



A435 Cycleway Section 2

Advance Works Document

Series 3000

Landscape and Ecology

Gloucestershire County Council Commissioning – Highways

A435 Cycleway Section 2

Advance Works Document – Series 3000 – Landscape and Ecology

February 2024

Contents Amendment Record

Doc Ref: A435C-ATK-EGN-S2-CD-ZL-003000

This document has been issued and amended as follows:

Issue	Revision	Description	Date	Signed
01	C01	For Information	23.01.24	C. Johnson
02	C02	For Construction	15.02.24	C. Johnson

REGISTER OF AMENDMENTS

REV No.	STATUS	DESCRIPTION OF ISSUE/AMENDMENTS	ORIGINATOR	CHECKER	APPROVED	DATE
02	C02	Amendments to Clauses 3006.3, 3009.1 & 3012.2, as per guidance from Cheltenham Borough Council	JS	PT	CJ	15/02/24

APPENDIX 30/1 LANDSCAPING: GENERAL

Action Number	Sub-Clause Reference	Specification Amendment
1	3001.2	<p>The Contractor shall give at least 48 hours' notice of all items in sub-clause 3001.2 and 2 weeks notice of any work within the vicinity of the following protected features:</p> <ul style="list-style-type: none"> a) Any vegetation clearance within the recognised bird nesting season (as noted below) b) Any hedges or trees (including their root protection zones) within or adjacent to the site not currently identified for work/removal. <p>Works to trees noted above require the Contractor to use a precautionary working method, produced by an ecologist, prior to any vegetation clearance.</p> <p>Please also refer to APPENDIX 30/12 SPECIAL ECOLOGICAL MEASURES for further details of precautionary working methods to protect bats and their habitats.</p> <p>All arisings are to be recycled or otherwise disposed of off site in a suitable environmentally responsible manner.</p>
2	3001.13	Pesticides records forms as provided below, detailing information as required shall be submitted after every application.
3	3001.14	The bird nesting period for this Agreement shall be from 1 st March to 31 st August, unless otherwise agreed in writing with the project manager.
4	3001.15	<p>Inspection reports on a form as detailed in this Appendix 30/1 shall be submitted relating to planting works, fencing and weed control at the following intervals:</p> <p>(a) Once a year during the maintenance period to be submitted after the defective planting inspections in August / September but before replanting commences in November and December.</p>

LANDSCAPE WORKS - PESTICIDES RECORD		
Date of visit: ../ ../ .. (minimum one record / day)		
Contract Name:		
Name of Company:		Company's telephone no:
Operations carried out	Pesticide used	Locations of Operations
Total weed control		
Weed control in any waterbody		
Selective herbicide to areas of grass		
Herbicide to cultivated plant beds		
Total herbicide around individual plants in grass		
Other (state purpose)		
Names of operatives on site: Qualifications of operatives named:		
Supervisor		
Storeman (BASIS)		
Application by		
Signed (for Company)		
Company's observations on damage by others or any incidents: 		

LANDSCAPE WORKS - INSPECTION REPORT	
Date of visit: .. / .. / .. (minimum one record / day)	
Name of Company/Contractor:	Company/Contractor's telephone no:
Operations carried out	Locations of Operations
Names of operatives on site:	
..... Company observations on damage by others, additional work required or general condition of the works:	
..... Observations of Local Authority Officers on standard of workmanship, additional work required or general condition of the works:	
..... This maintenance visit has been satisfactorily completed. SIGNED (for Company) NAME: DATE: .. / .. / .. SIGNED (for Company)..... NAME:..... DATE: .. / .. / ..	

APPENDIX 30/2 WEED CONTROL

Action Number	Sub-Clause	Specification Amendment
1	3002.1	Where effective weed control shall be possible and practicable by other means there shall be a presumption against the use of chemical herbicides. In all locations, weed control for all injurious weed species where identified, including those listed in sub-Clause 3002.1 with the addition of Oil Seed Rape, Rosebay Willow herb and Marestail, shall be carried out twice annually until the end of the first 60 months of maintenance period enough to restrict their growth and spread.
2	3002.4	Total weed control by non-residual herbicide shall be applied in accordance with manufacturer's instructions to the following locations: (i) All new planting beds prior to planting to be in a weed free condition. (ii) All stockpiles of topsoil shall be maintained in a weed free condition
3	3002.6	Where hand weeding is not feasible, selective control of broadleaved weeds using herbicides in planting and grass areas shall be carried out 3 times per year in March, April and June. Note: no application of selective herbicide to grassed areas until 4 months after sowing
4	3002.7	Hand weeding, or selective herbicide spot treatment if absolutely necessary, of broadleaved weeds shall be carried out areas min 3 times per year at times directed by the Project manager.
5	3002.8	Hand weeding shall be used for the control of weeds twice per year at the direction of the Project manager in all areas as a preference and particularly where spray herbicide cannot be applied without damaging the vegetation to be retained. Hand weeding of <i>Senecio jacobaea</i> (Ragwort) shall be carried out when the plants are actively growing but still at rosette stage from mid-April to the end of May.
6	3002.9	Where present, Japanese knotweed over 1.5m tall before September shall be cut down prior to spraying of regrowth. Disposal must take place in a disposal site registered by the Environment Agency. Refer also to sub-clauses 3012.23 – 3012.27
7	3002.10	All arisings from weeding operations are to be removed from site and disposed of in accordance with Environment Agency regulations

APPENDIX 30/4 GROUND PREPARATION

Action Number	Sub-Clause	Specification Amendment
1	3004.1	Not required
2	3004.2	All areas which shall be planted shall be treated with translocated herbicide between 21 and 25 days prior to planting in accordance with sub-clause 3002.4.
3	3004.7	The requirements of sub clauses 3004.8-11 shall apply.

APPENDIX 30/5 GRASS SEEDING

Action Number	Sub-Clause	Specification Amendment
		NOT REQUIRED FOR ADVANCED WORKS

APPENDIX 30/6 PLANTING

Action Number	Sub-Clause	Specification Amendment																					
1	3006.3	<p>All plants to comply with the standards set out in Sub-Clause 3006.3</p> <p>Species Rich Hedge:</p> <table> <tr> <td>Acer campestre</td> <td>Field maple</td> <td>10%</td> </tr> <tr> <td>Carpinus betulus</td> <td>Hornbeam</td> <td>10%</td> </tr> <tr> <td>Cornus sanguinea</td> <td>Dogwood</td> <td>10%</td> </tr> <tr> <td>Corylus avellana</td> <td>Hazel</td> <td>10%</td> </tr> <tr> <td>Crataegus monogyna</td> <td>Hawthorn</td> <td>40%</td> </tr> <tr> <td>Lonicera periclymenum</td> <td>Honeysuckle</td> <td>10%</td> </tr> <tr> <td>Prunus Avium</td> <td>Wild Cherry</td> <td>10%</td> </tr> </table> <p>All plants to be 1+1, 90 – 120cm, BR planted in triple staggered row 450mm apart at 5/lin m. Avoid block planting of single species, ensure species are planted in a mixture within the hedgerow.</p>	Acer campestre	Field maple	10%	Carpinus betulus	Hornbeam	10%	Cornus sanguinea	Dogwood	10%	Corylus avellana	Hazel	10%	Crataegus monogyna	Hawthorn	40%	Lonicera periclymenum	Honeysuckle	10%	Prunus Avium	Wild Cherry	10%
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Prunus Avium	Wild Cherry	10%																					
2	3006.6	All stock shall be of UK provenance unless otherwise agreed with the Project manager. Where possible stock shall be sourced from Forestry Commission Zone 40.																					
3	3006.10	All labels, canes and ties shall be retained for 12months.																					
4	3006.17	The planting season for bare-root, root-balled or cell-grown plant shall be November to March inclusive unless otherwise advised by the Project manager																					
5	3006.23	Notch planting of small bareroot stock, ie, transplants or whips, or cell-grown plants in areas of uncompacted soils can be undertaken by the any of the methods indicated that are suitable to the location. Plants should not be planted any deeper than nursery mark.																					
6	3006.24	Clause to apply																					
7	3006.28	Clause to apply																					
8	3006.29	Required to all planting areas.																					
9	3006.30	Required to all hedgelines.																					
10	3006.33	Water in to field capacity in accordance with Landscape Institute Technical Bulletin: Watering Restrictions and Watering Specifications (May 1996) where conditions are dry																					
11	3006.37	Adjustable tree ties, strapping or spacers shall be made from environmentally friendly material.																					
12	3006.38	Not required for advanced works																					
13	3006.49	Required to all plants. Water into field capacity in accordance with Landscape Institute Technical Bulletin: Watering Restrictions and Watering Specifications (May 1996) on day of planting.																					
14	3006.51	Mowing stakes are not required.																					
15	3006.52	Protective tubes are to be fully biodegradable.																					
16	3006.55	Not required for advanced works																					
17	3006.58	Mulch mats to hedges to be biodegradable hessian																					
18	3006.59	Mulch mats to be secured via (ii) burying 100mm strip vertically into ground																					
	3006.87	The Contractor shall replace any plants found to be defective during the defects liability period as defined by the Contract and at the end of each growing season during the maintenance period as defined by the Contract in accordance with sub-Clauses 3006.87-90																					
	3006.91	All plant stations during establishment of planting to ensure that sufficient water is applied to maintain healthy growth and in accordance with landscape Institute Technical Bulletin: Watering Restrictions and Watering Specifications (May 1996) where directed by and to the satisfaction of the Project manager.																					
	3006.92	As defined by the Contract maintenance period.																					

APPENDIX 30/7 GRASS, BULBS AND WILDFLOWER MAINTENANCE

Action Number	Sub-Clause	Specification Amendment
		NOT REQUIRED FOR ADVANCED WORKS

APPENDIX 30/8 WATERING

Action Number	Sub-Clause	Specification Amendment
1	3008.6	The Contractor shall water all planting for the duration of the Contract, Liability Period and Aftercare Period as stated in the Contract.
2	3008.7	Additional watering in accordance with sub-Clause 3008.7 may be required for all planting in periods of abnormally dry conditions as instructed by the Project manager.

APPENDIX 30/9 ESTABLISHMENT MAINTENANCE FOR PLANTING

Action Number	Sub-Clause	Specification Amendment
1	3009.1	Plants and planting areas shall be maintained in accordance with this Clause in all new planting areas up to completion of planting works and for the duration of the liability and maintenance period stated in the Contract. This Contract shall follow the standard GCC plan of a minimum of one visit per month during spring and summer and have an establishment period over 3 years, topping up mulch, watering and any pruning if necessary.
2	3009.4	Stakes, tubes, guards and ties shall be removed from plants where they are no longer required and responsibly disposed of off Site, ideally for reuse by others if possible.
3	3009.10	All planting areas: hand weeding as required
4	3009.11	Residual herbicide to be used only after agreement with the Project manager if non-residual is deemed ineffective.
5	3009.13	Mulch mats to be inspected and replaced/re-laid as per clause
6	3009.20	Weed control to hedge is required

APPENDIX 30/10 MAINTENANCE OF ESTABLISHED TREES AND SHRUBS

Action Number	Sub-Clause	Specification Amendment
1	3010.1	Plants and planting areas within the site shall be maintained in accordance with this Clause for the duration of the liability and maintenance period stated in the Contract.
2	3010.2	Weed control by hand.

APPENDIX 30/12 SPECIAL ECOLOGICAL MEASURES

Action Number	Sub-Clause	Specification Amendment
1	3012.1	Not required
2	3012.2	<p>Please refer to Bat Survey A435CS2-ATK-HGN-S2-RP-LE-000001 and Hedgerow survey \A435CS2-ATK-EBD-S2-RP-LE-000001.</p> <p>The special ecological measures works shall be carried out during the following times/ seasons:</p> <p>Bats Trees to be removed should be subject to a pre-works check by a suitably experienced ecologist immediately prior to removal. Providing no evidence of bat identified, tree can be felled. If bat evidence identified, licence from Natural England will be required prior to removal of tree. Where trees have been retained but have been identified as having features with suitability to support bat roosts, consideration will be given as to whether works could be carried out between the end of March to the start of May, or during September and October to avoid the key sensitive periods. Where this is not possible, a pre-works check of each tree with potential suitability will be needed immediately prior to construction to confirm absence of bat roost(s). Works to avoid night-time working (taken to be 30 minutes before sunset to 30 minutes after sunrise) to avoid disturbance to nocturnal species.</p> <p>Nesting birds Trees and hedgerows to be removed outside of the core season for nesting birds, taken to be between March and August inclusive. If this cannot be achieved, works within the core nesting bird season will require an inspection by a suitably qualified ecologist no more than 24 hrs prior to removal.</p> <p>Hazel dormouse, reptiles and badgers Trees, hedgerows, tussocky grassland and field margins to be will require an inspection by a suitably qualified ecologist no more than 24 hrs prior to works/ vegetation removal. Hibernation piles (reptiles) potentially present within the site should not be disturbed during the hibernation period (taken to be between November and February inclusive). If badgers or hazel dormouse are identified, advice to be sought from ecologist and licence from Natural England may be required.</p> <p>Otter and water vole Where works within 50 m of the Hyde Brook, a pre-works inspection to be undertaken by a suitably experienced ecologist to check for any evidence of otter or water vole before works proceed. Works to avoid night-time working (taken to be 30 minutes before sunset to 30 minutes after sunrise) to avoid disturbance to nocturnal species. If otter or water vole are identified, advice to be sought from ecologist and licence from Natural England may be required.</p> <p>If any protected habitats, species or features of ecological importance are found work is to stop until advice from an ecologist is sought.</p>
3	3012.3	N/A
4	3012.4	N/A
5	3012.5	All existing culverts to be maintained/inspected.
6	3012.6	N/A

Action Number	Sub-Clause	Specification Amendment
7	3012.7	N/A
8	3012.8	2 no. bat boxes to be installed on retained mature trees across the Site. Based on species confirmed as being present within the Site, suitable units include 2F Schwegler Bat Box and 2FN Schwegler bat box, or similar. Boxes should be positioned where they are sheltered from wind and artificial lighting, and within close proximity to suitable commuting and foraging habitat.
9	3012.9	N/A
10	3012.11	Locations and description of other habitat creation measures to be inspected: Where possible arisings from vegetation clearance may be used to create hibernacula piles which may be used by reptiles.