

# **SOFT LANDSCAPE WORKS MAINTENANCE AND MANAGEMENT PROPOSALS**

for

**PROLOGIS DEVELOPMENTS LTD**

at

**UNITS C and D  
PROLOGIS PARK**

**HAYES**

Job No. L1120/10

Date: 12<sup>th</sup> December 2012



Prepared by:

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<b>Ref:</b>	<b>L1120/10/RP011</b>
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<b>Date:</b>	<b>12<sup>th</sup> Dec 2012</b>

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## **MAINTENANCE AND MANAGEMENT STATEMENT**

(Refer to Appendix C for Soft Landscape Proposals drawing)

The establishment and future success of the external landscape is largely dependent on the standard and frequency of the subsequent maintenance and management it receives. Throughout the development period and thereafter a maintenance and management regime will be adopted. The ongoing landscape maintenance regime for ProLogis Park will continue to conform to the agreed requirements of BAA. If at some point in the future, the site is sold, the sale agreement will be covenanted to ensure the landscape maintenance regime is continued in perpetuity.

The aims and objectives of the landscape maintenance and management will be:

- a) To ensure the successful establishment and continued growth through to maturity of the Soft Landscape scheme shown on Planting Plans L1120/10-12 and 13.
- b) To ensure that the landscape develops in a manner commensurate with the original design intentions with particular emphasis upon achieving a successful connectivity to the infrastructure landscape and visual amenity.
- c) To achieve rapid establishment of the plant material with resultant total ground cover, thereby suppressing weed growth and reducing maintenance requirements.
- d) To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted.
- e) To manage the landscape in a manner convivial with the safety of site users, such as maintaining visibility splays and the removal of dead, dying or diseased tree branches.
- f) To accommodate the requirements of BAA guidelines in minimising a potential bird strike hazard for Heathrow Airport.

The soft landscape will, for the initial 1 year after Practical Completion, be maintained by the Landscape Contractor responsible for implementation of the works. The contract will include a defects liability clause to ensure replacement planting is carried out and successful establishment achieved. Refer to Appendix A for the schedule of maintenance for year 1. Thereafter maintenance contracts will be organised by facilities management on a suggested 5 yearly basis. Refer to Appendix B for matrix of maintenance operations envisaged over a 10 year period. These will be reviewed at regular intervals to respond to natural or man made changes in the environment which affect the landscape types (eg. prevailing weather conditions, tree disease, vandalism, etc).

The above approach will ensure that the quality of the landscape created in the early years can be maintained for the benefit of commercial occupiers, local residents and visitors to ProLogis Park, Hayes as well as providing a benefit to persons who live near and pass by the boundaries.

## **APPENDIX A**

### **Year 1 Maintenance Schedule**

# APPENDIX A

Site: Units C and D, Prologis Park, Hayes  
SCHEDULE OF LANDSCAPE MAINTENANCE WORKS FOR FIRST YEAR

UNITS C and D, PROLOGIS PARK, HAYES – SCHEDULE OF LANDSCAPE MAINTENANCE WORKS				
	Description	Quantity m <sup>2</sup>	Unit Cost £	Total Cost £
	<p>During the initial twelve month period after Practical Completion.</p> <p>Note: Allow for fourteen maintenance visits (12 during the growing season, 2 during the dormant season). A visit shall be defined as the period of time required by the Contractor to carry out all maintenance items specified in the Schedule of work below.</p> <p><b>A. Ornamental Shrubs</b>  <b>B. Ornamental Hedge</b>  <b>C. Native Hedging</b>  <b>D. Grass/ Wildflora Seed</b></p> <p><b>GENERAL</b></p> <p>a Tidy up areas removing rubbish, litter, etc., from planted and grass / wild flora areas. Repeat at each maintenance visit. <b>A,B,C,D.</b></p> <p>b Check that the plant material is firmly planted and firm in where required. Six times. <b>A,B,C.</b></p> <p>c Treat pests and diseases as necessary. <b>A,B,C.</b></p> <p>d Edge up planted areas to maintain soil level 25mm below adjacent hard surfaces and kerbs. Any soil washed onto hard surfaces to be cleaned off. Repeat at each maintenance visit. <b>A,B,C.</b></p> <p><b>SHRUB PLANTED AREAS</b></p> <p>e Water ornamental shrubs as necessary to maintain healthy growth. <b>A,B.</b></p> <p>f Prune shrubs as necessary. <u>Berry bearing species are to be pruned and coppiced to avoid the production of berries and fruit.</u> <b>A,B.</b></p> <p>g Keep shrub areas clear of weed growth by hand weeding and spot herbicide treatment as appropriate. Twelve times. <b>A,B.</b></p> <p>h Apply a compound granular fertilizer of composition NPK14:14:14 to planted areas at a rate of 70gms/m<sup>2</sup>. Once only. <b>A,B.</b></p>			
	Carried forward		£	

## APPENDIX A

Site: Units C and D, Prologis Park, Hayes  
SCHEDULE OF LANDSCAPE MAINTENANCE WORKS FOR FIRST YEAR

UNITS C and D, PROLOGIS PARK, HAYES – SCHEDULE OF LANDSCAPE MAINTENANCE WORKS (cont.)				
	Description	Quantity m <sup>2</sup>	Unit Cost £	Total Cost £
	Brought forward from previous page		£	
	<b>NATIVE HEDGE PLANTED AREAS</b>			
a	Keep areas clear of weed growth by hand weeding as appropriate from mid April to late September in accordance with Ecologist's recommendations. Four times. <b>C.</b>	m <sup>2</sup> (x4)		
b	Check shrub shelters / spiral guards and refirm/replace when required. Four times. <b>C.</b>	Item		
	<b>TREE PLANTING</b>			
c	To trees: check, adjust and replace stakes and ties as necessary. Prune, water and feed as necessary.	Item		
d	The crowns of tree species are to be thinned as necessary to limit the development of a dense, continuous canopy.	Item		
	<b>CUTTING TO GRASS/WILD FLOWER AREAS LOW MAINTENANCE (Reptile basking/badger foraging areas)</b>			
	All works are to be in accordance with Ecologist's recommendations and the contractor shall confirm timing and height of proposed cutting before undertaking any works.			
e	<u>Late April</u> PROVISIONAL. One cut down to 100mm. <b>D.</b>	m <sup>2</sup>		
f	<u>Early September</u> One cut down to 100mm. <b>D.</b>	m <sup>2</sup>		
	Note: at each cut excessive arisings shall be removed from site.			
	<u>General note:</u> <u>Berry bearing species are to be pruned and coppiced as necessary to avoid the production of berries and fruit. The crowns of tree species are to be thinned as necessary to limit the development of a dense, continuous canopy whilst maintaining screening benefit to the boundaries of the site</u>			
	Initial twelve months Maintenance to GENERAL SUMMARY		£	

## **APPENDIX B**

### **Management / Maintenance Matrix for 10 Year Period**

## APPENDIX B

SITE: Units C and D, ProLogis Park, Hayes  
SOFT LANDSCAPE MANAGEMENT / MAINTENANCE MATRIX

### UNITS C and D, PROLOGIS PARK, HAYES 10 YEAR PERIOD LANDSCAPE MANAGEMENT / MAINTENANCE MATRIX

ITEM OF WORK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
<b>GENERAL</b>										
Tidy up areas removing rubbish, litter, etc, from planted and grass / wild flora areas	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Treat pests and disease as necessary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check plant material is firmly planted and firm in where required.	✓	✓	✓							
Dead, dying or diseased wood to be pruned out	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Removal of diseased or dead plants with replacements as appropriate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>TREE PLANTING</b>										
Check, adjust, replace stakes and ties as necessary. Remove stakes after approximately 3 years if appropriate. Prune, water and feed as necessary.	✓	✓	✓	✓	✓					
Remedial tree surgery as necessary to remove any dead, dying or diseased branches and to allow the tree to achieve full stature. All works to be carried out by an Arboricultural Association approved contractor in accordance with BS3998: Recommendations for Tree Work.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
The crowns of tree species are to be thinned as necessary to limit the development of a dense, continuous canopy whilst maintaining screening benefit to the boundaries of the site.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



## APPENDIX B

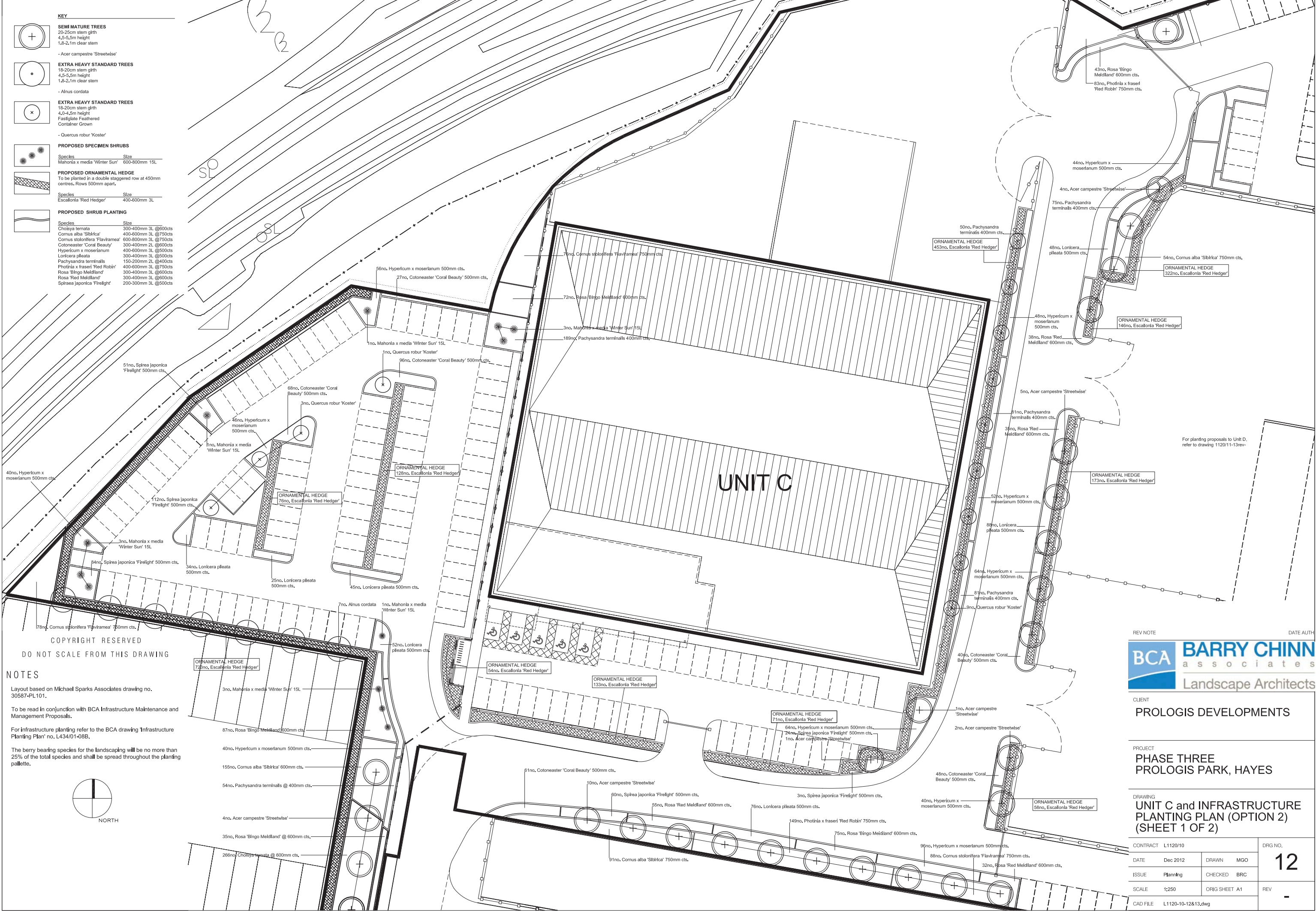
SITE: Units C and D, ProLogis Park, Hayes  
SOFT LANDSCAPE MANAGEMENT / MAINTENANCE MATRIX

### 10 YEAR PERIOD LANDSCAPE MANAGEMENT SCHEDULE OF WORK MATRIX (continued)

ITEM OF WORK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
<b>SHRUB, WOODLAND &amp; THICKET PLANTED AREAS</b>										
Weed growth to be controlled by mechanical and herbicidal means: Ornamental shrub planting Native hedge planting	12 visits 4 visits	12 visits 4 visits	12 visits 4 visits	8 visits 4 visits	8 visits 2 visits	8 visits 2 visits	5 visits 2 visits	5 visits 2 visits	5 visits 2 visits	5 visits 2 visits
Prune shrubs as necessary to prevent invasive species smothering less aggressive species and to prevent shrubs overhanging footpaths and other areas of hard paving	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check shrub shelters / spiral guards and refirm / replace when required. Remove after approximately 5 years if appropriate.	✓	✓	✓	✓	✓					
<u>Prune and coppice berry bearing species of shrubs as necessary to avoid the production of berries and fruit.</u>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Water all ornamental shrubs as necessary to maintain healthy growth	✓	✓	✓							
Fertilizer application as appropriate to ensure establishment of planting	✓		✓							
Edge up planted areas to maintain soil level 25mm below adjacent hard surfaces and kerbs. Any soil wash onto hard surfaces to be cleaned off	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>GRASS/WILD FLOWER AREAS – LOW MAINTENANCE</b>										
Grass cutting. 2no. cuts per year When appropriate to maximize seed dispersal following recommendation from an ecologist. *No herbicide or fertilisers to be used	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## **APPENDIX C**

### **Planting Plans L1120/10/12 and 13**



NOTES

Layout based on Michael Sparks Associates drawing no. 30587-PL101.

To be read in conjunction with BCA Infrastructure Maintenance and Management Proposals.

For infrastructure planting refer to the BCA drawing 'Infrastructure Planting Plan' no. L434/01-08B.

The berry bearing species for the landscaping will be no more than 25% of the total species and shall be spread throughout the planting palette.

REV NOTE		DATE AUTH	
		CLIENT	
PROLOGIS DEVELOPMENTS		PROJECT	
		PHASE THREE PROLOGIS PARK, HAYES	
DRAWING		UNIT C and INFRASTRUCTURE PLANTING PLAN (OPTION 2) (SHEET 1 OF 2)	
CONTRACT L1120/10		DRG NO.	
DATE Dec 2012		DRAWN MGO	
ISSUE Planning		CHECKED BRC	
SCALE 1:250		ORIG SHEET A1	
CAD FILE L1120-10-12&13.dwg		REV -	



## NOTES

Layout based on Michael Sparks Associates drawing no. 30587-PL101.

To be read in conjunction with BCA Infrastructure Maintenance and Management Proposals.

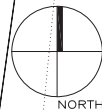
For infrastructure planting refer to the BCA drawing 'Infrastructure Planting Plan' no. L434/01-08B.

The berry bearing species for the landscaping will be no more than 25% of the total species and shall be spread throughout the planting palette.

For planting proposals to the estate road, refer to drawing 1120/11-12rev-

# UNIT D

BOUNDARY LANDSCAPE SCHEME  
PREVIOUSLY CONSENTED AND  
IMPLEMENTED AS INFRASTRUCTURE



REV NOTE

DATE AUT



CLIENT

PROLOGIS DEVELOPMENTS

PROJECT

## PHASE THREE PROLOGIS PARK, HAYES

DRAWING  
UNIT D  
PLANTING PLAN (OPTION 2)  
(SHEET 2 OF 2)

CONTRACT L1120/10

DATE	Dec. 2012	DRAWN	MGO
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ISSUE	Planning	CHECKED	BRC
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SCALE	1:250	ORIG
CAD FILE	L1120-10-12&13.dwg	

DRG NO.

13

REV

**KEY**

### SEMI-MATURE TREES

20-25cm stem girth  
4.5-5.5m height  
1.8-2.1m clear stem

- Acer campestre 'Streetwise'

#### EXTRA HEAVY STANDARD TREES

18-20cm stem glrth  
4.0-4.5m height  
Fastigate Feathered

- *Quercus robur* 'Koster'

**PROPOSED GRASS/WILDFLORA AREAS**  
80% British Seed Houses A4 Low Maintenance Mlx.  
20% British Seed Houses WF3 Wild Flora Mlx.  
Sown at 35 g/m/sq

### PROPOSED SHRUB PLANTING

Species	Size
<i>Cornus alba</i> 'Sibirica'	400-600mm 3L @750cts
<i>Cotoneaster</i> 'Coral Beauty'	300-400mm 2L @600cts
<i>Hypericum</i> x <i>moserianum</i>	400-600mm 3L @500cts
<i>Lonicera pileata</i>	300-400mm 3L @500cts
<i>Photinia</i> x <i>fraseri</i> 'Red Robin'	400-600mm 3L @750cts