



Bovis Homes Ltd

Uplands Mill, Biddulph

LANDSCAPE MAINTENENCE SPECIFICATION

January 2011

Q35 LANDSCAPE MAINTENANCE

This specification is to be read in conjunction with the document '*Report to partially discharge conditions 4 & 21 of SMDC planning approval ref.: 09/01018/OMAJEL*' and with '*Uplands Mill, Biddulph Ecological and Landscape Management Plan*' and supporting drawings Figures 4 and 5; the Ecology and Landscape Management Plans for the site.

The Management Plan provides detail of the proposed habitat creation, retention and enhancement of all habitats within the site to maximise the nature conservation value of the area. This specification provides details for the maintenance phase of both the retained and proposed habitats within areas outside of the residential development area.

To be read also with Specification Notes provided in drawing No. '*Bidd-03-101*'.

GENERALLY**105 MAINTENANCE OBJECTIVES**

- Location: Upland Mill site, Biddulph
- Duration: 20 years
- Aims: To ensure the habitats retained and created reach and maintain their maximum value to nature conservation
- Results: to maintain and enhance the nature conservation value of the retained habitats whilst ensuring created habitats complement those existing

110 NOTICE

- Give notice before:
 - Application of herbicide.
 - Application of fertilizer.
 - Watering.
 - Each site maintenance visit.
- Period of notice: 5 days

130 REINSTATEMENT

- Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstate to original condition.

175 DISPOSAL OF ARISING

- General: Unless specified otherwise, remove and dispose of at a designated compost site.
- Grass cuttings: leave for approximately 48 hours after cutting then remove to dispose of at a designated compost site.
- Shrub prunings: remove for disposal as above.
- Tree prunings: Stack removed wood as habitat piles in surrounding woodland and grassland. Remove all other arisings for disposal as above.
- Flush / Aquatic Vegetation: leave arisings for 48 hours and then remove for disposal as above

180 CHIPPING OR SHREDDING

- General: Not permitted on site.

181 MECHANICAL EQUIPMENT

- General: Minimize.

190 LITTER

- Extraneous rubbish not arising from the contract work: Collect and remove from site.
- Undertake a litter pick on a monthly basis

195 PROTECTION OF EXISTING GRASS

- General: Protect areas affected by maintenance operations using boards/ tarpaulins. Do not place excavated or imported materials directly on grass.

197 CLEANLINESS

- Soil and arisings: Remove from hard surfaces.
- General: Leave the works in a clean, tidy condition at completion and after any maintenance operations.

GRASSED AREAS**ALL GRASSED AREAS****210 MAINTENANCE OF GRASSED AREAS**

- General: Maintain turf in a manner appropriate to the intended use.
- Soil and grass:
 - Condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - Waterlogging and compaction: Prevent.
 - Damage: Repair trampling, abrasion or scalping.

220 GRASS CUTTING GENERALLY

- Before mowing: Remove litter, rubbish and debris.
- Finish: Neat and even, without surface rutting, compaction or damage to grass.
- Edges: Leave neat and well defined. Neatly trim around obstructions.
- Adjoining hard areas: Sweep clear and remove arisings.
- Drought or wet conditions: Obtain instructions.

226 TREE STEMS

- Precautions: Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree.
- Operations close to stems: Complete using hand tools.

235 BULBS AND CORMS IN GRASSED AREAS

- Before flowering: Do not cut.
- Interval between end of flowering and start of grass cutting (minimum): 4 weeks or as agreed

AMENITY GRASSLAND AREAS**256 MOWING AMENITY AREAS: TURF**

- Grass height: Cut to 50mm; mowing regime to be agreed with supervising manager on site.
- Arisings: Remove after mowing to a designated compost site

257 MOWING AMENITY AREAS: SEEDED

- First cut: when sward reaches 100mm cut to 50mm
- Grass height Year 1: cut to 50mm 2-3 times between March and November
- Grass height Year 2 onwards: cut to 50mm. Mowing regime to be agreed with supervising manager on site.
- Arisings: Remove arisings 48 hours after mowing to a designated area within the site to provide breeding and hibernacula habitat (location to be agreed with supervising Ecologist)

258 EDGES TO SEEDED AMENITY AREAS

- Location: Along path edges and around newly planted trees.
- Timing: After seeded areas are well established.
- Edges: Cut to clean straight lines or smooth curves. Draw back soil to permit edging.
- Arisings: Remove.

WILDFLOWER MEADOW GRASSLAND AREAS**276 MAINTENANCE OF WILDFLOWER MEADOW AREAS:**

- Preparation: Before each cut remove all litter and debris.
- Height and frequency of cut in first growing season:
 - Time of first cut: once grassland reaches a height of 100mm
 - Height of first cut: cut to 50mm
 - Frequency of subsequent cutting (minimum): 2-3 times in first year
- Height and frequency of cut in second growing season: Twice annually where grassland is established. Mowing regime to be agreed with supervising ecologist.
 - Time of cut: Spring and late summer
 - Height of cut: 50mm
- Arisings: Remove arisings 48 hours after mowing to a designated area within the site to provide breeding and hibernacula habitat (location to be agreed with supervising Ecologist)

277 MOWN VERGE

- Location: Where footpaths cross areas of MG5 grassland a verge is to maintained parallel to the footpath on both sides (or one side if applicable)
- Width (approximate): 1.0m verge both sides
- Operations: 15 cuts annually between March and November to 50mm height
- Arisings: Remove 48 hours after mowing to a designated compost site.

278 GRASSLAND MARGINS

- Location: Where areas of MG5 grassland sit adjacent to woodland, hedgerows and tree bases
- Width (approximate): 1.0m margin to all woodland, hedgerows and trees
- Operations: Do not mow. Hand pull, cut, and/or spot treat saplings, invasive species or unwanted herbaceous growth 3 times annually
- Arisings: remove and dispose of at a designated compost site.

340 SPOT WEEDKILLING IN WILDFLOWER MEADOW GRASS AREAS

- Herbicide: Glyphosate based.
- Operations: Spot treat invasive weeds and ruderal vegetation in areas of open grassland to control spread of such species; as directed by supervising ecologist.

SHRUBS/ TREES/ HEDGES**500 ESTABLISHMENT OF NEW PLANTING**

- Duration: 5 years
- Weed control:
 - Method: Keep tree and hedgerow planting clear of weeds by use of suitable herbicides
 - Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.

510 TREE STAKES AND TIES

- Inspection/ Maintenance times: Annually and after major storms
- Stakes:
 - Replace loose, broken or decayed stakes to original specification.
 - If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
- Ties: Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
 - Where chafing has occurred, reposition or replace ties to prevent further chafing.
- Removal of stakes and ties: In year 5
 - Fill stake holes with lightly compacted soil.

520 REFIRMING OF TREES AND SHRUBS

- Timing: After strong winds, frost heave and other disturbances.
- Refirming: Tread around the base until firmly bedded.
- Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and re-firm.

525 TREE GUARDS

- Loose or defective guards: Adjust, refix or replace to original specification and to prevent chafing.

540 PRUNING GENERALLY

- Pruning: In accordance with good horticultural and arboricultural practice.
 - Removing branches: Do not damage or tear the stem or bark.
 - Wounds: Keep as small as possible and cut cleanly back to sound wood.
 - Cutting: Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
 - Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
- Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- Disease or infection: Give notice if detected.
- Growth retardants, fungicide or pruning sealant: Do not use unless instructed.

570 FORMATIVE PRUNING OF YOUNG TREES

- Standard: Type and timing of pruning operations to suit the plant species.
- Time of year: Do not prune during the late winter/ early spring sap flow period.
- Young trees up to 4 m high:
 - Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well balanced head and ensure the development of a single strong leader.
 - Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.

612 TRIMMING ESTABLISHED HEDGES

- Time of Year: October to February
- Operations:
 - Form: Trim to specified height and profile using suitable mechanical cutters.
 - Trim: Only one half of each of the hedgerows should be cut each year

620 REMOVAL OF DEAD PLANT MATERIAL

- Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems. Dead wood to be retained in situ adjacent to trees or in open space nearby as a habitat pile.

630 DEAD AND DISEASED PLANTS

- Removal: Remove any dead, dying or diseased trees or plants
- Replacement: Replace in all cases for the first 5 years.

641 THINNING OF WOODLAND TG21 BY REMOVAL OF SURPLUS PLANTS

- Trees to be thinned: remove the poorest specimens; as instructed by supervising arboriculturalist or tree surgeon
- Timing: September to November
- Roots:
 - Disturbance to adjacent plants: Minimise.
 - Soil: Refill holes with topsoil to leave an even graded surface.
 - Adjacent plants: Make good any minor damage immediately.
- Plants for retention: Select plants with a strong healthy habit.
- Mature planting density: Replace removed specimens with new trees with species like for like

651 HAND WEEDING OF SAPLINGS

- Location: Where saplings from the Broadleaved and Mixed Woodland habitats encroach upon grassland areas or neighbouring habitats.
- Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
- Completion: Rake area to a neat, clean condition.

655 WEED CUTTING BY HAND OR MACHINE

- Undesirable grass, invasive alien species brambles and herbaceous growth, plus scrub or shrub saplings not pulled by hand: Cut/trim down cleanly to ground level.
 - Timing: Three times annually for the first five years.
- Herbicides: Glyphosate spot treatment on scrub sapling stumps after cutting, or ten days prior to strimming where applicable

657 HERBICIDE TO KILL REGROWTH

- Type: Glyphosate based.

- Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

710 WOODLAND PLANTING MAINTENANCE

- Watering: In exceptional circumstances to prevent plants dying.
- Loose plants: Refirm surrounding soil, without compacting.
- Vegetation: Except trees and coppice shoots to be retained, cut down to ground level within the plantation area.
 - Arisings: Leave between rows.
- Ditches and drains: Keep clear.

715 WOODLAND THINNING

- Mature planting density: As advised by supervising ecologist or arboriculturalist
- Timing: Undertaken as necessary after the second five-year management period

TREE WORK

810 TREE WORK GENERALLY

- Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
- Protection: Avoid damage to neighbouring trees, plants and property
- Standards: To BS 3998 and Health Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- Removing branches: Cut as Arboricultural Association Leaflet 'Mature tree management'. Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
- Appearance: Leave trees with a well balanced natural appearance.
- Chain saw work: Operatives must hold a Certificate of Competence.
- Tree work: To be carried out by an approved member of the Arboricultural Association.

815 ADDITIONAL WORK

- Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.
- Stack removed wood following tree pruning in grassland as habitat piles.

820 PREVENTION OF WOUND BLEEDING

- Standard: To BS 3998, clause 8.

825 PREVENTION OF DISEASE TRANSMISSION

- Standard: To BS 3998, clause 9 and Appendix B.

830 CLEANING OUT AND DEADWOODING

- Remove:
 - Dead, dying, or diseased wood, broken branches and stubs.
 - Fungal growths and fruiting bodies.
 - Rubbish, wind blown or accumulated in branch forks.
 - Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
 - Other unwanted objects, e.g. tree houses, swings.
 - Climbing plants: Remove ivy from any affected trees (most notably TG19)

835 CUTTING AND PRUNING GENERALLY

- Tools: Appropriate, well maintained and sharp.

- Final pruning cuts:
 - Chainsaws: Do not use on branches of less than 50 mm diameter.
 - Hand saws: Form a smooth cut surface.
 - Anvil type secateurs: Do not use.
- Removing branches: Do not damage or tear the stem.
- Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
- Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
- Large branches:
 - Remove in small sections and lower to ground with ropes and slings.
- Dead branches and stubs: When removing, do not cut into live wood.
- Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
- Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

845 CROWN LIFTING

- Clearances: Remove branch systems to give clearance where adjacent to roads and footpaths/footways
 - Height: 2.5m above footpaths
- Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

860 REMOVING TREES, SHRUBS AND HEDGES

- Standards: To BS 3998, Appendix A and Health Safety Executive (HSE)/ Arboricultural and Forestry Advisory Group Safety Leaflets.
- Existing services: Check for below and above ground services. Give notice if they may be affected.
- Shrubs and smaller trees: Cut down and grub up roots.
- Tree stumps:
 - Removal by winching: Give notice. Do not use other trees as supports or anchors.
- Work near retained trees: Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.
- Filling holes:
 - Material: Use as-dug material and/ or imported soil as required.
 - Finishing: Consolidate and grade to marry in with surrounding ground level.

865 BARK DAMAGE

- Wounds:
 - Do not attempt to stop sap bleeding.
 - Bark: Remove ragged edges using a sharp knife.
 - Wood: Remove splintered wood from deep wounds.
 - Size: Keep wounds as small as possible.
- Liquid or flux oozing from apparently healthy bark: Give notice.

870 CAVITIES IN TREES

- Investigation: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
- Water filled cavities: Do not drain.
- Sound wood inside cavities: Do not remove.

TREE AND SHRUB REPLACEMENTS

This section provides information on the specification of trees and shrubs only where planted as replacements for specimens removed as a result of disease or death. Please refer to the original specification for Uplands Mill for full details for External Planting (Dwg. No. Bidd-03-101).

871 SOIL CONDITIONS

- Soil for cultivating and planting: Moist, friable and (excepting aquatic/ marginal planting) not waterlogged.
- Frozen or snow covered soil: Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.

872 CLIMATIC CONDITIONS

- General: Carry out the work while soil and weather conditions are suitable.
- Strong winds: Do not plant.

873 TIMES OF YEAR FOR PLANTING

- Deciduous trees and shrubs: November to late March.
- Container grown plants: At any time if ground and weather conditions are favourable.
- Watering and weed control: Provide as necessary.

874 MECHANICAL TOOLS

- Restrictions: Do not use within 100 mm of tree and plant stems.

875 HEDGEROW PLANTS - GENERAL

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants: Bottom worked.
- Root system and condition: Balanced with branch system.
 - Standard: The National Plant specification
- Species: True to name.
- Origin/ Provenance: Local provenance
 - Definition: Origin and Provenance have the meaning given in the National Plant Specification.

876 TREES - GENERAL

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants: Bottom worked.
- Root system and condition: Balanced with branch system.
 - Standard: The National Plant specification
- Species: True to name.
- Origin/ Provenance: British origin
 - Definition: Origin and Provenance have the meaning given in the National Plant Specification.

877 PLANTS/ TREES - SPECIFICATION CRITERIA

- Name, forms, dimensions, provenance and other criteria: As scheduled and defined in the National Plant Specification.
- 878 PLANT/ TREE SUBSTITUTION
- Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering: Submit alternatives, stating:
 - Price.
 - Difference from specified plants/ trees.
 - Approval: Obtain before making any substitution.
- 879 HEDGEROW PLANT LAYOUT:
- Size: 60-90cm Hedgerow whips
 - Spacing: 6 per linear metre, double-staggered rows
 - Grouping: As per Specification Notes (Dwg. No. Bidd-03-101).
- 880 NATURALIZED HEDGES
- Planting: In root pits large enough to take full spread of roots. Set out plants evenly.
 - Base of the pit will be broken sufficiently to allow root penetration.
- 881 AFTER PLANTING
- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
 - Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
- 883 TREE PITS
- Sizes: break up soil to a depth of 1 metre.
 - Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
 - Pit bottoms: With slightly raised centre.
 - Pit sides: Scarify.
 - Backfilling material: As per Specification Notes (Dwg. No. Bidd-03-101).
- 884 STANDARD TREES
- Standard: Prepare roots and transplant to BS 4043.
 - Backfilling material: As per Specification Notes (Dwg. No. Bidd-03-101).
 - Support: Single stake and tie. Tie to have a spacing device positioned 25mm maximum from top of stake
- 885 STANDARD TREE STAKING GENERALLY
- Stakes: 1.6m chesnut stake 600mm above ground and 1000mm below ground
 - Preservative treatment: standard
 - Nails: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
- 886 WOODLAND TREE PROTECTION
- Type: spiral tree guards
 - Support: Internal Bamboo cane
 - General: Ensure that protection methods do not impede natural movement of trees or restrict growth

WET FLUSH AREAS

895 CLEARANCE OF FLUSH AREAS

- Clearance: Remove litter and debris, and strim vegetation
- Frequency: Once annually
- Time of year: September
- Arisings: leave for 48 hours before removal to designated composting area.