



Ainsley Gommon
ainsley.gommon@virgin.net www.ainsleygommonarchitects.co.uk
architecture : urban design

**Glan Gors,
Wrexham.**
for
Pennaf

Landscape Specification

SECTION ONE : PLANTING REQUIREMENTS

GENERAL DESCRIPTION OF WORKS AND REQUIREMENTS

1.01 Ordering and Delivery of Materials

In order to avoid any delays caused by the non-delivery of materials, the Contractor must place an order immediately instructions have been received by him/her to proceed with the work, and any delay in delivery of materials will not, therefore, be accepted as an excuse for delays in the programme. Every effort shall be made by the Contractor to obtain all materials as quickly as possible.

1.02 Ground Works

All ground works should comply with the latest British Standard recommendations, and will be carried out by the Principal Contractor.

1.03 Levels and Setting Out

The Principal Contractor shall accurately perform all setting out and provide all implements as may be necessary for this purpose. He/she shall check all dimensions of the site against those shown on the drawings and in the event of any discrepancies shall inform the Designer in writing, and obtain instructions before proceeding. He/she shall inform the Client when overall setting out is complete and before commencing excavations. Should any error occur in the setting out of the site, it is to be corrected to the satisfaction of the Designer at no extra cost to the Client.

1.04 Site Clearance

Site clearance shall include removal of all roots, rubbish, large stones, concrete, brickwork, weeds, debris, or other unwanted material from the site to an authorised tip.

NOTE: Japanese Knotweed (*Polygonum cuspidatum*) : is a rhizomatous perennial, 2-3m high, bamboo like stems, arching branches, leaf is broadly oval and pointed at the tip, with clusters of creamy white flowers late in the season.

Early identification of a contaminated area is essential. Please notify the client if you suspect that this plant is growing in the locality of the areas proposed for planting. The contractor must be able to contain, control and remove Japanese Knotweed with clear methods of working to prevent spread.

1.05 Setting out of Planting Beds

The positions of the planting beds shall be marked out on site in accordance with the drawings. The position of specimen trees shall be marked individually. The outline of planting beds and their internal divisions shall be indicated.

The Landscape Architect reserves the right to adjust the exact positions of the plants after they have been set out prior to planting.

When planting in a bed, the plants shall be evenly distributed to the spacing specified and arranged in an informal manner avoiding straight lines unless specifically instructed. Confirmation that the major setting-out of all planted areas is satisfactory shall be obtained from the Landscape Architect before planting commences.

Any errors in the setting-out shall be made good at the contractor's own expense. Any discrepancy between the planting plan and the schedule of quantities shall be notified to the Landscape Architect immediately.

1.06 Existing Topsoil

Existing topsoil must be removed where necessary before any ground reformations, grading operations commence on site. It is to be deposited in heaps and the location agreed with the client and at all times kept free from contamination by other materials.

1.07 Sub-Soil

Sub-soil and topsoil must not be mixed and, where it is necessary to strip and store sub-soil, it must be located where topsoil has already been removed and the siting approved by the client and/or the Designer. Surplus subsoil is to be removed to an approved disposal site.

1.08 Top Soil (Imported)

Top soil is to be good quality, free draining, loamy topsoil, the stone content shall not exceed 10% and no stones shall be more than 50mm in any dimension. The topsoil shall be free from sub-soil, weed-seed, roots or perennial weeds, sewage sludge or other injurious material. It shall comply with the current British Standard (BS 3882)and the pH value of the soil shall match that on the site.

Any substandard loads or any material, which on subsequent laboratory tests is found to contain unacceptable levels of poisonous substances or fails to meet the specification, shall be removed from the site at no expense to the Client.

1.09 Stacking of Top Soil

All topsoil, existing or imported, is to be stacked in heaps not exceeding 1m in height.

1.10 Spreading Top Soil

The bases of areas to be spread with topsoil shall be thoroughly loosened before spreading commences. Topsoil to be spread to specified depths: Turf areas 150 mm, shrub areas 500 mm, climber areas 500 mm, hedge areas 700 mm.

Final grading shall be carried out to ensure a true specified level and slope and to avoid dishing and other depressions where water may collect. The level of topsoil shall be at least 50 mm above all hard area to allow for shrinkage and settlement. After spreading, topsoil areas shall not be traversed by machinery or used for storage purposes.

1.11 Soil Ameliorants

Enmag or similar slow release fertiliser shall be incorporated in the backfill for **all** planting pits and topsoil/growing medium to shrub areas at the time of planting. The rate of application shall be as recommended by the manufacturer.

Alginure Seanure'Soilbuilder' or similar approved soil conditioner shall be incorporated into the soil/growing medium at a rate of 140 gm/sq.m for a depth of 100mm. It shall be applied and thoroughly worked in to the compost/growing medium(by raking or cultivator). In tree pits Alginure shall be used at the rate of 325 gms per pit.

The Contractor shall, not later than one week after commencement of the works, submit the specification and recommended rate of application for the fertiliser for the Architects' approval. All areas for the temporary storage of soil or other materials within the site shall be as agreed with the Architect.

1.12 Source of Contractor's Plants

All plants shall have been grown from the contractor's own nursery stock or shall have been obtained from a nursery of equivalent standing approved by the Architect. Imported stock must have been grown-on for at least twelve months in a United Kingdom nursery. A certificate to that effect is to be furnished by the contractor when making a request for use of imported stock. Arrangements are to be made by the contractor for the Architect to inspect such stock at the suppliers nursery prior to lifting. Samples of typical plants are to be provided by the contractor at the time of making a request for their use. These samples shall be retained by the Architect for the duration of the planting period for quality control purposes and are to be returned to the contractor for incorporation into the contract.

The Architect will have the power to reject any sub-standard stock either at the nursery source or on site. All rejected material shall be removed from site and replaced with plants conforming to the specified requirements.

1.13 Description of Contractor's Plants

All plants shall be true to size and description. They shall be good, well formed healthy specimens, free from disease and damage to stem, branches, roots and foliage and shall have a vigorous root system containing and reasonable proportion of fine fibrous rootlets. All shrubs shall be container grown unless otherwise specified. The containers shall be reasonably full of root without being root bound.

1.14 Specified Trees and hedging

Trees and shrubs to be supplied by; J.A.Jones Nursery or a Nursery Approved by The Landscape Architect.

The Contractor is DEEMED to have included for this possibility in his Tender. Any substitutions proposed will be vigorously investigated.

In the event of substitutions proving necessary and upon submission of satisfactory evidence that certain plant species are not available, the

contractor may be permitted to substitute alternative species of equal quality and cost, or an equitable adjustment of the price may be made for any cost differential.

All substitutions shall be of the nearest equivalent species and variety to those originally specified and shall be subject to the prior approval **in writing** of the Architect. Such approval must be obtained at the earliest possible date, and if requested after acceptance of the tender then it must be obtained **prior** to work commencing on site.

1.15 Open Ground Stock

The use of open ground stock is not appropriate for this contract. ALL shrub stock is to be container grown and ALL tree and hedging stock to be rootballed.

The contractor shall supply to the Architect if required, details of all plants used.

1.16 Container Grown Plants

Container grown plants shall have been individually grown from propagation in a pot or similar container. Containerised plants will not be acceptable.

1.17 Care of Plants on Site

Planting should be carried out as soon as possible after the plant material is delivered to site. Where planting must be delayed, care should be taken to protect the plants from theft or damage. Plant material may be stored on site for no more than 7 days before planting. The Architect shall inspect the beds prior to delivery and shall approve the method of storage. Any sub-standard method of storage which may result in damage to the stock shall be rectified as directed by the Architect.

All materials shall be properly protected against damage at all times. All plants shall be protected from excessive wind, sun, heat or cold. Container grown material shall be left in their delivery packages and placed close together on the ground in an upright position and protected from the wind.

All planting to be carried out only when the ground is free from frost and waterlogging and, in the case of plants grown in open ground during the dormant season (i.e. end October to end March), unless otherwise approved by the Architect.

1.18 Planting British Standards

All trees, shrubs and hedging shall comply with the minimum requirements of the relevant BS below and the requirements of this specification. Where requested by the Architect, the contractor shall provide a certificate to the effect that all materials, trees, shrubs and plants supplied are in accordance with the specification. Trees shall be true to size and description, and shall be good well formed, healthy specimens free from disease and damage to stems, branches, roots and foliage. They shall be nursery grown and shall have been regularly transplanted.

BS 3936	Part 1 selected standards; standard; feathered trees under 3.6m high, whips, shrubs.
BS 3936	Part 4 forestry transplants
BS 3936	Part 9 bulb planting
BS 4043	Semi mature trees

Unless otherwise specified, all planting and staking shall be in accordance with BS 4428, 1969, recommendations for general landscape operations.

1.19 Planting Depth

The depth at the centre of the pits shall be adjusted to ensure that all stock is planted to the depth of the nursery soil mark on the stem, and this shall be maintained on the finished ground level to allow for settlement after planting. All damaged roots shall be cut back to sound wood. Any cut ends 25mm diameter or over shall be treated with a fungicide, in accordance with BS 3998.

1.20 Planting Procedure

Topsoil shall be removed to a sufficient depth and width to allow the roots to be fully spread, shrubs shall be planted in the manner described and 35gm of slow release fertilizer worked into the top 50mm of soil with 500mm radius of the plant. The root ball around container grown plants and evergreens should not be disturbed. Containers and wrappers are to be removed unless otherwise agreed by the Architect. When planting, the roots of stock shall be evenly spread out. The backfill shall be finely broken topsoil, which was removed when forming the planting pit, or supplemented by topsoil material obtainable on site. The backfill shall be placed in layers and lightly consolidated throughout its total depth to ensure there are no voids around the roots or root ball. In addition, the backfill is to be firmly heeled around the plant collar.

All planting pits or beds in existing grass areas are to be finished to a neat line.

1.21 Tree Pits

Pits shall be excavated to the dimensions as detailed on the drawings and to clear the root ball of each individual tree and not less than 750mm x 750mm x 1000mm deep, and to suit the size of the root balls. The depth of all pits shall be as measured at their centre. Bases of all pits shall be excavated to the horizontal.

The Contractor shall break up the base of each pit to a depth of 150mm, and refill the pit with imported topsoil and Fisons Tree Planting and Mulching Compost to be provided in the ratio 1:1 by volume and lightly firm by treading. Sufficient topsoil/compost mixture shall be returned to the pit to raise the surface level to a minimum of 75mm above adjacent levels. Backfilling shall only take place when the holes have been excavated all to the satisfaction of the Architect.

1.22 Tree support

Wire guys anchored to 'Deadman anchors', Platypus anchors or approved patent anchorage systems shall be used to support **all** extra heavy standard, heavy standard, selected standard, and standard trees.

4mm guying wire wire tensioned with 2 No Maxi Gripple tensioners per tree will be strained over a 125x25mm timber frame placed above the rootball to hold the tree straight without disturbing the rootball. The tightening wires to the wire mesh containing the root ball should be freed-up round the base of the trunk to avoid the risk of constricting future growth. The root ball should not be loosened or damaged. (The hessian and wire mesh containment will decay over time leaving the root system free to develop).

1.23 Tree irrigation

All trees shall be supplied with Root Rain irrigation systems, suitable to their locations and tree sizes, typically 2.5 metres for heavy standards and 4.00 metres for extra heavy standards, selected from Root Rain Urban and Civic systems.

1.24 Root management

All trees planted in adopted surfaces will have root containment by Greenleaf ReRoot 600/1000 linear root barriers installed to protect adjacent surfaces and services.

1.25 Delivery to Site

Trees shrubs and hedging shall be delivered to site and planted only during season 1st November to 30th April, except as agreed by the Architect. Planting shall only be undertaken when the soil is in a friable condition. None of the planting works shall be undertaken during periods of heavy frost. Plants shall only be removed from their protective coverings or packing immediately before planting.

1.26 Cutting Back Stock After Planting

The contractor shall allow in his tendered rates for the cutting back of certain species, as indicated in the drawings (such cutting back shall entail the reduction of either the leading shoot (s) or laterals to promote bushy growth). Plants shall be cut back immediately after planting and hedges trimmed to a uniform height, and secateurs shall be used to give a clean cut. Plants shall not be cut in bundles. After cutting back, all cuttings shall be collected and removed from site.

1.27 Operational Damage

On completion of planting any broken branches shall be pruned, damaged areas of bark shall be neatly pared back to sound tissue with all cuts and wounds over 25mm in diameter shall be treated with a fungicidal sealant.

Each tree shall be inspected carefully for bruising and crushing which may not be easily apparent. Such damage may be found where the tree and machine have been in contact, where ropes and fastenings have been. Where damage has occurred; the bark shall be neatly pared back to sound tissue and wounds

over 25mm in diameter shall be treated with a fungicidal sealant all in accordance with BS 3998.

Where in the opinion of the Engineer/ Landscape Architect the damage is such as to warrant the rejection of the tree, it shall be replaced by the contractor at no extra cost to the contract. Trunk wrappings applied by the grower shall not be removed and any subsequent damage during planting shall be made good.

1.28 Watering

All plants shall be watered in after planting to ensure an intimate contact between roots and soil particles and shall subsequently be maintained in a moist condition. See section 2.02 for quantities. Where there is a risk of frost within 24 hours, watering shall be suspended until such risk has passed.

1.29 Fertilizing

On completion of planting the contractor shall apply slow release fertilizer at the rate of 100 g/m². All areas shall receive an evenly distributed application, lightly worked into the surface area **prior** to the application of mulch. Fertilizer shall be a 2 season slow release 14:14:14 as specified.

1.30 Guarantees and Replacements

All trees and plants shall be guaranteed for 12 months from Practical Completion. The price quoted must include the cost of supply of the plant material both initially and due to any necessary replacement, and planting same. All tree stakes and ties shall be replaced within 12 months from the date of use, if in the opinion of the Architect, they are defective.

1.31 Defects Liability Site Visit

The contractor is to arrange to re-visit the site with the Architect at the end of the Defects Liability Period. The contractor shall replace, at his own expense, any plant material supplied by him which has failed to thrive (other than that which in the Architect's judgement is due to vandalism) within the twelve month Defects Liability Period.

1.32 Description of Replacement

All plants supplied to replace failures shall be of a size, form and quality to match those plants which were originally specified. Replacements shall conform with the requirements of the contract and schedule of rates.

1.33 Turf Laying

A Turf Condition and Delivery

The turf shall be treated with selective weedkiller not less than four weeks prior to lifting.

The Turf shall be a high quality cultivated lawn turf. (BS 3969:1990 Applies), with the following mix: Supply and lay:
Agrostis castellana 15%
Dactylis glomerata cocksfoot 10%
Festuca rubra 35%

Festuca rubra ssp commuta 15%
Poa nivalis rough meadow grass 25%
@ 25 gms per m² with BSH2 or BSH3 Pre-seed fertiliser.

If requested, the Contractor shall supply a sample of the turf he/she proposes to use for approval by the Designer and shall ensure that all turf supplied to the site are similar to the approved sample.

If so required, the Contractor shall inform the Designer of the location of the supply, so that the turf may be inspected prior to lifting.

For large areas, turf to be delivered at appropriate intervals throughout the work so as to avoid, as far as possible, stacking turf for long periods. Turf should be unloaded and conveniently stacked on cleared ground to a maximum height of 1m unless arranged on pallets for mechanical handling. Turf shall be used within 48 hours of delivery.

B Preparation of Ground

All areas to be turfed are to be cultivated to a depth of at least 150mm cleared free of weeds and rubbish and brought to a fine tilth.

Three to five days before turfing, an approved pre-turfing fertiliser is to be worked into the top 50mm of soil as the final tilth is reached. The fertiliser is to be applied in transverse directions in accordance with the manufacturer's instructions and worked into the final tilth by a mechanical spreader or hand held rake.

C Laying of Turf

No turf shall be laid until the topsoiling in whole or in part has been satisfactorily completed by being brought to an even tilth and firmness.

Turf from the stack shall be wheeled to the area on planks laid closely side by side. Adequate timber planks should be provided to support workmen and barrows and provide access.

The turf should be laid on the prepared soil bed and firmed into position in consecutive rows with broken joints close butted and to the correct levels.

The turf shall be laid off planks working over turf laid previously.

Where necessary, the turf shall be lightly and evenly firmed with wooden beaters, the bottom of the beaters being frequently scraped clean of accumulated soil or mud. A dressing of finely sifted top soil (complying to BS 3882) shall be applied and well brushed into the joints. The finished area is to be level and even. Turf edges and margins shall be laid with a whole turf.

D Laying Turf around Trees and Adjacent to Walls

Turf adjacent to trees are to be trimmed exactly to the stem and stake of tree to cover the soil completely, unless otherwise instructed by the Designer.

Turf areas adjoining buildings, boundary walls or fences are to be taken to the faces of the structure to give complete soil cover.

E Establishment Cut : Turfed Areas

When the grass has grown to about 100mm in height, trim to 40mm with a cylinder mower, which has sharp cutting blades and incorporates a roller, alternatively, the grass may be cut with rotary or other grass cutting machinery, provided it is set correctly and properly sharpened to cut cleanly. Additionally a light rolling will be necessary. Cuttings are to be removed.

F Subsequent Cuts : Grass Seeded and Turfed Areas

The contractor shall, during the first growing season after seeding or turfing, maintain all grass areas so that the sward is at no time greater than 50mm in height, and free from pernicious weeds, e.g. docks, thistles, etc.

1.34 Seeding

A Seed Mixture

After ground preparation the following seed mixtures are to be sown to the areas indicated:

Grass: British Seed Houses Limited;

Lawns:

Agrostis castellana 15%
Dactylis glomerata cocksfoot 10%
Festuca rubra 35%
Festuca rubra ssp commuta 15%
Poa nivalis rough meadow grass 25%
@ 25 gms per m² with BSH2 or BSH3 Pre-seed fertiliser.

All seeds delivered to site shall be protected from damp and vermin until required. Any seed unused shall be returned to the seed merchant for storage until required on site. No seeding shall be carried out until all preparatory work is completed and approved by the Architect.

Seed shall be obtained from an approved source. A certificate to prove purity, germination and genuineness, the year of harvest, and origin, must be produced by the supplier for inspection by the Architect. A sample of seed must be supplied prior to seeding and the Architect reserves the right to have the seed mixture analysed by an independent assessor, and if it proves unsatisfactory, to refuse acceptance.

B Fertilizer

Before seeding of grassed areas only, an approved granular pre-seeding fertilizer is to be worked into the final tilth, only after the standard of tilth and the fertilizer have been approved by the Architect.

C Sowing

Sowing of grass seed shall take place during suitable calm weather conditions at the rate quoted above unless otherwise directed, when the soil is neither waterlogged nor extremely dry. Sowing shall not take place later than the end of Sept, or earlier than March.

Seeding shall be carried out in two equal sowings in transverse directions. After sowing, the ground shall be lightly harrowed or raked and rolled using a ringed/ Cambridge type roller.

D Germination

Seeded areas will only be accepted for payment when germination has proved satisfactory. No payment for re-seeding shall be made to the contractor if the seed fails, due to any reason whatsoever, and he shall be required to make good the seeding until a good sward is obtained as directed by the Landscape Architect.

E Establishment Cut : Grass Seeded Areas

When the grass has grown to about 100mm in height, trim to 40mm with a cylinder mower, which has sharp cutting blades and incorporates a roller, alternatively, the grass may be cut with rotary or other grass cutting machinery, provided it is set correctly and properly sharpened to cut cleanly. Additionally a light rolling will be necessary. The establishment cut shall also include a further stone-pick. Cuttings are to be removed.

F Subsequent Cuts : Grass Seeded and Turfed Areas

The contractor shall during the first growing season after seeding or turfing, maintain all grass areas so that the sward is at no time greater than 50mm in height, and free from pernicious weeds, e.g. docks, thistles, etc.

1.35 Mulching

A 50mm layer of bark mulch shall be spread over all shrub and hedge planted areas. Mulch to be coarse forest bark, a sample of which must be provided for the landscape architect prior to any mulch arriving on site. Mulch must be dished around the base of each plant and care taken (by hand if necessary) to ensure smaller plants or branches are not buried.

SECTION TWO – MAINTENANCE PLAN AND AFTERCARE

2.01 Maintenance Visits

A minimum of 12 visits shall be undertaken during each of the 12 months. Three during the Winter months and twelve during the growing season. The latter shall be undertaken at intervals of not less than two weeks, nor more than four weeks.

At each maintenance visit the following work is to be carried out as and when necessary:

2.02 Watering

Plant material shall be watered on each visit as follows:

- | | | |
|----|---|---------------------------|
| a) | Standard trees | 50 litres each |
| b) | Shrubs | 15 litres/ m ² |
| c) | Hedging | 20 litres /m ² |
| d) | Grass areas shall be watered where necessary to ensure good establishment | 10 litres/ m ² |

The contractor shall make due allowance in his rates for carrying out these tasks outside normal working hours when necessary to avoid premature evaporation or leaf damage caused through watering in bright sunlight.

The contractor is to allow for the provision of water, water carts or hoses with a fine hose attachment or sprinklers at normal mains pressure. The contractor is to include and state in his tender the cost of compliance with this clause so that the cost of visits can be deducted in whole or in part if not required to be used.

Drought Conditions: Should emergency legislation restricting the use of water during drought conditions be imposed, the contractor will be required to ascertain, before operations, the availability and cost of, and arrange to collect and apply second class water by bowser or other means from an approved sewage works, deliver to site and apply as specified. When required by the Architect, the contractor shall arrange for tests of this water to be carried out in accordance with BS 6068.

2.03 Disease and Pest Control

The contractor should inspect all stock at regular intervals to check for pests and diseases. All necessary steps should be taken as required. If the problem is beyond control, the tree or plant shall be removed and burnt. It shall then be replaced by another tree/shrub of the same species and size at the contractors expense.

Client to inform maintenance team of failures.

2.04 Herbiciding and Handweeding

Grass Areas: All weeds appearing in the sown grass areas shall be spot- treated with a translocated herbicide.

Shrub planting areas: The contractor shall maintain all shrub and hedge planted areas completely free of weeds and grass, during the maintenance period; by means of:

- i) spraying with translocating herbicide using an arbor-guard and applied in late Spring
- ii) spot treatment with contact herbicide at other times
- iii) handweeding as and when necessary.

Upto year 3 onwards. Evidence of healthy and bushy growth combined with desirable ornamental features eg fruit, flower, autumn colour, stem colour.

From year 3-5 80% increase in growth from initial height at planting in year 1.

The contractor shall rake up loose bark mulch and replace as necessary to planted areas to maintain the original depths.

2.05 Fertilizing

At 12 months after practical completion, the contractor is to apply 100 gm/m² of ficote 140 fertilizer or similar approved to all planted areas.

2.06 Pruning, firming of Plants: Inspection of Tree Ties

The contractor shall prune all dead, damaged or diseased wood in accordance with BS 3998: 1966, any resultant wounds over 25mm in diameter shall be treated with an approved fungicidal sealant.

Stock should be inspected regularly and firmed as necessary. This should, in particular, be done after strong winds and in the Winter when frosts may lift the plants.

Guys shall be inspected and adjusted or replaced as necessary to ensure the provision of adequate support and prevention of root ball rotation.

All trees that are staked and tied with rubber strap ties are to be inspected and adjusted annually, which are to be removed after a period of three years.

Up to year 5 onwards evidence of healthy growth with trim stem with a well balanced natural appearance appropriate to the tree specie.

2.07 Litter Collection

The contractor shall at all times keep the site clean, tidy and free from litter and carry out a litter collection at each maintenance visit.

The contractor shall take care to avoid any spillage of fuel, oil, chemicals or other materials noxious to plant life. Plants or soil contaminated by such material must be removed off site and replaced.

2.08 Grass Cutting

See section on seeding and turf. - Section 1.33

2.09 Supplementary Mulching

Throughout the maintenance period, a minimum depth of 75mm of coarse forest bark mulch should be maintained. The mulch should be raked regularly and additional amounts added as required (Allow for 10% replacement).

2.10 Replacement of Stock

The contractor shall be required to visit the site with the Architect/ Landscape Architect at the end of the first growing season, to schedule and agree all failures.

The contractor shall allow in his rates for supplying and making good any specified plant material that dies other than deaths caused by malicious damage after completion. Deaths will be judged to include those plants experiencing dieback on inspection resulting in a plant being below the height or spread specified.

The contractor shall make good at his own expense, any plant which has died or is not developing full foliage throughout its branches within the maintenance period. Non-development or death due to malicious damage shall be replaced at the original contract rates if requested by the Architect. The contractor shall replace plants as soon as possible during the planting season immediately following the loss.

2.11 Replacement of Vandalised or Stolen Plant Stock as 2.10

Where stock has been vandalised or stolen, the contractor must contact both the local police and the Landscape Architect immediately. A site visit will then be arranged to ascertain the extent of loss and an instruction issued for replacements.

The contractor will not be held responsible for such damaged stock, however, if the contractor does not contact the Architect immediately as explained above then it will be assumed that stock has failed naturally and the contractor will have to replace the stock at his own cost.

2.12 Maintenance and Aftercare Generally

Notwithstanding any of the above, the contractor will undertake as many maintenance visits as may be deemed necessary by the Architect in order that the work undertaken in this contract is maintained in a clean, tidy, healthy and thriving condition, with litter, disease, damage and weedgrowth controlled to the satisfaction of the Architect and to good landscape and horticultural practice.

See maintenance schedule.

2.13 Completion

Before leaving the site the contractor shall thoroughly fork through all planted areas removing all weeds, weed roots and large stones etc., to bring to a fine tilth and approved camber. Where mulch is spread the contractor shall ensure that on completion of weeding, all areas are made good with mulch where instructed and to depths as specified. The contractor shall leave the whole landscape works in a sound clean and tidy condition.

2.14 Landscape Maintenance Sheets

The contractors attention is drawn to the "landscape maintenance sheets" enclosed along with the contract documents.

The "Notice of Landscape Maintenance" is to be sent to the Architect at least one week prior to the proposed landscape visit. The Architect will then visit the site during the maintenance operation to certify those works which should be, and which are being, undertaken. The "Landscape Maintenance Sheet" will then be completed and signed by the Architect. Only once this is signed will the contractor be paid for maintenance works. The completed sheet should be enclosed with the contractors next invoice/ valuation.

SECTION THREE - SCHEDULES OF WORK

3.01	PREPARATIONS: SHRUBS Prepare all shrub beds for planting, including cultivations, introduction of fertilisers and ameliorants, removal of weed material and stones. Carry out all minor adjustments to levels in vicinity of adjacent surfaces as necessary.	Total : £ .p
3.02	PREPARATIONS: CLIMBERS Prepare all climber's beds and pockets for planting, including cultivations, removal of weed material and stones. Carry out all minor adjustments to levels in vicinity of adjacent surfaces as necessary.	
3.03	PREPARATIONS: HEDGES Prepare all hedge beds for planting, including cultivations, introduction of fertilisers and ameliorants, removal of weed material and stones. Carry out all minor adjustments to levels in vicinity of adjacent surfaces as necessary.	
3.04	PREPARATIONS: TURF and SEED Prepare all beds for turfing and seeding , including cultivations, soil ameliorants, herbicide etc., removal of weeds and stones, including adjustments to levels and making up levels with imported top soil.	
3.05	PREPARATIONS: TREE PITS: Excavate tree pits and backfill with backfill medium incorporating fertilisers and ameliorants : Pits 750 x 750 x 1000mm, minimum- pits to suit actual rootball size.	
3.06	PREPARATIONS:TREES Supply and install all anchorage systems, deadmen, wires and tensioners, root barriers and irrigation systems set out in the specification.	
3.07	MULCH Supply and lay mulch to all shrub, climber and hedge planting beds as set out in the specification.	

3.08**SHRUBS:**

Supply and plant the following container grown shrubs in accordance with the specification, including incorporating fertilisers in planting medium.

SHRUBS -	SIZE (CM)	TYPE POT	BREAKS IN LOWER 1/3	DENSITY /M2	QUANTITY	RATE £	TOTAL £
Buxus sempervirens 'suffuticosa'	10-50	15	bushy plant	4/m ²			
Cornus sanguinea 'midwinter fire'	40-60	2L	1+1	4/m ²			
Choisya ternata 'sundance'	20- 30	2L	2 breaks in lower third	4/m ²			
Euonymous fortunei 'emerald n gold'	15-20	1.5 L	bushy plant	4/m ²			
Hypericum androsaemum	30-40	3L	5 breaks in lower third	4/m ²			
Ilex aquifolium	60-80	2L	2/3 breaks	4/m ²			
Lavendula angustifolia 'hidcote'	40-60	2L	2 breaks in lower third	4/m ²			
Luzula sylvatica	30-40	P9	Bushy plant	4/m ²			
Mahonia aquifolium 'apollo'	20-30	2L	Bushy plant	4/m ²			
Rosa pimpinellifolia	30-40	3L	3 breaks in lower third	4/m ²			
Rosmarinus officianalis 'severn sea'	30-40	3L	3 breaks in lower third	4/m ²			
Salix repens	20-30	2L	Bushy plant	4/m ²			
Salvia officianalis	30-40	3L	3 breaks in lower third	4/m ²			
Sambucas nigra	40-60	2L	2 breaks in lower third	4/m ²			
Skimmia japonica	10-20	2L	3 breaks in lower third	4/m ²			
Skimmia japonica 'rubella'	10-20	2L	3 breaks in lower third	4/m ²			
Spirea japonica 'goldflame'	20-30	2L	5 breaks in lower third	4/m ²			
						total	

3.09**CLIMBERS:**

Supply and plant the following container grown climbers in accordance with the specification, including incorporating fertilisers in planting medium.

CLIMBERS	SIZE (CM)	TYPE POT	BREAKS IN LOWER 1/3	DENSITY /M2	QUANTITY	RATE	TOTAL £
Lonicera Periclymenum 'Graham Thomas'	60-90	2L	Caned min 2 breaks	1/m2			
Hedera helix	30-40	2L	3 breaks in lower third	1/m2			
Humulus lupulus	30-40	2L	3 breaks in lower third	1/m2			
						total	

3.10 GRASS SEEDING

Supply sow British Seed House :
 Agrostis castellana 15%
 Dactylis glomerata cocksfoot 10%
 Festuca rubra 35%
 Festuca rubra ssp commuta 15%
 Poa nivalis rough meadow grass 25%
 -(with additional clover) for low maintenance @ 20
 gms per m² with BSH2 or BSH3 Pre-seed fertiliser.

GRASS SEEDING					QUANTITY	RATE	TOTAL £
Mix as listed above pre seedfertiliser							
						total	

3.11 TURF

Supply and lay Agrostis castellana 5%
 Festuca rubra 40%
 Festuca rubra ssp commuta 15%
 Lolium perenne 40%
 @ 25 gms per m² with BSH2 or BSH3 Pre-seed
 fertiliser.

TURF					QUANTITY	RATE	TOTAL
As measured by the contractor					sqm		

3.12 TREE PITS

Excavate tree pits and backfill with backfill medium incorporating fertilisers: Pits to be sized to receive rootballs-which will vary in size. [refer to drawing]

TREE PITS					QUANTITY	Cost per sq.m	TOTAL
------------------	--	--	--	--	----------	---------------	-------

750x750x1000mm minimum-matched to root-ball sizes					16		
---	--	--	--	--	----	--	--

3.13 TREES

Supply and plant the following root balled trees, including anchors, deadmen and ties irrigation systems and root barriers as specification.

TREE SPECIES	TREE TYPE	GIRTH/OVERALL HEIGHT (CM)	QUANTITY	RATE £	TOTAL £
Alnus glutinosa	RB	16-18	3		
Carpinus betulus' Frans fontaine'	RB	16-18	5		
Sorbus aria	RB	16-18	4		
Liq2idambar styraciflua	RB	16-18	4		
			16	total	

3.14 BULBS

Supply and plant the following bulbs in a mixed bed:

Bulbs					QUANTITY	RATE	TOTAL £
Galanthus nivalis		bulb			348		
Hyacinthoides nonscriptus		bulb			348		
Narcissuss pseudomnarcissuss		bulb			348		
					6/m2	total	

3.15 Mixed hedging

Supply and plant the following for mixed as specification. Hedging should be planted in two staggered rows at a density of not less than 5 per metre with approximately 450m between plants in the same row, and 300-400mm between rows. The interplant whips/transplants should be planted within this pattern in groups of 2/3. Include for rabbit guards and staking as necessary.

HEDGE SPECIES	SIZE CM	TYPE/ROOT	QUANTITY	RATE £	TOTAL £
Cornus sanguinea 'Midwinter fire'	40-60	Bare root			
Crateagus monogyna	40-60	Bare root			
Corylus avellana	40-60	Bare root			

Ilex aquifolium	40-60	Bare root			
Rosa pimpinellifolia	40-60	Bare root			

MAINTENANCE

3.14

Allow for the following maintenance visits as specification.

MAINTENANCE

Maintenance to be carried out for a twelve month period following Practical Completion of the landscape works. A minimum of 12 visits to be carried out, as per specification. Please also refer to Section 2 for plant aftercare.

	Task	Price per Visit	Year 1
1	Watering; quantities as spec; trees, shrubs and grass.		6
2	Disease & Pest Control.		12
3	Herbicide & handweeding to include forking out and removal all persistent noxious weeds.		1
4	Fertilizing.		2
5	Pruning: firming of plants; inspection of stakes, ties and guys.		12
6	Collection of litter; rubbish; large stones etc		12
7	Hedge trimming, to maintain uniform shape		4
8	Grass cutting to maintain maximum 50mm sward		9
9	Supplementing of bark mulch		1

Total £-P_____

Note: The Contractor is responsible for replacing all stock which dies or ceases to thrive adequately.

Note: Any amendments to the maintenance requirements through the year are to be adjusted against the rates given above.

Total for maintenance

COLLECTION PAGE		Total £ : p
3.01	Preparations: Shrubs	
3.02	Preparations: Climbers	
3.03	Preparations: Hedges	
3.04	Preparations: Turf	
3.05	Preparations: Tree pits	
3.06	Preparations: Tree planting	
3.07	Preparations: Mulch	
3.08	Supply and plant: Shrubs	
3.09	Supply and plant: Climbers	
3.10	Supply and plant: Hedges	
3.11	Supply and lay: Turf and seed	
3.12	Supply and plant: Trees	
3.13	Supply and plant: Bulbs	
3.14	Maintenance	
	Landscape contingency Sum	500.00
	TOTAL carried forward to	
	FORM OF TENDER :	

Appendixes

Glan Gors, Wrexham.

2.15. NOTICE OF LANDSCAPE MAINTENANCE VISIT

Visit No.

Date:

Site: Glan Gors, Wrexham.

Contractor:

We hereby give notice (minimum one week) that we intend to carry out a maintenance visit on the above site on:-

Signed.....

Date

This completed form should be sent to the Architect.

AINSLEY GOMMON ARCHITECTS
1 Price Street, Hamilton Square,
Birkenhead, Merseyside, CH41 6JN.

For the attention of Mr. Peter Gommon.

Galn Gors, Wrexham.

2.16 LANDSCAPE MAINTENANCE VISIT

Visit No.

Date:

Site: Glan Gors, Wrexham.

Contact:or:

The following maintenance works were carried out at the above site on:-

.....(date)

Tick as appropriate:

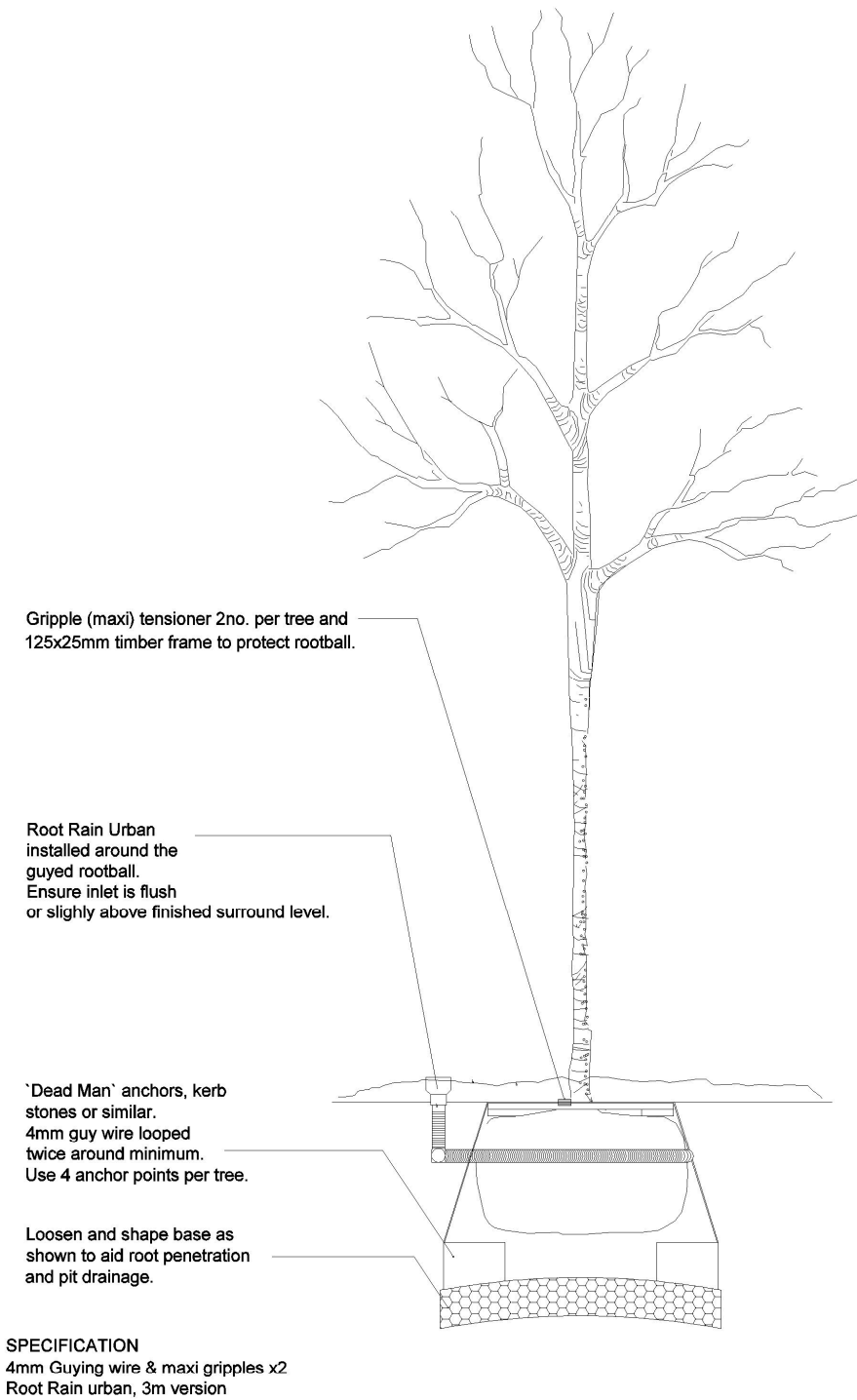
1. Watering
2. Disease and Pest Control
3. Herbicide & hand weeding
4. Fertilizing
5. Pruning, forming of plants, inspection of stakes, ties & guys
6. Collection of litter; rubbish; large stones etc.
7. Removal of tree supports & protective wrappings
8. Grass cutting
9. Supplementary bark mulch
10. Replacement of stock

Dated & signed by the Architect

.....

AINSLEY GOMMON ARCHITECTS
1 Price Street, Hamilton Square,
Birkenhead, Merseyside, CH41 6JN.

TREE PLANTING DETAILS



Standard Tree Pit to Soft Landscaped Area

REVISIONS