

Project Name				Substructure	
	Qty	Unit	Rate	£	p
<p><u>GENERAL MEASUREMENT NOTES</u></p> <p><u>The general notes below are to be read in conjunction with the drawings, specification, room data sheets and Bills of Quantities</u></p> <p>The descriptions contained within this Bill of Quantities are generally in accordance with the Standard Method of Measurement 7</p> <p>Where there may be discrepancies between the pricing schedule and the drawings and specification, as detailed within the tender documents the drawings will always take precedence</p> <p>The items and quantities contained within this Bill of Quantities are as indicated on tender drawings and should not be regarded as the definitive scope of works. It is the responsibility of the Contractor or Sub-Contractor to check and confirm the full scope of the works and to include in his pricing for all other works required to complete the works</p> <p>All sections include the facility for the Contractor to include monies in respect of works not specifically included within the pricing schedule and measurement</p> <p><u>DOCUMENT LIST</u></p> <p><u>The following list of information represents the drawings used in the measurement of the Bills of Quantities</u></p> <p>Structural Engineers Drawings</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>XXXXXXXXXXXXXXXXXXXX</p> <p>Other</p> <p>Structural NBS Specification</p>					
				To Collection £	
				0.00	

Project Name				Substructure	
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<u>ELEMENT ASSUMPTIONS</u>					
<u>The following project assumptions are to be read in conjunction with the project drawings, specification, room data sheets and Bills of Quantities</u>					
All bulk excavations and earth works to formation level have been measured in the external works including topsoil strip					
site excavation drawings shows cut/ fill to formation level of 38.800					
We have allowed for onsite filling with hardcore prior to excavation for pits; commencing level of excavations to office area is 39.650 and for appliance bay is 39.615					
For calculations, we have assumed founding strata level to be 38.800					
Drawings show isolation joints to some columns; assumed isolation joints will be required to all columns and have measured as such					
Substructure is measured up to ground floor slab; it includes structures below the ground floor slab as shown on drawings; no items, screed nor any other finish above ground floor slab level has been included in this bill.					
<u>D20 EXCAVATING AND FILLING</u>					
<u>Excavating</u>					
Pits (56nr)					
a	1.0m maximum depth	180	m3		0.00
b	2.0m maximum depth	21	m3		0.00
Trenches exceeding 300 wide					
c	1.0 m maximum depth	15	m3		0.00
Extra over excavation irrespective of depth for excavating					
soft spots; unsuitable topsoil and fill; including all earth work support; compacting; disposal of excavation material offsite; backfilling as structural engineers specification					
d		5	m3		0.00
e	next to existing services; generally		Item		0.00
f	around existing services crossing excavation		Item		0.00
<u>Extra over excavation irrespective of depth for breaking out</u>					
g	rock (Provisional Quantity)	5	m3		0.00
h	concrete (Provisional Quantity)	5	m3		0.00
To Collection £					0.00

Project Name Withheld				Substructure	
		Qty	Unit	Rate	£ p
	<u>D20 EXCAVATING AND FILLING continued ...</u>				
	<u>Extra over excavation irrespective of depth for breaking out continued ...</u>				
a	brickwork blockwork or stonework (Provisional Quantity)	5	m3		0.00
	<u>Working space allowance to excavations: backfilling with suitable material</u>				
	Pits				
b	generally	25	m2		0.00
	Trenches				
c	generally	50	m2		0.00
	<u>Earthwork support</u>				
	To faces of excavations				
d	1.0m maximum depth; distance between opposing faces not exceeding 2m	194	m2		0.00
e	1.0m maximum depth; distance between opposing faces between 2m to 4m	164	m2		0.00
f	2.0m maximum depth; distance between opposing faces between 2m to 4m	28	m2		0.00
	<u>Disposal</u>				
	Surface water				
g	generally		Item		0.00
	Excavated material				
h	off site	216	m3		0.00
i	off site (Provisional Quantity)	20	m3		0.00
	Removal of any Toxic / hazardous material located at any location on the site, including any delay or disruption of the planned works, to be deposited at a tip licensed to receive toxic/hazardous waste and including the replacement of voids with imported granular filling; Contractors risk item				
j			Item		0.00
	<u>Filling to excavations</u>				
	Hardcore filling; granular material, well graded, all pieces less than 75 thick in any direction; spread and level in 150 thick layers				
k	exceeding 250 average thick	661	m3		0.00
	Highways agency type 1 unbound mixture to Highways Agency 'Specification for highway works', clauses 801 and 803				
l	not exceeding 250 average thick	118	m3		0.00
To Collection £					0.00

Project Name Withheld				Substructure	
		Qty	Unit	Rate	£ p
<u>D20 EXCAVATING AND FILLING continued ...</u>					
<u>Filling to excavations continued ...</u>					
Subgrade improvement layer (Capping); 'Specification for highway works', Table 6/1, Class 6F1 or 6F2					
a	not exceeding 250 average thick	34	m3		0.00
b	exceeding 250 average thick	218	m3		0.00
<u>Surface treatments</u>					
Compacting					
c	bottoms of excavations	286	m2		0.00
d	hardcore	785	m2		0.00
capping; place and compact to Highways Agency Specification for highway works, Table 6/1 clause 612, 613.3613.9 and 613.10					
e		785	m2		0.00
type 1; place and compact to Highways Agency Specification for highway works, clause 802					
f		785	m2		0.00
<u>E10 MIXING / CASTING / CURING IN SITU CONCRETE</u>					
<u>GEN 2 concrete</u>					
Blinding					
g	50 thick	40	m3		0.00
<u>Mass concrete; FND2</u>					
Foundations					
h	generally	187	m3		0.00
provisional allowance for further mass concrete to founding strata; extent to be confirmed onsite					
i		56	m3		0.00
<u>Reinforced concrete; FND2</u>					
Foundations					
j	generally	36	m3		0.00
<u>Reinforced concrete; C28/35; DC-1</u>					
Foundations					
k	generally	33	m3		0.00
Lift pit walls					
l	150 to 300 thick	2	m3		0.00
Steel encasement					
m	150 thick concrete	5	m3		0.00
<u>Reinforced concrete; RC32/40</u>					
Beds					
n	not exceeding 150 thick	86	m3		0.00
o	150 to 450 thick	74	m3		0.00
To Collection £					0.00

Project Name Withheld					Substructure
		Qty	Unit	Rate	£ p
<u>E10 MIXING / CASTING / CURING IN continued ...</u>					
<u>Weak mix concrete</u>					
a	Filling hollow walls not exceeding 150 thick	2	m3		0.00
<u>Non shrink grout</u>					
b	Stanchion bases 25 thick	70	Nr		0.00
<u>E20 FORMWORK FOR IN SITU CONCRETE</u>					
<u>Basic finish formwork as NBS E20/615 and all subsequent clauses</u>					
c	Sides of foundations plain vertical; 500 to 1000 high	268	m		0.00
d	Sides of ground beams and edges of beds 250 to 500 high	191	m		0.00
e	Recess 150 x 70 x 1132 recess in slab	1	Nr		0.00
f	Walls vertical	7	m2		0.00
g	25 x 25 chamfer to exposed edge of wall	10	m		0.00
<u>Suitable finish to surfaces to receive asphalt tanking as NBS E20/615 and all subsequent clauses</u>					
h	Sides of foundation plain vertical; 500 - 1000	15	m		0.00
i	Walls vertical	10	m2		0.00
j	Kicker 150 high	10	m		0.00
<u>E30 REINFORCEMENT FOR IN SITU CONCRETE</u>					
<u>Reinforcement to BS4449 & EN10080</u>					
k	Bar B16; 650 lap length	3.07	T		0.00
l	B12; 480 lap length	0.36	T		0.00
m	Mesh; allow for 400 lap length B785; to trench fill; with and including 500 long anchorage into pad foundation	119	m2		0.00
n	A192 to ground bearing slabs	665	m2		0.00
o	A393 to ground bearing slabs	416	m2		0.00
p	D49; to column bases	36	m2		0.00
To Collection £					0.00

Project Name Withheld				Substructure	
		Qty	Unit	Rate	£ p
<u>E30 REINFORCEMENT FOR IN SITU continued ...</u>					
<u>Reinforcement to BS4449 & EN10080 continued ...</u>					
a	Mesh/ Bar 50kg/m to slab edge thickening	9.53	T		0.00
<u>E40 DESIGNED JOINTS FOR IN SITU CONCRETE</u>					
<u>Joints as shown on drawing</u>					
<u>XXXXXXXXXXXXXXXXXXXX</u>					
b	10 wide Isolation joint between edge of ground slab and column encasement; complete with compressible filler board with joint sealant; allow for anti crack bars external column; 1H12 anti crack bar per column	50	Nr		0.00
c	internal column; 4H12 anti crack bar per column	20	Nr		0.00
d	20 wide Isolation joint between edge of ground slab and lift walls as drawing generally	11	m		0.00
e	10 wide x 30 deep surface groove; filled with joint sealant saw cut joint	144	m		0.00
f	20 wide joint with compressible filler board and joint sealant; R16 x 650 dowel bar at 200 centres; bar debonded at one end with proprietary sleeve movement joint; depth to suit slab thickness	35	m		0.00
g	change in level movement joint; depth to suit slab thickness	11	m		0.00
h	Day joint; allow for scabbling face of existing concrete prior to second pour depth to suit slab depth thickness	57	m		0.00
i	Movement joint detail to drainage channel 15 thick servcised Kork-pak sealed with 15 x 15 deep Expandite Colpor 200; R20 Dowel bars (450 x 150) at 300 centres; half of the bar to be debonded; dowel cap end filled with 25 thick compressible filler	11	m		0.00
j	Anti-crack bar no details provided; length to suit	5	Nr		0.00
<u>Hydrophilic water stops; ADCOR 500S waterbar or similar approved</u>					
k	Water stops generally	9	m		0.00
To Collection £					0.00

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	<u>E41 WORKED FINISHES/CUTTING TO IN SITU CONCRETE</u>				
	<u>Power float finish as NBS E41/120 and all subsequent clauses</u>				
a	Finish generally	754	m2		0.00
	<u>Trowelled finish as NBS E41/125 and all subsequent clauses</u>				
b	Finish generally	31	m2		0.00
	<u>E42 ACCESSORIES CAST INTO IN SITU CONCRETE</u>				
	<u>Holding down systems; cast into foundation</u>				
	Fix only of holding down bolts, nuts and washers (supply measured elsewhere)				
c	generally	70	Nr		0.00
	<u>Corner guards to exposed corners of appliance slab and external slab</u>				
	Stainless steel cold formed angle section welded to face in contact with concrete; contractor's choice of temporary fixing to shutter; 60 x 60 x 8 RSA stainless steel with 150 long tang at 450 centres				
d	generally	64	m		0.00
e	20 thick stainless steel plate; bolted on one side	32	m		0.00
f	10 x 20 deep stainless steel flat bar welded to angle	64	m		0.00
	<u>Drainage channel</u>				
	Drainage channel with grating set 5mm below slab level; channel with and including minimum 200 bed and haunch (ST4) with 1 layer of A193 mesh				
g	generally	5	m		0.00
	<u>F10 BRICK / BLOCK WALLING</u>				
	<u>Dense masonry blockwork; Aggregate Industries Masterdenz; in cement: lime: sand mortar compressive class designation M6; colour to match block as NBS F10.1204 and all subsequent clauses</u>				
h	Walls 100 thick	60	m2		0.00
To Collection £					0.00

Project Name				Substructure	
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	<u>F10 BRICK / BLOCK WALLING continued ...</u>				
	<u>Clay facing brickwork laid in half lap stretcher bond; lbstock Brunel Smooth Blue Solid, A5050A; in cement: lime: sand mortar compressive class designation M6; light grey colour with bucket handle joint as NBS F10.1205 and all subsequent clauses</u>				
a	Walls 102.5 thick	52	m2		0.00
	<u>F30 ACCESSORIES / SUNDRY ITEMS FOR BRICK / BLOCK / STONE WALLING</u>				
	<u>Forming Cavities</u>				
	In hollow walls with stainless steel wall ties at 600 horizontal and 450 vertical centres; full fill cavity insulation				
b	approximately 60 wide	26	m2		0.00
	<u>Damp proof courses</u>				
	Approved impermeable damp proof membrane as F30.1307				
c	exceeding 225 wide	113	m2		0.00
	<u>Weep holes</u>				
	Approved weep holes				
d	assumed 450 centres	337	nr		0.00
	<u>Precast threshold cills</u>				
	Incorporating threshold cills				
e	cills measured elsewhere		Item		Included
	<u>J30 LIQUID APPLIED TANKING/DAMP PROOF MEMBRANES</u>				
	<u>Grace Protection as shown on drawing</u> <u>XXXXXXXXXXXXXXXXXXXX</u>				
	Tanking and damp proofing				
f	over 300 wide	38	m2		0.00
	<u>Bituthene MRX as shown on drawing</u> <u>XXXXXXXXXXXXXXXXXXXX</u>				
	Tanking and damp proofing				
g	over 300 wide	38	m2		0.00
	<u>J40 FLEXIBLE SHEET TANKING / DAMP PROOF MEMBRANES</u>				
	<u>2000 gauge damp proof membrane; lapped and sealed with dpc</u>				
	Tanking and damp proofing				
h	vertical	86	m2		0.00
To Collection £					0.00

Project Name				Substructure	
		Qty	Unit	Rate	£ p
	<u>J40 FLEXIBLE SHEET TANKING / DAMP PROOF MEMBRANES continued ...</u>				
a	<u>2000 gauge damp proof membrane; lapped and sealed with dpc continued ...</u> Tanking and damp proofing continued ... horizontal	785	m2		0.00
b	<u>500 gauge separation membrane above insulation, joints taped, taken up slab edge and sealed at junction with horizontal DPM</u> Tanking and damp proofing horizontal	785	m2		0.00
	<u>P10 SUNDRY INSULATION / PROOFING WORK / FIRE STOPS</u>				
c	<u>EPS perimeter Insulation</u> Vertical 25 thick	8	m2		0.00
d	<u>EPS Insulation to achieve 0.18W/m2K; Yelofoam X7Le manufactured by Celecta or acceptable equivalent; 250kPA compressive strength as NBS P10.1202 and all subsequent clauses</u> Horizontal 100 thick	785	m2		0.00
e	<u>OTHER ITEMS</u> <u>The contractor is to detail below any items not specifically identified above that he considers should be shown and included in his tender</u>		Item		0.00
To Collection £					0.00

Project Name				Substructure	
		Qty	Unit	Rate	£ p
Collection					
	Total from Page 1A / 1				0.00
	Total from Page 1A / 2				0.00
	Total from Page 1A / 3				0.00
	Total from Page 1A / 4				0.00
	Total from Page 1A / 5				0.00
	Total from Page 1A / 6				0.00
	Total from Page 1A / 7				0.00
	Total from Page 1A / 8				0.00
	Total from Page 1A / 9				0.00
To Summary £					0.00

Project Name Withheld					
		Qty	Unit	Rate	£ p
	Summary				
	Substructure Page 1A / 10				0.00
Total for Bill £					0.00