

SOFTWARES SPECIFICATION NOTES

Site clearance generally: Where necessary remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil. Remove stones exceeding 75 mm. Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

Works within the root protection area (RPA): There shall be no areas of storage, trafficking of machinery, cultivation, ripping or mechanical rotation or importing of top soil, within the root protection area (RPA) of the existing trees to be retained. Where paths and hard surfacing is proposed within the retained tree RPA's, a No Dig methodology is to be adopted. Underground reinforcement, such as Cell Web (or similar approved) to be utilised in these locations. No trenches shall be dug within the RPA of the existing trees. New hedging plants within the RPA of the existing trees shall be notch planted. All of the above must be in accordance with BS 5837.

Site preparation: Where required all existing topsoil and subsoil shall be stripped and stored separately on site. Heaps must not exceed 3m in height and should be used within 12 months in accordance with BS 4425 (Code of practice for general landscape operations).

Soil build up: Existing topsoil and subsoil to be retained and reused on site within the landscape scheme where possible. Prior to spreading all topsoil to be screened to remove large stones and other deleterious materials, such as plant roots, leaves and clay. Topsoil to be loose-tipped and spread over de-compacted subsoil/receiving area. The total minimum rooting depth for planting, after settlement, should be: Grass 450mm; Planted areas 600mm; Trees 900mm. Topsoil depths for these areas should not normally exceed 300mm with the following minimum depths for each area:

Planting Area	Minimum Depth	
Grass	150mm	
600mm; Planted areas	300mm; Trees	300mm. Meadows & wildflower seeding to be sown directly onto prepared subsoil.

Compost to tree/shrub pits: To be as per BS PAS 100: well rotted sterilised spent mushroom compost max. pH 6.7 or Target Treestart compost. The contractor shall provide a Certificate of Analysis to show that the material being supplied complies with the above criteria. Incorporate spent mushroom compost or equivalent approved peat free compost into tree and planting pits at a rate of 3 parts topsoil to 1 part compost, thoroughly mixed together.

PLANTING
 Generally: Minimise trafficking of graded slopes. All plants to be preferably planted between Nov. - March. Nursery stock trees and shrubs to be in accordance with BS 3936 and BS 8545, to be supplied and planted in accordance with British Standards and the Horticultural Association's Plant Handling Guide. Container grown shrubs to be thoroughly watered before planting; trees and bare root shrubs watered after planting.

Shrub/Hedge planting pits: Timing: Excavate 1-2 days (maximum) before planting. Pit sizes: Wide enough to accommodate roots/toughs when fully spread and 75 mm deeper than root system. Pit bottom improvement Break up to a depth of 150 mm, incorporating 25g of slow-release fertiliser per planting pit. Where existing planting and roots are present plants are to be notch planted to minimise disruption/root damage. Backfilling material: Reuse excavated material. 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.

Tree Accessories: Typically trees in landscape to be staked unless stated otherwise by the Landscape Architect. Underground guying is recommended for semi mature trees or trees within hard landscape and in public areas. Trees to be staked using 1m long x 75mm dia. round timber stakes (size of stakes to be adjusted to suit size of tree). Cross member to be installed 750mm x 25mm (larger trees will need large cross members). Locate proprietary Hessian ties on cross member to secure tree and prevent rubbing. Short stakes (<1.0m high) with biodegradable Hessian ties are recommended to encourage wind tolerance and prevent rubbing. Tree pit accessories by Green Tech or similar. Underground guying and perforated plastic irrigation/ventilation pipe to landscape architect approval.

Protective fencing/guards: Newly planted areas or individual plants are to include rabbit/deer proof fencing. Either perimeter mesh fencing or individual biodegradable plastic free spiral guards/shelters/tubes are to be installed around all planting where required. Where areas are fenced mesh to be 1m min above ground and buried 300mm below ground.

Mulching: Approved medium coarse-purp tree bark composted for at least 4 weeks. Particle size 25-75mm dia, max. 20% fines, pests and disease free and free of Methyl Bromide contamination. Clear any weeds, ensure soil is thoroughly moistened prior to applying mulch. All planting areas inc. trees, hedges and planting beds should receive an even 75mm depth of bark mulch, adjoining edge of mulch to be 15mm min. below adjacent handstanding to avoid spillage. 50mm depth of mulch is only suitable for higher quality ornamental bark (<5% fines, 3-5mm size etc.). All bark should be FSC certified. Option to use biodegradable mulch mats to control moisture, soil temperature, erosion and weeds. All trees with grass are to have a 1.5m diameter mulch circle.

Seeding and making good existing grass areas: Sweep embankments to be hydroseeded where required. After cultivating, grading and fertilizing prepare seed bed to fine, firm tilth with good crumb structure (Depth: 25 mm). Rake to a true, even surface, friable and lightly firmed but not over compacted. Remove surface stones/earth clods. Extend cultivation into existing adjacent amenity grassed areas sufficient to ensure full marring in of levels where required. Evenly distribute seeds at an application rate of 35g/m² or as per supplier recommendations. Establish good seed contact with the root zone to promote healthy, consistent growth. Lightly harrow or rake to cover seed. Thoroughly water completed seeding until germination as necessary to keep the surface damp and soil moist but not water logged.

Cutting In: Where cutting planting beds into existing grassed areas, the surrounding grass shall be protected and made good as necessary. These areas to be made good by preparing and re-seeding area. Seed mixes: John Chambers Lawn/Meadow seed or similar approved.

Turf Preparation - Lay turf with minimim possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist. Do not lift turf in frosty weather or if ground waterlogged. Arrange phased delivery timescales to avoid need for excessive stacking. Stacking height 1m (max). Do not use dried out or deteriorated turf. After cultivating, grading and fertilizing prepare seed bed to fine, firm tilth with good crumb structure (Depth: 25 mm). Rake to a true, even surface, friable and lightly firmed but not over compacted. Remove surface stones/earth clods. Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

Turf Implementation - Turf to be laid in Spring and summer within 18 hours of delivery; and Autumn and winter within 24 hours of delivery. Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry. Planks to be laid on previously laid turf. Do not work on prepared bed or a newly laid turf. Turf laid along contours with staggered, close abutted joints. Do not stretch turf. At the edges of the whole turfs to overlap line, or to true line. Remove high spots and fill hollows with fine soil to adjust levels. Digity and evenly firm as the edges. Lay the whole turfs in contact with each other, with no gaps. Use rollers. Dress turf with Sharp sand at a rate of 2kg/m² and brushed in to complete final finish. Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below. Use hardy low maintenance amenity turf suitable for use in shade (TO BS 3369).

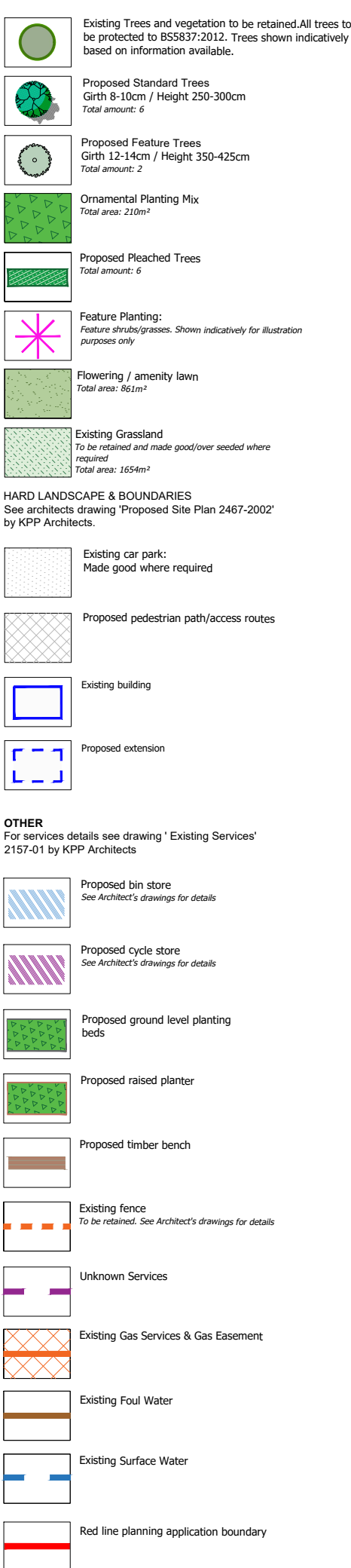
Seed Preparation and Implementation for Wildflower Seeding: No addition of nutrient to soil required. Method to suit soil type, proposed usage location and weather conditions during and after sowing. A friable firm seed bed required, weed free, alleviation of compaction to a depth of 100-200mm, sowed on a firm and fine tilth. Seed bed preparation to be conducted in dry conditions, close to the time of sowing Remove surface stones/large clods. Marry in with fine aggregate seeds where required. Evenly distribute seeds at the manufacturers recommended application rate. Establish good seed contact with the root zone to promote healthy, consistent growth. Lightly harrow or rake to cover seed. Thoroughly water completed seeding.

Year 1: Apply herbicide to all dead or falling plants to be replaced the following growing season. Maintain a weedfree bare earth area 1000mm dia minimum around individual trees and shrubs. Herbicide shall only be used where necessary and if use is required it should be a non-residual translocated herbicide and spot applied/applied with spray guard. Application and use to be in accordance with EA guidance. Prior to spraying ensure all spirals are tight to ground level and leaves within spray range are fully enclosed. Arisings: Remove. Trim all edges. Weed control: Substantially free of broad leaved weeds. Method: Application of a suitable selective herbicide. Remove any stones 25 mm in any dimension brought to the surface. Watering: To ensure establishment.

NOTE: Works to be carried out in accordance with the most up to date and current British Standards referenced within this specification



SOFT LANDSCAPE
(Planting: refer to planting schedule & Specification for planting details)



Trees Planting:

Note: All tree pits to be mulched as per specification. Where protection is required, biodegradable plastic free tree tubes or spiral guards to be provided to smaller specimens. Pleached trees to be spaced a minimum of 1500mm apart. Allow at least 50 cm behind the trees for pruning and tying in the framework. If planting close to paving or foundations, consider a root barrier to prevent damage.

NATIVE TREES					
Total No. 6					
No.	Species	Height cm	Girth cm	Size	Spec.
1	Acer campestre (Ac)	250-300	8-10	S	B, clear stem 175-200cm
3	Alnus glutinosa (Ag)	250-300	8-10	S	B, clear stem 175-200cm
2	Sorbus aucuparia (Sau)	250-300	8-10	S	B, clear stem 175-200cm

- Where paths and hard surfacing is proposed within close proximity to trees all construction is to be in accordance with BS 5837: 2012
- Root barriers / root protection measures are to be incorporated where required in accordance with guidelines where existing and proposed trees and vegetation are within 2m of proposed building or trees are in close proximity to services (details to be agreed).
- Tree and shrub planting proposed within drainage easements to be approved by local water authority. Planting to incorporate root protection measures around services or planting pits to ensure the sewer system is resistant to tree root ingress in accordance with the current Code for Design.
- Contractor shall comply with NJUG publication, volume 4 'Guidelines For The Planning, Installation And Maintenance Of Utility Services In Proximity To Trees' together with BS 5837:2012 Trees in Relation to Construction. Where conflicts arise refer to the British Standard.

Ornamental Planting Mix:

To be planted as per specification. The schedules provide an indicative but not exhaustive list.

ORNAMENTAL PLANTING MIX					
Species	Pot Size	Size cm	Spec	Density P/m ²	
Bergenia 'Bressingham White'	3L	X	C	3m ²	
Choisya ternata 'Sundance'	5-7.5L	50-60	C	3m ²	
Hebe 'Red Edge'	3L	50-60	C	3m ²	
Heuchera 'Lime Marmalade'	3L	x	C	7m ²	
Luzula sylvatica Marginata	2L	40-50	C	6m ²	
Pachysandra terminalis	2L	15-20	C	6m ²	
Polypodium vulgare	3L	X	C	4m ²	
Sedum spectabile 'Autumn Joy'	3L	X	C	4m ²	
Vinca minor	2L	X	C	6m ²	
Veronicastrum virginicum 'Album'	1-2L	X	C	3m ²	

Feature Shrubs:

To be planted as a feature/focal point within a planting bed.

FEATURE SHRUBS				
Species	Pot Size	Size cm	Spec	Density P/m ²
Anemathele lessoniana	5L	60-90	C	1
Miscanthus 'Kleine Fontane'	3L	150-180	C	1
Cornus sanguinea 'Midwinter Fire'	3L	60-80	C	1

Seed Mixes:

All grass and meadow seeding is to be carried out in accordance with specification or similar approved by landscape architect. Areas of flowering lawn are to be subject to a reduced mowing regime once established with all arisings removed from site.

Mown margins are to be incorporated where required when adjacent to footpaths and highways.

AMENITY FLOWERING LAWN
John Chambers Heritage Flowering Lawn 80% Grass Seed Wildflower Mix
Sowing rate @ 5g/m²
Low Maintenance Grass Seed, Lady's Bedstraw, Common Bird's Foot Trefoil, Bulbous Buttercup, Cat's Ear, Red Clover, White Clover, Cowslip, Common Daisy, Common Dandelion, Harebell, Autumn Hawkbit, Rough Hawkbit, Black Medick, Common Mouse-Ear, Field Pansy, Wild Pansy, Hoary Plant

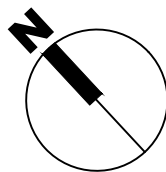
AMENITY MIX
John Chambers Grass Seed Low Maintenance
Sowing rate @ 35g/m ²
Amenity PRG, Strong Creeping Red Fescue, Chewings Fescue, Hard Fescue, Browntop Bent

Project: Bretton Park Dewsbury		Client: UK Greetings Ltd			00 Rev	19/02/24 Date	Draft for client comment Detail	BP Made	LW Chk'd	LW App'd
Title: Landscape Masterplan & Specification		Drawn: BP	Chk'd: LW	App'd LW						
Drawing Number: PWP 942 001	Revision: 00	Drawing Scale: 1:500 @ A1								

Notes:

1. Not for construction all dimensions to be confirmed on site
2. Based on Layout Drawing - PROPOSED SITE PLAN_2467-2002 by KPP Architects. For services details see drawing ' Existing Services' 2157-01 by KPP Architects
3. Refer to architects drawing for hard landscape, boundary treatments, site levels, drainage, retaining walls.
4. Build ups/footings to engineers specification.
5. Contractor to be fully satisfied with locations of services prior to excavations.
6. All existing trees to be protected to BS 5837.

Scale 1:500



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