

Hard Landscape Product Schedule v1 – October 6th, 2023

The following items are marked upon Hard Landscape GA

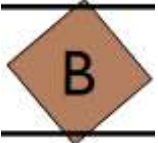
Ref / Symbol	Location & Description	Manufacturer & Ref (similar approved)	Size / Fixing	Finish	Quantity
Bollards & Chains					
 B1	Root Fixed Bollard with chain fixings Material – Cast Iron To side of loading bay / car parking Manchester Cast Iron Bollard: BX 1539 Broxap	Broxap Street Furniture Manchester Cast Iron Bollard BX1539 With Eyebolts, drilled, tapped and bonded to receive welded chain. Tel – 01782 564411	950mm above ground Root fixing 300mm below ground set in footings to 450x450x450mm with paving taken to bollard. Weight – 42kg	Main bollard – gloss black RAL9006 with ring bands picked out in white RAL 9016. Class 2 White Reflective band fitted.	
 B2	De-mountable Bollard Material – Cast Iron To forecourt main entrance. Manchester Cast Iron Bollard: BX 1539 Broxap	Broxap Street Furniture Manchester Cast Iron Bollard BX1539 Tel – 01782 564411 Removeable socket fixing with suited padlock supplied by WCBC.	950mm above ground Root fixing 300mm below ground set in footings to 450x450x450mm with paving taken to bollard. Weight – 42kg	Main bollard – gloss black RAL9006 with ring bands picked out in white RAL 9016. Class 2 White Reflective band fitted.	
 B3	Root Fixed Stainless Steel Bollard Material – Stainless Steel To side entrance to forecourt Mitred Top Sheffield Stainless Steel Bollard: BX47/MitredTop-1 Broxap	Broxap Street Furniture Mitred Top Sheffield Stainless Steel Bollard BX47 – Mitred top Tel – 01782 564411	750mm above ground Root fixing 300mm below ground set in footings to 450x450x450mm with paving taken to bollard. Bollard diameter 104mm Weight – TBC	Class 304 stainless steel Matt satin finish 1 No indentation set below top for receipt of Class 2 white reflective band.	
 B4	De-mountable Stainless Steel Bollard Material – Stainless Steel To main entrance to forecourt Mitred Top Sheffield Stainless Steel Bollard: BX47/MitredTop-1 Broxap	Broxap Street Furniture Mitred Top Sheffield Stainless Steel Bollard BX47 – Mitred top Tel – 01782 564411 Removeable socket fixing with suited padlock supplied by WCBC.	750mm above ground Root fixing 300mm below ground set in footings to 450x450x450mm with paving taken to bollard. Bollard diameter 104mm Weight – TBC	Class 304 stainless steel Matt satin finish 1 No indentation set below top for receipt of Class 2 white reflective band.	

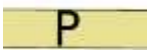
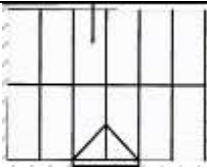
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	Solar Powered Illuminated Bollard Material – Diecast Aluminium & Polycarbonate to side garden SF-PRODUCT-DETAIL-Guarded-Solar-Light-Bollards.pdf (streetfurnishings.co.uk)	Street Furnishings Ltd Guarded Solar Light Bollard No reference given Daylight white LED bulbs Tel – 01189 404717	Height = 760mm Post diameter = 210mm Base diameter = 258mm Surface Mounted with chemical fixed hold-down bolts Weight 5.2kg	Main bollard – gloss black RAL9006	
	Separation chain Material –Steel Set between bollards to demark the loading bay area 8 X 42 Galv Chain 25M Long - F H Brundle	FH Brundle Ltd 8mm link diameter, link length 44mm – long link welded chain Ref - 05C0825 but this is a 25m long chain when that length is not required	Fixed by quick repair links to either end of bollards that are then welded. Fall of chain 250mm from horizontal at centre. Weight – 1.25kg per m	Chain painted gloss black RAL 9006	

Power Supply

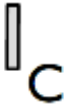
	Recessed Power Supply Material – RBK Concrete chamber and stainless steel lid. Set with in forecourt area. Pop Up Power Supplies In-ground units with power supply	Pop-up Power Supplies Ltd Ref PUPS02 5050 With standard 600mm recessed inspection cover 60mm deep in stainless steel to receive paving treatment.	Ground recessed with semi-automatic lid. Socket configuration to be agreed with Wrexham – 3 phase or single phase also to be confirmed. 100mm depth concrete base with 400mm Type 3 stone under	Recessed lid to receive tarmac and resin bound gravel surfacing to match remainder of forecourt.	
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Bespoke Items

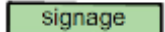
	Plinth for Brymbo Man Side entrance to forecourt Material – Yorkstone flag fixed to concrete blockstone by chemical fixing	Drings Stone Quarry source to be confirmed but plinth top stones and vertical cladding to be in matching yorkstone.	Plinth top – 4 No top stones 750 x 750 x 75mm with two edges bevelled and drip line. 4 No vertical cladding 1400 x 450 x 35mm		
	Acton Dog Plinth Side garden Material – Yorkstone flag fixed to concrete blockstone by chemical fixing	Drings Stone Quarry source to be confirmed	Measure to be confirmed		

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	Play Bench Play End of side garden Material – Softwood timber Early Years Wooden Outdoor Activity Busy Bench (costcuttersuk.com)	Costcuttersuk.com Ref DR016 Early Years Busy Bench	W1200 x D500 x H610mm (550mm worktop height) Set on resin bound aggregate surface and not fixed. Weight – 17kg Hold back galvanised straps to church boundary wall	Planed softwood timber, pressure treated free of splinters and sharp edges – 10 year treatment guarantee.	
	Timber storage cabinet To end wall in side garden Double door, lockable	Unspecified supplier Tall enough to take spade internally. Pentland roof style with roof felt.	W900 x D600 x H1200mm Freestanding Hold back galvanised straps to car park boundary wall	FSC softwood with 15 year minimum rot guarantee. Timber stained sedge green.	2
	Curved timber seats Forecourt and side garden. Timber seat 500mm deep Galvanised steel sub-frame Rough&Ready Curved Benches Streetlife	Streetlife Ref – Rough and Ready Curved Seat Back and armrests provided at intervals as set down in schedule. UK - 020 30 20 1509 enquiriesUK@streetlife.com	Max length – 3000mm Various radii, please see seating schedule but all 500mm deep Various weights Fixing – chemically fixed hold down bolts through subframe with nylon bushes to prevent catalytic corrosion to supplier's recommendations.	FSC Approved Hardwood with 30 year plus lifespan. Galvanized sub-frame with 50 year plus lifespan	4 No with different radii and lengths
	Decked stage In side garden	Joiner made deck stage 100x100mm posts set within ground. 200x50mm sub-frame Grooved deckboards as surface.	2m deep 3m at widest point 200x50mm side beams 38m grooved decking boards with anti-slip infills.	Pressure treated preservative finish of Tanobrun or similar. Allowed to weather	
	Aluminium Framed Greenhouse With double door side entrance to allow fully accessible entry. 8x6 Elite Thyme Painted Greenhouse - South West Greenhouses (swgreenhouses.co.uk)	South West Greenhouses Ref - Elite Thyme Painted Finish Greenhouse Entry from either end	8' x 6' aluminium framed greenhouse. Polycarbonate glazing 1 standard roof vent with auto vent opening fitting Low thresholds front & rear 7 slat staging to one long side	Powder coated aluminium frame – Olive colour Double door in rear as well as front end	

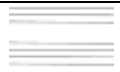
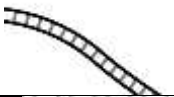
Street Furniture

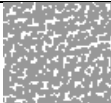
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	Cycle Stands Forecourt to east side of glazed frontage Cast aluminium framed cycle stand Emerson Cycle Stand, Street Furniture, UK (artformurban.co.uk)	Artform Urban Furniture Ltd Ref – Emerson Cycle Stand Adlington Business Park, Adlington, Cheshire, SK10 4NL t : 0800 542 8118 w : artformurban.co.uk	Height – 767mm Width – 511mm Depth - 89mm Weight – 11kg Hold down bolts and chemical fixing hidden in base of frame	Pangard II polyester powder coated	
	Litter Bins Forecourt area at main and side entrances Cast aluminium bin frame and steel base. Poe Litter Bin, Street Furniture, UK (artformurban.co.uk)	Artform Urban Furniture Ltd Ref – Poe Litter Bin Adlington Business Park, Adlington, Cheshire, SK10 4NL t : 0800 542 8118 w : artformurban.co.uk	Height – 1108mm Diameter – 733mm Capacity – 127 litres Side door opening. Hold down bolts and chemical fixing hidden in base of frame	Pangard II polyester powder coated	2
	Water Butt Green house down spout in side garden Reclaimed rustic oak barrel water butt 56 Gallon Rustic Oak Barrel Water Butts - Oak Barrel Water Butts • The Barrel Makers	The Barrel Makers Ref – 56 gallon reclaimed rustic oak barrel. The Barrel Makers, Lady Park, Gateshead Tyne and Wear NE11 0HD T – 07526 812713 Mailbox@thebarrelmakers.co.uk	56 gallon rustic oak barrel With stand With liftable lid With brass frog tap suitable for hose fixing. With rainsaver and flexible hose to fit to greenhouse downpipe	Rustic oak finish of barrel.	1

Items still under review / by others

	Reclaimed Belfast Sink Play end and adjacent to greenhouse Subject to ongoing discussion as to use and connections				
	Museum information signage Positioned either side of main entrance Subject to ongoing discussion with exhibition designer				
	Floor Mosaic Feature of play area Garden Rings - EverEdge	Separate mosaic artist to be procured by Museum. Until that point a circle shall be formed using a steel edging ring By Everedge – 01630 417120	Garden Ring 75mm deep by 1500mm diameter fixed by driven spikes set in concrete footing. Top of ring to be flush with adjacent surfacing.	Central circular void backfilled with play sand until mosaic artist is procured.	1

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	Artscreen Set on legs to extend above wall top at south end of south garden near Anderson Shelter.	Bespoke - artist designed and fabricated but laser cut steel panels proposed.	Nominal 9m long and 3m high panel (s) set on frame above wall top to act as a decorative wind break for side garden,	To be agreed. Illumination – to be agreed	
Lighting elements					
	Light column Positioned within the forecourt, set predominately at edge of soft landscaping Silka Cylindrical Street Lights DW Windsor	DW Windsor Ltd Silka light column and luminaire DW Windsor Pindar Road, Hoddesdon, Hertfordshire, EN11 0DX T: 01992 474600 E: info@dwwindsor.com W: www.dwwindsor.com	Luminaire -Silka Max 1200mm Base Column height – 4400mm Colour Temp – TBC Base Column Fixing – 1000mm root Control - TBC	Base Column Paint – TBC Decorative Shield – TBC	
	Light Column with CCTV Camera Positioned to north side of side entrance.	DW Windsor Ltd Silka light column and luminaire DW Windsor Pindar Road, Hoddesdon, Hertfordshire, EN11 0DX T: 01992 474600 E: info@dwwindsor.com W: www.dwwindsor.com	Luminaire -Silka Max 1200mm Base Column height – 4400mm Colour Temp – TBC Base Column Fixing – 1000mm root Control - TBC	Base Column Paint – TBC Decorative Shield – TBC	
CK 	Electric Control Kiosk Positioned next to landscape bed near Courtroom 2 entrance. Control lighting and recessed ground power supplies.	Vandal resistant IP55 rated as minimum GRP lockable cabinet	To be confirmed by electrical engineer	Green Base mounted to concrete foundation	
	Retractable Awning Set to west elevation of current storage building to provide summer shade and cover for stage area. RA Lux 5000: Electric Awnings with Advanced Design UK (retractableawning.co.uk)	Retractable Awnings by Gaviata RA-Lux-5000 Fully retractable cassette awning, remote controlled with wind vibration sensor for closing in high winds.	5m wide – 3m extension Fixed to west elevation of storage building after removal of strip of rough render.	Cream awning in Teflon coated, uV stable material. Minimum 5 year guarantee. Cassette and arms in powder coated.	1

Ref / Symbol	Location & Description	Manufacturer & Ref (similar approved)	Size / Fixing	Finish	Quantity
Paving and Edging Products					
	Existing Paving To delivery area to east side of building.	No actions proposed. Repair of any damage in the construction process.	Not applicable.	As existing	
	Yorkstone door threshold stone To Court 2 door to mirror that of the Court 1 door.	Drings Stone Quarry sourced to be confirmed.	To match size of Court 1 door threshold stone and 70mm thick. Laid on bitumen concrete sub-base and 30mm sand cement mortar for levelling purposes. Laid with 1:40 cross fall away from door.	Sawn finish to top, bottom and sides. Resin bound aggregate laid up to stone to create flush finish.	
	Reclaimed Yorkstone Sett As lifted from forecourt area where they are used as trims either side of dished channel. Re-used as separators to car parking bays, to trim central yorkstone in forecourt area, to edge planting beds in forecourt area and as frame to tree grilles around retained pear trees.	As reclaimed from site. Cleaned to have mortar and other fixing material removed from them. Should new setts be required to 'top-up' the reclaimed then matching ones procured and used around tree grilles.	Yorkstone setts 200x100 in plan by unknown depth. Full mortar bed with rear haunch.	As existing. Trim courses laid as single rows with curves to planting beds laid with steady gaps.	
	New Granite Sett Edging Double row of granite cubes used to edge new beds in side garden	Stone supplier for silver grey granite cubes.	100 x 100 x 100mm 100mm footing strip with haunch 75mm up rear of cube	Sawn finish and left unpolished.	
	Yorkstone Flag Paving Main concourse from front entrance through parade ground walls to front entrance of museum.	Drings Stone Quarry to be confirmed	450mm regular coursed Random lengths between 300mm to 900mm. 70mm thick. Laid on full mortar bed over a bituminous concrete base	6-sided sawn flag Laid in a stretcher bond. 10mm joints with a brushed matching joint fixing compound.	
	Resin bound aggregate – Buff Principal paving surface to forecourt and side garden of museum Resin Bound Surfacing - Coatech	Coatech 6mm Butterscotch in an impermeable resin	2-6mm golden/buff gravel in clear impermeable resin binder. Laid in 25mm layer over bitumen concrete base course	Laid to falls leading to linear drains, retained channels and rain garden.	

Ref / Symbol	Location & Description	Manufacturer & Ref (similar approved)	Size / Fixing	Finish	Quantity
	Resin Bound Aggregate – Dark Grey To paving spaces to east side of museum Resin Bound Surfacing - Coatech	Coatech 6mm Sterling Silver in an impermeable resin	2-6mm dark grey gravel in clear impermeable resin binder. Laid in 25mm layer over bitumen cement base course	Laid to falls leading to road drainage.	
	Permeable Resin Bound Aggregate – Buff To tree grilles around 4No. retained pear trees.	None specified – commercial references to be taken up to ensure ability to handle scale of work and sensitivity of working near to retained trees.	8-10mm golden/buff rounded aggregate in clear permeable binder to allow oxygen and rainwater infiltration to trees' root zones.	Laid to falls leading to linear drains and rain garden.	
	Tree Grille and Frame To 4No. retained pear trees Resi-Grille Tree Grille System - Tree Grilles & Guards Green-tech	Green-Tech Res-Grille Green-tech Rabbit Hill Business Park Great North Road Arkendale HG5 0FF Phone - 01423 369727 Email - sales@green-tech.co.uk	1200 x 1200mm with 400mm central aperture for tree trunk laid in 2000x2000mm squares with outer 400mm band backfilled with permeable buff resin bound aggregate.	Mild Steel Hop Dip Galvanised to BS EN ISO 1460:1999 Filled with permeable buff resin bound aggregate.	
	Recessed Inspection Covers To replace existing covers in forecourt, side garden and but not in parking lot.	Not specified	Varying sizes to suit chamber. 5 Tonne max load suitable for pedestrian / light traffic usage. Tray depth 50mm for resin bound aggregate areas and 70mm for yorkstone area.	To match adjacent paving area.	
	Loose Gravel To rear of planting beds in side garden and between allotment planting beds at Anderson Shelter.	Any supplier	5-7mm pea shingle golden brown in colour laid in 200mm depth to rear of ground level planting beds in side garden, laid over permeable geotextile such as Terram 1000.	Level to top of retaining timber boards.	
	Timber edging boards To form planting beds up side of Anderson Shelter and to rear of ground level beds in side garden.	Any FSC approved timber supplier. 15 year in ground guarantee.	200 x 38mm planed section softwood board cut to length. Fixed by nailing to 600mm long 50x50mm square stakes driven at corner of beds or at	Pressure treated preservative system – Tanobrun or similar with 15 year in ground guarantee.	

Ref / Symbol	Location & Description	Manufacturer & Ref (similar approved)	Size / Fixing	Finish	Quantity
			1500mm centres to rear of longer beds.		
	Sandbags To form entrance to Anderson Shelter and to act as visible retention to church wall. Hessian Sand Bag 13 X 30 Inch Approx. (Empty) From Aspli Safety	Aspli Safety Supplies or any other supplier. Hessian unfilled sandbags for filling on Site.	325 x 750mm (13"x30") unfilled dimension. Filled with clean builders sand and neck tied with durable jute string. Laid on top of each other to suite shelter.	Hessian bags.	

Gates and Fencing

	Gate G1 From bin store / café storage area to forecourt	Existing gate refurbished and reinstalled. Artwork features on gate bent back to shape / replaced.	Existing dimensions retained. New fixing points installed in museum and church boundary walls. Jockey wheels fixed to both leaves to aid ease of opening.	Gloss Black RAL 9006 exterior paint finish applied by restorer with minimum 10 year paint lifespan.	
	Gate G2 & Timber Security Fence From side garden to rear garden where air source heat pumps are positioned. Acoustic Fencing Jacksons Fencing (jacksons-fencing.co.uk)	Jackson Fencing – Jakoustic Fence SR3 rating G2 gate to match Jakoustic system and open outwards with a push bar to the rear as part of fire escape route from store building. Jackson Fencing – 0800 408 2234	2.5m high with weathered capping board I-beam posts hot-dipped galvanised posts fitted and then clad with matching timber, set 600mm into ground with 450 x 450mm hole section.	Jakcure treated timber. 25-year guaranteed life span.	
	Gate G3 & Timber Closed Boarded Fence Set to north end of side garden to separate play area from bin and café store.	Jackson Fencing Tongue and Groove vertical panel flat top fence Jackson Fencing – 0800 408 2234	1.83m high Two narrow panels to sit either side of twin leaf Hythe Courtyard Gate – 1.8m wide. Manual opening inwards into bin store area. Fence posts set set 600mm into ground with 450 x 450mm hole section.	Jakcure treated timber. 25-year guaranteed life span.	

Drainage Items

Ref / Symbol	Location & Description	Manufacturer & Ref (similar approved)	Size / Fixing	Finish	Quantity
	Linear Drain with Single Brick Slot Front forecourt with single brick slot set around edge of building where glazed atrium is set. MultiDrain PPD Brickslot ST (aco.co.uk)	ACO Multidrain PPD D400 Load Class with single brick slot MT Technical Advice: 01462 810301 technical@aco.co.uk With end traps, jetting points and connections.	200mm Drain width to aid with pluvial run off attenuation. Fixed as per manufacturer's instructions.	Galvanised steel brick slot – single set to building side of drain.	
	Linear Drain with Double Brick Slot Front forecourt set within Yorkstone paving route leading up to main entrance and across thresholds in boundary wall. MultiDrain PPD Brickslot ST (aco.co.uk)	ACO Multidrain PPD D400 Load Class with double brick slot MT Technical Advice: 01462 810301 technical@aco.co.uk With end traps, jetting points and connections.	200mm Drain width to aid with pluvial run off attenuation. Fixed as per manufacturer's instructions	Galvanised steel brick slot – double to aid water capture and reduce risk of clogging up..	
	Linear Drain with Mosaic Cover In front forecourt area as majority form of drainage covers within resin bound aggregate paving area. MultiDrain PPD (aco.co.uk)	ACO Multidrain PPD D400 Load Class with single brick slot MT Technical Advice: 01462 810301 technical@aco.co.uk With end traps, jetting points and connections.	200mm Drain width to aid with pluvial run off attenuation. Fixed as per manufacturer's instructions	Ductile Iron Mosaic lockable but removeable covers to aid jetting out of drain.	
	Retained Dished Channel and Gullies In side garden with central dished channel with twin yorkstone sett banding detail retained along current lines and level.	None as exiting.	Cleaning of gullies after works complete and prior to handover.		
	Raised Ground to Shed to Rain Gardens Raising of forecourt area to ensure fall towards rain garden	Ground raise in bitumen cement base course to bring levels up to allow fall into rain gardens,	20-40mm aggregate to act as sub-base to resin bound gravel and yorkstone.		