		1/11/61			

Mature

Garden

X

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18								
	Side A	Side B						
8a - Bank - Height (in metres) to nearest 25cm			8f - Ditch - internal - Dry (tick)					
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)					
8c - Fence (tick)								
8d - Ditch - external - Dry (tick)								
8e - Ditch - external - Wet (tick)								

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)								
10a – Nettles	10a – Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B							

12 - HEDGEROW SHAPE – See also Part B section 19a								
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.					
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy					
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch					

13 - DIMENSIONS			
13a - Average Height (m)	3	13b - Average Width (m)	2.5
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) Species DE (ci						

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
16b - Features (including evidence of recent planting)

30m SURVEY SECTION ONLY

17 - WOODY SPECIES IN 30m SURV	EY SECT	ION ON	LY – Add any others, including non-nati	ves.	
Species	Shrubs	Trees	Species	Shrubs	Trees
	%	No.		%	No.
	cover			cover	
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)		
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)		
Ash (Fraxinus excelsior)	10		Privet, wild (Ligustrum vulgare)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (Prunus spinosa)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)	10		Willow Crack		
Elm, English (Ulmus procera)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (Ulmus sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (Crataegus sp.)	10				
Hazel (Corylus avellana)	20				
Holly (Ilex aquifolium)	10				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)	Х	
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		ı			
Herb Robert					
Dog's mercury					

		Fie	eld Su	ırvey Form –	H29				
		Loca	l Hedge	erow Field Survey	Form				
PART A - ESSEN	NTIAL ASSESSM	IENTS (T	o be co	mpleted for all loca	l hedgerow surve	ys)			
TITLE OF SURV	EY: M4 Hedgero	w regulat	ion asse	essment					
Grid Ref									
Date 2 3 1	Date 2 3 1 0 2 0 1 5 Hedgerow No								
Surveyor(s): Geo	rgia Kelly				Side S	Surveyed - E	Both Y/N	N	
2 - SURVEY TIM	ES AND WEATH	HER/OTH	ER COI	NDITIONS THAT N	1AY AFFECT THI	SURVEY			
2d - Were there a	any difficulties in	surveying	the hed	dgerows? If so plea	ase describe.		YES	NO	
Difficulty(ies):		,					•		
3 - HEDGEROW	TYPE								
3a - Shrubby hed	lgerow X	3b - Line	of trees	3	Bc - Shrubby with	line of trees	6		
,					•		•		
4 - LENGTH (m)	- between nodes	or inters	ections	with other hedgero	ws, to nearest 5m	1			
					·			•	
5 - CONNECTION	NS - total numbe	r of other	hedger	ows connected to	End 1	End 2	Tot	al	
each end of the h			3 -						
						•			
6 - EXTENT OF S	SURVEY 68	a - Whole	hedaer	ow	6b - 30m	Section(s)	х		
-				- <u>-</u>		(1)			
WHOLE HEDGE	ROW OR 30m S	URVEY S	SECTIO	N (Sections 7-16)			•		
7 - ADJACENT L				(000					
. , , , , , , , , , , , , , , , , , , ,		Side	Side				Side	Side	
		A	В				A	В	
7a - Arable	Arable crop			7e - Road/Route	Major Road				
	Uncropped				Minor Road		Х		
	margin								
7b - Grass	Improved				Track (unsur	faced)			
	Semi-		X		Footpath				
	improved								
	Unimproved				Rail				
7c - Woodland	Young				Canal				
	Semi-mature			7f - Water	River				

Mature

7d - Other

Stream

Lake/pond

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	100		8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES							
Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B	

12 - HEDGEROW SHAPE – See also Part B section 19a						
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.			
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy			
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch			

13 - DIMENSIONS			
13a - Average Height (m)	4	13b - Average Width (m)	3
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	N

15 - ISOLATED HEDGEROW TREES – See also Part B section 21						
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.						
Species DBH (cm) DBH (cm)						
Field maple x 2	20					

16 – NOTES – Whole hedgerow or 30m survey section						
16a - Fauna (evidence of)						
16b - Features (including evidence of recent planting)						

30m SURVEY SECTION ONLY

17 - WOODY SPECIES IN 30m SU	IRVEY SECT	ION ON	LY - Add any others, including non-n	atives.	
Species	Shrubs % cover	Trees No.	Species	Shrubs % cover	Trees No.
Alder, common (Alnus glutinosa)	3070.		Plum, wild (Prunus domestica)		
Apple, crab (<i>Malus sylvestris</i>)			Poplar, black (<i>Populus nigra betulifolia</i>)		
Ash (Fraxinus excelsior)			Privet, wild (<i>Ligustrum vulgare</i>)		
Aspen (Populus tremula)			Rose, dog- (Rosa canina)		
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)		
Birch, downy (Betula pubescens)			Rose (Rosa sp.)		
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)		
Blackthorn (<i>Prunus spinosa</i>)	20		Spindle (Euonymus europaeus)		
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)		
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)		
Cherry, wild (<i>Prunus avium</i>)			Willow, grey (Salix cinerea)		
Dogwood (Cornus sanguinea)	10		Willow, goat (Salix caprea)		
Elder (Sambucus nigra)			Willow Crack		
Elm, English (<i>Ulmus procera</i>)					
Elm, wych (<i>Ulmus glabra</i>)					
Elm, (<i>Ulmus</i> sp.)					
Gorse (Ulex europaeus)					
Gorse, western (Ulex gallii)					
Guelder rose (Viburnum opulus)					
Hawthorn (<i>Crataegus</i> sp.)	20				
Hazel (Corylus avellana)	20				
Holly (<i>Ilex aquifolium</i>)	20				
Hornbeam (Carpinus betulus)					
Lime, large-leaved (Tilia platyphyllos)					
Lime, small-leaved (Tilia cordata)					
Maple, field (Acer campestre)	10		Bramble (Rubus fruticosus agg.)		
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)		
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	Х	
Pear (<i>Pyrus communis</i> sensu lato)			Traveller's-joy (Clematis vitalba)		
Pine, Scots (Pinus sylvestris)			% Gaps/access openings		
Woodland species		1			
Herb Robert					

Field Survey Form – H39									
Local Hedgerow Field Survey Form									
PART A - ESSEN	PART A - ESSENTIAL ASSESSMENTS (To be completed for all local hedgerow surveys)								
TITLE OF SURVEY: M4 Hedgerow regulation assessment									
Grid Ref									
		_							,
Date 2 0 1	0 2 0 1 5	Hedger	ow No						
Surveyor(s): Geo	rgia Kelly					Side S	urveyed - E	Both Y/N	N
2 - SURVEY TIM	ES AND WEA	THER/OT	HER CO	NDITIONS THAT	ГМА	AFFECT THE	SURVEY		
2d - Were there a	any difficulties	in surveyi	ng the he	dgerows? If so p	lease	describe.		YES	<u>NO</u>
Difficulty(ies):									
3 - HEDGEROW		T			T				
3a - Shrubby hed	lgerow X	3b - Lin	e of trees	S	3c -	Shrubby with	line of trees	3	
									1
4 - LENGTH (m)	- between nod	les or inte	rsections	with other hedge	erows,	to nearest 5m			
							ı		1
5 - CONNECTIO each end of the h		ber of oth	er hedger	rows connected	to	End 1	End 2	Tot	al
each end of the f	leagerow								
C EVIENT OF	CLIDVEV	Co Mho	ا ما ما ما		T _v	Ch 20m	Caption (a)		
6 - EXTENT OF	SURVEY	6a - Who	ie neager	OW	X	6b - 30m	Section(s)		
WHOLE HEDGE	DOW OD 20m	CLIDVE	CECTIO	N (Castions 7.1)	2)			<u>.</u>	
7 - ADJACENT L		ISURVET	SECTIO	on (Sections 7-1)	o)				
7 - ADJACENT L	AND USE	Side	Side					Side	Side
		A	B					A	B
7a - Arable	Arable crop			7e - Road/Rou	ıte	Major Road			
	Uncropped					Minor Road		Х	
	margin								
7b - Grass	Improved					Track (unsur	faced)		
	Semi-					Footpath			
	improved					Dell			
7- 10/	Unimproved					Rail			
7c - Woodland	Young			7f \\/\c+c=		Canal			
	Semi-mature	;		7f - Water		River			
	Mature					Stream		<u> </u>	

Lake/pond

Motorawy drainage basin X

7d - Other

8 - ASSOCIATED FEATURES – See also Part B section 18							
	Side A	Side B					
8a - Bank - Height (in metres) to nearest 25cm	50	50	8f - Ditch - internal - Dry (tick)				
8b - Average herb vegetation height (cm) to nearest 5cm			8g - Ditch - internal - Wet (tick)				
8c - Fence (tick)							
8d - Ditch - external - Dry (tick)							
8e - Ditch - external - Wet (tick)							

10 - NUTRIENT ENRICHMENT GROUND FLORA INDICATOR SPECIES								
Estimate % cove	Estimate % cover of each species within a 2m wide band alongside the hedgerow (to nearest 5%)							
10a - Nettles Side A Side B 10b - Cleavers Side A Side B 10c - Docks Side A Side B						Side B		
	Total Hottings Glad M. Glad B. Fols Glad VI. Glad B. Fols Beautiful Glad B.							

12 - HEDGEROW SHAPE – See also Part B section 19a							
What shape is the hedger	ow? - Circle diagram of cro	oss-section that most closely	resembles hedgerow.				
a) Trimmed & dense	b) Intensively managed	c) Untrimmed	d) Tall & leggy				
e) Untrimmed, with outgrowth	f) Recently coppiced (facing view)	g) Recently laid (facing view)	h) Other - Sketch				

13 - DIMENSIONS			
13a - Average Height (m)	15	13b - Average Width (m)	4
Excluding bank, to nearest 25cm		At the widest point of canopy; excluding bank, to	
		nearest 25cm	

14 - INTEGRITY - Continuity and height of canopy along hedgerow	
14a – Estimated % GAPS - percentage gaps	Y - gate

15 - ISOLATED HEDGEROW TREES – See also Part B section 21							
Use one row per specimen or one row and a number if there are many individuals of the same species in the same size class. Estimate DBH to nearest 5cm or nearest 1cm if DBH less than 5cm.							
Species DBH (cm) Species DBH (cm)							

16 – NOTES – Whole hedgerow or 30m survey section
16a - Fauna (evidence of)
Badger push-through and latrine
16b - Features (including evidence of recent planting)

30m SURVEY SECTION ONLY

17 - WOODY SPECIES IN 30m SURVEY SECTION ONLY – Add any others, including non-natives.							
Species	Shrubs	Trees	Species	Shrubs	Trees		
	%	No.		%	No.		
	cover			cover			
Alder, common (Alnus glutinosa)			Plum, wild (Prunus domestica)				
Apple, crab (Malus sylvestris)			Poplar, black (Populus nigra betulifolia)				
Ash (Fraxinus excelsior)			Privet, wild (Ligustrum vulgare)				
Aspen (Populus tremula)			Rose, dog- (Rosa canina)				
Beech (Fagus sylvatica)			Rose, field- (Rosa arvensis)				
Birch, downy (Betula pubescens)			Rose (Rosa sp.)				
Birch, silver (Betula pendula)			Rowan (Sorbus aucuparia)				
Blackthorn (Prunus spinosa)	10		Spindle (Euonymus europaeus)				
Broom (Cytisus scoparius)			Sycamore (Acer pseudoplatanus)				
Buckthorn (Rhamnus cathartica)			Wayfaring-tree (Viburnum lantana)				
Cherry, wild (Prunus avium)			Willow, grey (Salix cinerea)				
Dogwood (Cornus sanguinea)			Willow, goat (Salix caprea)				
Elder (Sambucus nigra)			Willow Crack				
Elm, English (Ulmus procera)							
Elm, wych (<i>Ulmus glabra</i>)							
Elm, (Ulmus sp.)							
Gorse (Ulex europaeus)							
Gorse, western (Ulex gallii)							
Guelder rose (Viburnum opulus)							
Hawthorn (Crataegus sp.)	40						
Hazel (Corylus avellana)	50						
Holly (Ilex aquifolium)							
Hornbeam (Carpinus betulus)							
Lime, large-leaved (Tilia platyphyllos)							
Lime, small-leaved (Tilia cordata)							
Maple, field (Acer campestre)	5		Bramble (<i>Rubus fruticosus</i> agg.)	30			
Oak, pedunculate (Quercus robur)			Honeysuckle (Lonicera periclymenum)				
Oak, sessile (Quercus petraea)			Ivy (Hedera helix)	20			
Pear (Pyrus communis sensu lato)			Traveller's-joy (Clematis vitalba)				
Pine, Scots (Pinus sylvestris)			% Gaps/access openings				
Woodland species							
Herb Robert							
Lords-and-ladies							
Hairy brome							

Hedgerow Survey Report 2015

Annex C: Photographs of Hedgerows



H1 (1)



H1 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





Н3

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H5 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H5 (2)



H6 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By: Date: 10/2015



H6 (2)



H7

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



Н8



H9 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H9 (2)

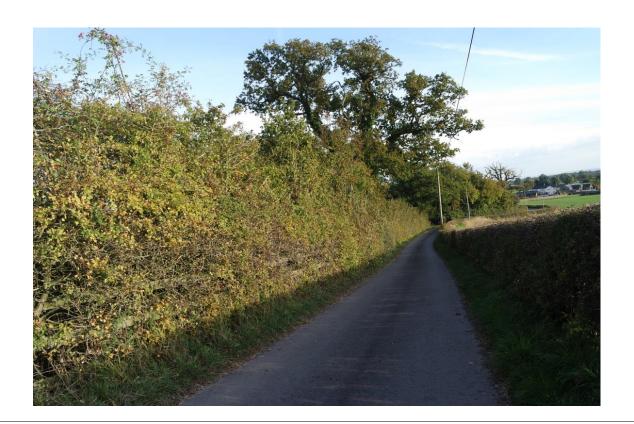


H9 (3)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H10 (1)



H10 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By: Date: 10/2015



H10 (3)



H11 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H11 (2)



H11 (3)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H13

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H15 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H15 (2)



H15 (3)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H16 (1)



H16 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H17 (1)



H17 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H17 (3)



H18 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H18 (2)



H18 (3)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H19 (1)



H19 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H19 (3)



H20

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H22 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H22 (2)



H23

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H25

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H27

Project: M4CaN

Job Ref: JER6591 Checked By:





H29

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H30 (1)



H30 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H33 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H33 (2)



H34

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H36 (1)

Client: vveish Governmen	Client:	Welsh Government
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Project: M4CaN

Job Ref: JER6591 Checked By:



H36 (2)



H37

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H38 (1)



H38 (2)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H40

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:





H42 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H42 (2)



H43 (1)

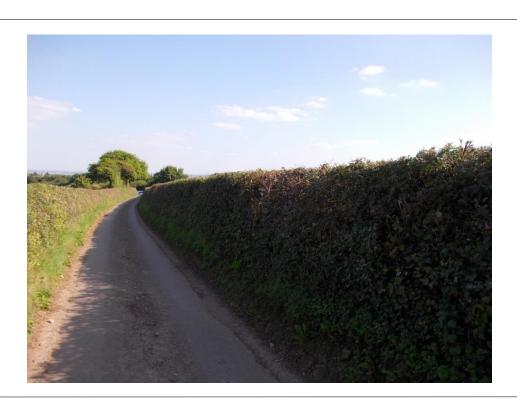
Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H43 (2)



H44 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H44 (2)



H45 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H45 (2)



H46 (1)

Client:	Welsh Government
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Project: M4CaN

Job Ref: JER6591 Checked By:



H46 (2)



H47 (1)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



H47 (2)



H47 (3)

Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By:



Client: Welsh Government

Project: M4CaN

Job Ref: JER6591 Checked By: Date: 10/2015

Annex D: Summary of Isolated Trees in Hedgerows

Summary of isolated trees within hedgerows classified as 'Important' under the Hedgerow Regulations

'Important' hedgerow	Species present	Diameter (m)
	Coppiced grey willow Salix cinerea x 2	0.30
H6	Pedunculate oak Quercus robur	0.40
	Hazel Corylus avellana x 10	0.20
H7	Ash Fraxinus excelsior	0.20
	Pedunculate oak	1.25
H8	Ash	0.30
H10	Pedunculate oak	0.50
	Ash	0.40
1144	Ash	0.50
H11	Pedunculate oak	0.40
	Alder Alnus glutinosa	0.50
	Lombardy poplar Populus nigra	0.50
H12	Lombardy poplar	0.40
	Lombardy poplar	0.40
	Pedunculate oak	1.00
H13	Pedunculate oak Quercus	0.50
	Pedunculate oak	1.50
H14	Pedunculate oak Pedunculate oak	0.50
	r cudificulate oak	0.50
	Ash	0.50
	Pedunculate oak	0.20
H15	Ash x 2	0.30
	Pedunculate oak	0.50
	Ash x 3	0.30
H21	Elm <i>Ulmus</i> sp. x 2	0.20
	Ash	0.20
H27	Field maple Acer campestre x 2	
	Ash	0.50
	Pedunculate oak	0.30 0.30
H30	Pedunculate oak	0.30
	Pedunculate oak	0.30
	Pedunculate oak	0.50
1104	Pedunculate oak	0.50
H31	Pedunculate oak	0.70
	Pedunculate oak	0.70
H32	Sessile oak	0.30
	Assemblage of saplings and young hazel,	
H35	field maple, pedunculate oak, ash and	0.05-0.15
1.00	grey willow trees	0.00 0.10
Ц40	Assemblage of saplings and young hazel,	0.05.0.40
H40	field maple and plum Prunus sp. trees	0.05-0.10

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'Important' hedgerow	Species present	Diameter (m)
H43	Coppiced hazel Dense holly <i>Ilex aquifolium</i> bush covered in ivy	0.20 0.15

Summary of isolated trees within hedgerows not classified as 'Important' under the Hedgerow Regulations

Hedgerow not classified as 'Important'	Species present	Diameter (m)
H20	Hawthorn Crataegus monogyna	0.20
H18	Hawthorn Hazel Alder Crack willow Salix fragilis x 5	0.30 0.30 0.30 0.10-0.20
H19	Hazel x 3 Crack willow x 4	0.10 0.10-0.20
H17	Ash ~20 Sycamore	0.20-0.30 0.30
H16	Pedunculate oak Hawthorn x 2	0.40 0.40
H9	Pedunculate oak	0.10