

Elemental Order of Cost Estimate

Preferred Option (3)

for and on behalf of:

London Borough of Southwark
Housing and Modernisation
Third Floor, Hub 3
160 Tooley Street
London
SE1 2QH

Date 25 November 2019
K180809/E8/0263/JCH/G3

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Elemental Order of Cost Estimate

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1. Executive Summary

1.1 This report has been prepared to advise the updated estate refurbishment costs including our estimated cost of structural strengthening works as detailed in Arup's report dated 24th October 2019.

1.2 In summary, the Arup report identifies the following structural repairs:

- Demolition and reconstruction of existing communal stair and lift core serving the residential dwellings
- Construction of rooftop steel frame to support strengthening structure
- Construction of new steel structure to provide support to existing panels and floors from floor 8 to roof level in the event of partial collapse
- Construction of new "jacket" to strengthen shear wall from Ground to 14th floor
- Construction of new frame to support / strengthen wall between 1 bed flats from Ground to 4th Floor
- Removal of existing floor screeds to all levels and replacement with new reinforced structural screed
- Construction of new foundation slab to support new structures and strengthen existing footings
- Replacement of existing external cladding system

1.3 The following works are modelled in this estimate:

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- Structural reinforcement works to include all stripping out and reinstatement of affected areas including floors, ceilings, sanitaryware, mechanical and electrical installations, fixtures and fittings etc.
- Permanent fire stopping.
- Making good cracks / gaps between external wall panels and intermediate cross-wall panels.
- Heating.
- Communal Satellite TV System and Broadband.
- Renewal of all service pipes, waterproofing to WC and bathroom floors, renewal of existing soil stacks and renewal of communal cold water tanks. ~
- Improvements to ventilation to stairways and landings where cold bridging, condensation and ingress of rainwater causing trip/slip hazards. ~
- Renew existing lifts. ~
- Provide improved insulation to the flats and (communal areas ~).
- Repair/renew key building components such as roofs and windows. ~
- Improve illumination to stairways and communal areas. ~
- Improve water pressure to upper floors (booster pumps). ~

1.4 Subsequent to the first iteration of this estimate, Arup have undertaken further investigations and devised a more extensive solution for stabilising the existing structures to allow continued safe occupation. A consequence of the increased scope of the remedial structural works is that the works identified ~ above are subsumed into the strengthening works and can no longer be considered optional. Options 1 and 2 that were previously identified cannot now be considered as distinctly separate solutions.

1.5 The estimated costs cover works to the following properties:

LEDBURY ESTATE						
BLOCK	CONSTRUCTION YEAR	NO. STOREYS	NO. UNITS	ACCOMMODATION	GIA	STRENGTHENING WORKS
Sarnsfield House	1969	14 storey tower	56	10nr 1B Flats 10nr 3B Flats 36nr 2B Flats	4,522	Works as set out in Arup Report: Demolish and rebuild communal access core (steel framed construction assumed). Rooftop steel frame and suspension system to support floors 8-14 Reinforced concrete raft foundation to support jacketed shear wall from floors G-4 Structural steel frame to support separating wall between 1 bed flats G-4th floor
Skenfrith House	1969	14 storey tower	56	28nr 1B Flats 28nr 3B Flats	4,522	Works as set out in Arup Report: Demolish and rebuild communal access core (steel framed construction assumed). Rooftop steel frame and suspension system to support floors 8-14 Reinforced concrete raft foundation to support jacketed shear wall from floors G-4 Structural steel frame to support separating wall between 1 bed flats G-4th floor
Peterchurch House	1970	14 storey tower	56	28nr 1B Flats 28nr 3B Flats	4,522	Works as set out in Arup Report: Demolish and rebuild communal access core (steel framed construction assumed). Rooftop steel frame and suspension system to support floors 8-14 Reinforced concrete raft foundation to support jacketed shear wall from floors G-4 Structural steel frame to support separating wall between 1 bed flats G-4th floor
Bromyard House	1968	14 storey tower	56	10nr 1B Flats 10nr 3B Flats 36nr 2B Flats	4,522	Works as set out in Arup Report: Demolish and rebuild communal access core (steel framed construction assumed). Rooftop steel frame and suspension system to support floors 8-14 Reinforced concrete raft foundation to support jacketed shear wall from floors G-4 Structural steel frame to support separating wall between 1 bed flats G-4th floor
			224		18,088	m ²

Accommodation per block		
1B Flat	76	Tenanted
2B Flat	72	Leasehold
3B Flat	76	
	224	

1.6 The estimate generates the following headline costs:

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	Total Cost	Cost £/m ² GIA	£/dwelling
Structural and associated Essential Works	85,158,419.50	4,708	380,172
Heating Works *1	4,320,000.00	239	19,286
Broadband Installation *2	235,000.00	13	1,049
TOTAL COST	89,713,419.50		

*1 - Lump sum for Heating Works. These costs should be taken as indicative; the project is at feasibility stage and there is limited design information available.

*2 - Lump sum allowance for broadband installation; indicative costs are used for the purpose of this exercise. They will vary according to the specification selected.

*3 - Landscaping works lump sum allowance assumes a mix of hard and soft landscaping the design of which is to be determined.

1.7 **Tender inflation:** Costs are current at 4Q2019. No adjustment has been made for inflation to any potential future tender date

1.8 **Construction inflation:** Is excluded from the estimated costs above

2. Essential Works - Ledbury High Rise Blocks

				Preferred Option (3)							
				Sarnsfield House		Skenfrith House		Peterchurch House		Bromyard House	
Item	Unit	Rate	Quant	(£)	Quant	(£)	Quant	(£)	Quant	(£)	
1	Strip off existing wall paper within flats	m ²	1,50	12,199	18,298.50	11,598	17,397.00	12,199	18,298.50	11,598	17,397.00
2	Strip off existing ceiling paper within flats	m ²	1.50	3,808	5,712.00	3,808	5,712.00	3,808	5,712.00	3,808	5,712.00
3	Strip out existing tiles to kitchen, WC and bathroom walls affected by the strengthening works	m ²	5.00	1,805	9,025.00	1,805	9,025.00	1,805	9,025.00	1,805	9,025.00
4	Allowance for removing kitchens	item	11,200.00	1	11,200.00	1	11,200.00	1	11,200.00	1	11,200.00
5	Allowance for removing bathroom appliances	item	8,400.00	1	8,400.00	1	8,400.00	1	8,400.00	1	8,400.00
6	Strip out existing carpet/vinyl within flats, including skirtings	m ²	1.00	3,808	3,808.00	3,808	3,808.00	3,808	3,808.00	3,808	3,808.00
7	Screed removal within flats	m ²	100.00	3,808	380,800.00	3,808	380,800.00	3,808	380,800.00	3,808	380,800.00
8	Allowance for asbestos removal. (Allowance £7.5K per property)	item	420,000.00	1	420,000.00	1	420,000.00	1.00	420,000.00	1	420,000.00
9	Allowance for re-checking fire stopping. Assumed all fire stopping measures have been undertaken	item	1,000.00	1	1,000.00	1	1,000.00	1	1,000.00	1	1,000.00
10	Fire stopping to vertical and horizontal joints	m	25.00	2,996	74,900.00	2,996	74,900.00	2,996	74,900.00	2,996	74,900.00
11	Allowance for access covers to fire stopping of vertical and horizontal joints to avoid intrusive periodic checks.	m	25.00	2,240	56,000.00	2,240	56,000.00	2,240	56,000.00	2,240	56,000.00
12	Allowance for fire stopping radiator pipework	item	10,000.00	1	10,000.00	1	10,000.00	1	10,000.00	1	10,000.00
13	Removal of existing partition wall between bedroom, protected hall and new partition wall. Assumed 50% of properties.	m ²	80.00	197	15,760.00	197	15,760.00	197	15,760.00	197	15,760.00
14	Allowance for fire stopping to cables through lounge wall	item	3,000.00	1	3,000.00	1	3,000.00	1	3,000.00	1	3,000.00
15	Allowance for fire stopping to vent grille into protected hall	item	6,000.00	1	6,000.00	1	6,000.00	1	6,000.00	1	6,000.00
16	Replace existing door to WC with FD20 door	nr	600.00	56	33,600.00	56	33,600.00	56	33,600.00	56	33,600.00
17	Allowance for fire stopping floor penetration of redundant gas pipe	item	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00
18	Fire stopping gap between wall and floor to wall between lounge and kitchen.	m	25.00	202	5,050.00	202	5,050.00	202	5,050.00	202	5,050.00
19	Fire stopping gap between wall and floor in bathrooms	m	25.00	95	2,375.00	95	2,375.00	95	2,375.00	95	2,375.00
20	Allowance for fire stopping incoming supply cables to electric meter (located in internal cupboard)	item	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00
21	Allowance for sealing riser doors within flats (Assumed 1 per property).	item	28,000.00	1	28,000.00	1	28,000.00	1	28,000.00	1	28,000.00
22	Carefully remove and dispose existing external cladding	m ²	50.00	2,100	105,000.00	2,100	105,000.00	2,100	105,000.00	2,100	105,000.00
23	Demolish existing communal stair and lift core	m ³	100.00	1,890	189,000.00	1,890	189,000.00	1,890	189,000.00	1,890	189,000.00
24	Construct new communal stair and lift core	m ²	1,250.00	750	937,500.00	750	937,500.00	750	937,500.00	750	937,500.00
24a	New lifts	nr	125,000.00	2	250,000.00	2	250,000.00	2	250,000.00	2	250,000.00
25	Temporary propping of existing residential blocks	nr	5,620,000.00	1	5,620,000.00	1	5,620,000.00	1	5,620,000.00	1	5,620,000.00
26	Exposed structural frame on roof (galvanised and painted)	t	3,600.00	155	558,000.00	155	558,000.00	155	558,000.00	155	558,000.00
27	Suspended frame, picking up floors 8-14 (fire protected, max 1.2m lengths)	t	3,300.00	195	643,500.00	195	643,500.00	195	643,500.00	195	643,500.00
28	Cross walls floors G-4	t	3,300.00	20	66,000.00	20	66,000.00	20	66,000.00	20	66,000.00
29	Diamond cut holes through existing floors for steel hangers	nr	250.00	1,230	307,500.00	1,230	307,500.00	1,230	307,500.00	1,230	307,500.00
30	Shear wall	item	86,000.00	1	86,000.00	1	86,000.00	1	86,000.00	1	86,000.00
30a	Diamond cut through slabs for new shear wall	nr	7,500.00	15	112,500.00	15	112,500.00	15	112,500.00	15	112,500.00
31	Reinforced concrete screed	item	375,000.00	1	375,000.00	1	375,000.00	1	375,000.00	1	375,000.00
31a	Basement excavation of mass fill	m ³	150.00	787	117,978.64	787	117,978.64	787	117,978.64	787	117,978.64
32	Reinforced concrete foundation 1.5m thick	item	155,000.00	1	155,000.00	1	155,000.00	1	155,000.00	1	155,000.00
32a	Install new ground floor slab (beam and block)	m ²	100.00	280	28,000.00	280	28,000.00	280	28,000.00	280	28,000.00
33	New external cladding (allowance for insulated panellised system)	m ²	600.00	1,204	722,400.00	1,204	722,400.00	1,204	722,400.00	1,204	722,400.00
34	Remove and re-install HIUs to allow installation of strengthening.	item	14,000.00	1	14,000.00	1	14,000.00	1	14,000.00	1	14,000.00
35	Plasterboard lining to structural walls, including skim plaster and decoration.	m ²	30.00	392	11,760.00	577	17,310.00	577	17,310.00	392	11,760.00
36	Plaster and decoration of non-structural walls.	m ²	25.00	7,150	178,750.00	7,227	180,675.00	7,227	180,675.00	7,150	178,750.00
37	Plasterboard to ceiling on mf grid	m ²	45.00	1,204	54,180.00	1,204	54,180.00	1,204	54,180.00	1,204	54,180.00
38	New vinyl flooring to wet rooms including covered skirtings	m ²	45.00	728	32,760.00	728	32,760.00	728	32,760.00	728	32,760.00
39	New carpet throughout remaining rooms	m ²	30.00	476	14,280.00	476	14,280.00	476	14,280.00	476	14,280.00
40	Skirtings rooms with carpet.	m	12.00	4,106	49,272.00	3,900	46,800.00	3,900	46,800.00	4,106	49,272.00
41	New ceramic tiles to kitchen, WC and bathroom walls affected by the strengthening works.	m ²	35.00	1,805	63,175.00	1,805	63,175.00	1,805	63,175.00	1,805	63,175.00
42	Install new LD2 system to 1B flats	nr	900.00	10	9,000.00	28	25,200.00	28	25,200.00	10	9,000.00
43	Install new LD2 system to 2B flats	nr	1,100.00	36	39,600.00	0	-	0	-	36	39,600.00
44	Install new LD2 system to 3B flats	nr	1,250.00	10	12,500.00	28	35,000.00	28	35,000.00	10	12,500.00
45	New extractor fans in kitchens and bathrooms	nr	1,100.00	56	61,600.00	56	61,600.00	56	61,600.00	56	61,600.00
46	Range of kitchen fittings and worktops to 1B flats.	nr	2,500.00	10	25,000.00	28	70,000.00	28	70,000.00	10	25,000.00
47	Range of kitchen fittings and worktops to 2B flats.	nr	2,700.00	36	97,200.00	0	-	0	-	36	97,200.00
48	Range of kitchen fittings and worktops to 3B flats.	nr	2,900.00	10	29,000.00	28	81,200.00	28	81,200.00	10	29,000.00
49	New door to kitchen (Excluded)	nr	700.00	-	-	-	-	-	-	-	-
50	New access door to protected lobby. Excluding WC and bathroom doors	nr	700.00	224	156,800.00	224	156,800.00	224	156,800.00	224	156,800.00
51	Range of sanitary appliances comprising close coupled wc, pedestal whb, taps and bath (including bath panel and taps).	nr	2,000.00	56	112,000.00	56	112,000.00	56	112,000.00	56	112,000.00
52	Allowance for PV panels. Assumed 80% of the roof area to Sarnsfield House and Peterchurch House and 50% of the roof area to Skenfrith House and Bromyard House (Pro-rata per block)	item	335,000.00	-	-	-	-	-	-	-	-
53	Communal satellite system. Assumed 1 point per property	item	31,000.00	1	31,000.00	1	31,000.00	1	31,000.00	1	31,000.00
54	Enabling works - electrical installations within dwellings; disconnect and remove existing accessories, remove existing wiring and remove all existing containment as necessary	nr	520.00	56	29,120.00	56	29,120.00	56	29,120.00	56	29,120.00
55	Enabling works - Door entry system including identify, isolate and disconnect door entry connections at distribution terminal, disconnect and remove individual hand sets, remove all existing wiring as necessary and remove all cable containment as necessary per floor (retain existing equipment for reuse).	nr	210.00	56	11,760.00	56	11,760.00	56	11,760.00	56	11,760.00
56	Enabling works - Communal electrics including removal of main and sub distribution boards, power supplies to floors, lighting supplies to floors, rising mains and lateral mains	item	10,000.00	1	10,000.00	1	10,000.00	1	10,000.00	1	10,000.00
57	Sprinkler installation	m ²	60.00	4,522	271,320.00	4,522	271,320.00	4,522	271,320.00	4,522	271,320.00
58	Full rewire to all properties	nr	3,000.00	56	168,000.00	56	168,000.00	56	168,000.00	56	168,000.00
59	Landlord system and switchroom works including Periodic Test, new Ryefield board, lateral mains cabling and rising main inclusive replacing old duct covers	item	100,000.00	-	-	-	-	-	-	-	-
60	New door entry system	nr	1,200.00	56	67,200.00	56	67,200.00	56	67,200.00	56	67,200.00
61	Improve ventilation to stairways and landing where cold bridging, condensation and weather causing slip hazards. Improvement to be met by replacing the windows to communal areas. This includes a louvre installation to the top of the staircore where a window has been removed to all blocks.	m ²	550.00	-	-	-	-	-	-	-	-
62	Allowance for soil stacks	item	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00
63	Allowance for reducing existing ventilation system to lobbies	item	10,000.00	1	10,000.00	1	10,000.00	1	10,000.00	1	10,000.00
64	New lifts (included in new core)	nr	0.00	-	-	-	-	-	-	-	-
65	Internal wall insulation board to inner face of external walls within flats. Including skim plaster and decoration finish on insulation board.	m ²	75.00	4,891	366,825.00	4,891	366,825.00	4,891	366,825.00	4,891	366,825.00
66	Allowance for removal of all windows	item	45,000.00	1	45,000.00	1	45,000.00	1	45,000.00	1	45,000.00
67	New double glazed PVCu windows. Assumed 16 m ² per property.	m ²	550.00	896	492,800.00	896	492,800.00	896	492,800.00	896	492,800.00
68	Flat roof replacement, including temporary disconnection of services and strip off existing coverings. Including new man-safe system.	m ²	270.00	385	103,950.00	385	103,950.00	385	103,950.00	385	103,950.00
69	Install new lighting system to stairways	item	15,000.00	-	-	-	-	-	-	-	-
70	Allowance for external lighting	item	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00	1	5,000.00

71	Allowance for water pumps	m ²	10.00	4,522	45,220.00	4,522	45,220.00	4,522	45,220.00	4,522	45,220.00
72	New Front Entrance Door	nr	1,300.00	56	72,800.00	56	72,800.00	56	72,800.00	56	72,800.00
73	New panel over Front Entrance Door, including fire stopping low voltage cables.	nr	500.00	56	28,000.00	56	28,000.00	56	28,000.00	56	28,000.00
74	New panel below window in access lobby, including testing of existing.	nr	800.00		-		-		-		-
75	Doors in communal areas	nr	1,000.00		-		-		-		-
76	Remove security grilles from flat front entrance doors. (Allowed 3 doors per block).	nr	100.00	3	300.00	3	300.00	3	300.00	3	300.00
77	FD30 doors to bin chutes	nr	1,000.00		-		-		-		-
78	Fire and safety signage	nr	500.00	1	500.00	1	500.00	1	500.00	1	500.00
79	Remove existing electrical riser panels and block up	item	7,500.00		-		-		-		-
80	Ryefield board cupboard door stop cover	item	500.00		-		-		-		-
81	Install new refuse disposal system (single chute).	item	150,000.00		-		-		-		-
82	Allowance for improvements to the refuse areas. An allowance of £15K has been made per block. Please note that this is just an allowance, as the scope of works required is not known.	item	15,000.00		-		-		-		-
83	Strip off existing wall paper in communal areas	m ²	1.50		-		-		-		-
84	Strip off existing ceiling paper in communal areas	m ²	1.50		-		-		-		-
85	Strip out existing vinyl to communal area, including skirtings and excluding stairs and landings.	m ²	1.00		-		-		-		-
86	New vinyl flooring to communal area. Including skirtings and excluding stairs and landings.	m ²	45.00		-		-		-		-
87	New vinyl flooring to stairs and landings.	item	13,000.00		-		-		-		-
88	Plaster and emulsion paint on walls to communal area, including skim plaster and decoration.	m ²	25.00		-		-		-		-
89	Plasterboard to ceiling on mf to communal area including skim plaster and decoration.	m ²	45.00		-		-		-		-
90	New main entrance door	nr	2,500.00		-		-		-		-
91	Allowance for decoration only to stairs	item	25,000.00		-		-		-		-
Building Works Estimate					14,100,979.14		14,104,180.64		14,105,082.14		14,100,077.64
Inflation adjustment to costs (3Q 2018 - 4Q 2019)				0.05	141,881.27		142,031.34		142,073.60		141,839.02
Total block inflation adjustment											567,825.23

TOTAL BUILDING WORKS ESTIMATE

TOTAL BUILDING WORKS ESTIMATE					56,978,144.79
Preliminaries					11,416,423.94
Sub-total					68,394,568.73
Main Contractor's Overheads and Profit	%	8.00			5,471,565.50
Sub-total					73,866,134.23
Main contractor's design fee	%	0.25			184,665.34
Sub-total					74,050,799.56
Contingency	%	15.00			11,107,619.93
Sub-total					85,158,419.50
Tender inflation	%	Excl.			Excl.
Sub-total					85,158,419.50
Construction inflation	%	Excl.			Excl.
COST LIMIT					85,158,419.50
Cost £/m ² Residential GIFA					4,708
Cost £/dwelling					380,172

3. Heating System

				Preferred Option (3)							
				Sarnsfield House		Skenfrith House		Peterchurch House		Bromyard House	
Item	Unit	Rate		Quantity	(£)	Quantity	(£)	Quantity	(£)	Quantity	(£)
1	Allowance to remove all old boilers and make good (scaffold required)	item	14,000.00	1	14,000.00	1	14,000.00	1	14,000.00	1	14,000.00
2	Energy centre (Pro-rata per block)	item	1,300,000.00	0.25	325,000.00	0.25	325,000.00	0.25	325,000.00	0.25	325,000.00
3	Allowance for communal system as per existing with permanent boilers (Pro-rata per block)	item	480,000.00	0.25	120,000.00	0.25	120,000.00	0.25	120,000.00	0.25	120,000.00
4	Enabling works. Heating installation including the removal of the heating circuit, associated radiators and hot and cold water.	nr	2,550.00	56	142,800.00	56	142,800.00	56	142,800.00	56	142,800.00
5	Heating system	m ²	50.00	4,522	226,100.00	4,522	226,100.00	4,522	226,100.00	4,522	226,100.00
Building Works Estimate					827,900.00		827,900.00		827,900.00		827,900.00
Inflation adjustment to costs (3Q 2018 - 4Q 2019)					38,807.81		38,807.81		38,807.81		38,807.81
Total block inflation adjustment											155,231.25
TOTAL BUILDING WORKS ESTIMATE											3,466,831.25
	Preliminaries	%	-								-
	Sub-total										3,466,831.25
	Main Contractor's Overheads and Profit	%	8.00								277,346.50
	Sub-total										3,744,177.75
	Main contractor's design fee	%	0.25								9,360.44
	Sub-total										3,753,538.19
	Contingency	%	15.00								563,030.73
	Sub-total										4,316,568.92
	Tender inflation	%	Excl.								Excl.
	Sub-total										4,316,568.92
	Construction inflation	%	Excl.								Excl.
	COST LIMIT										4,316,568.92
	SAY										4,320,000.00
	Cost £/m ² Residential GIFA										239
	Cost £/dwelling										19,270

4. Broadband Installation

				Preferred Option (3)							
				Sarnsfield House		Skenfrith House		Peterchurch House		Bromyard House	
				Quant	(£)	Quant	(£)	Quant	(£)	Quant	(£)
1	Broadband installation	m ²	10.00	4,522	45,220.00	4,522	45,220.00	4,522	45,220.00	4,522	45,220.00
Building Works Estimate					45,220.00		45,220.00		45,220.00		45,220.00
Inflation adjustment to costs (3Q 2018 - 4Q 2019)			0.05		2,119.69		2,119.69		2,119.69		2,119.69
Total block inflation adjustment											8,478.75
TOTAL BUILDING WORKS ESTIMATE											189,358.75
	Preliminaries	%	-								-
Sub-total											189,358.75
	Main Contractor's Overheads and Profit	%	8.00								15,148.70
Sub-total											204,507.45
	Main contractor's design fee	%	0.25								511.27
Sub-total											205,018.72
	Contingency	%	15.00								30,752.81
Sub-total											235,771.53
	Tender inflation	%	Excl.								Excl.
Sub-total											235,771.53
	Construction inflation	%	Excl.								Excl.
COST LIMIT											235,771.53
SAY											235,000.00
	Cost £/m ² Residential GIFA										13
	Cost £/dwelling										1,053

5. Preliminaries				Preferred Option (3)	
Programme Duration (Weeks)				410	
Item	Unit	Rate	Quantity	(£)	
Preliminaries – Site Overheads					
A Management / Site Staff					
1	Contracts Manager	Week	1,950.00	410.00	799,500.00
2	Forward Surveys and Colour Choices	Week	25.00		-
3	Agent	Week	1,950.00	410.00	799,500.00
4	Quantity Surveyor	Week	1,750.00	205.00	358,750.00
5	Site Supervisor	Week	1,750.00		-
6	General Foreman	Week	1,250.00	410.00	512,500.00
7	Finishing Foreman	Week	1,300.00	205.00	266,500.00
8	General Labourer	Week	1,000.00	1,640.00	1,640,000.00
9	Resident Liaison Officer	Week	350.00	410.00	143,500.00
10	Commissioning Engineer	Week	1,750.00	0.00	-
11	Site Expenses	Week	1,000.00	410.00	410,000.00
B Health and Safety					
1	Health & Safety Officer (visiting)	Week	150.00	410.00	61,500.00
2	Health & Safety Officer Signage	Week	100.00	410.00	41,000.00
3	Health and Safety consumables	Week	50.00	410.00	20,500.00
C Parking Costs					
1	Per vehicle per week	Week	25.00	1,640.00	41,000.00
D Site Set Up / Compound					
1	Hire of Contractors office 32' (inc furniture)	Week	45.00	410.00	18,450.00
2	Hire of canteen / drying room	Week	35.00	410.00	14,350.00
3	Hire of Meeting Room (inc furniture)	Week	50.00	410.00	20,500.00
4	Hire of storage container 20' (4nr)	Week	15.00	1,640.00	24,600.00
5	Transportation (delivery & collection per unit)	Item	200.00	7.00	1,400.00
6	Welfare facilities / consumables / stationary	Week	40.00	410.00	16,400.00
7	Site & Contract Signage	item	500.00	1.00	500.00
D Site Set Up / Compound (Cont'd)					
15	Welfare facilities / consumables / stationary	Week	150.00	410.00	61,500.00
16	Hire Sanitary Unit 3+1 (4 nr)	Week	100.00	1,640.00	164,000.00
E Office equipment					
1	Photocopier	Week	10.00	410.00	4,100.00
2	Computer	Week	5.00	410.00	2,050.00
3	Printer	Week	5.00	410.00	2,050.00
4	Site stationary	Week	5.00	410.00	2,050.00
F Security					
1	Plywood hoarding price per metre run per week	Week	1.50	123,000.00	184,500.00
2	Pair of timber gates to hoarding	Week	150.00	1.00	150.00
3	Decorate timber hoarding (colour to be agreed)	LM	5.00	300.00	1,500.00
4	Erect and dismantle timber hoarding per metre run	LM	5.00	300.00	1,500.00
5	Mesh fencing price per metre per week	Week	2.00	196,800.00	393,600.00
6	Erect and dismantle per metre run	LM	10.00	480.00	4,800.00
7	Planked footway price per metre run per week	Week	1.00	10,250.00	10,250.00
8	Erect and dismantle per metre run	LM	2.00	25.00	50.00
9	PVC encapsulated identity cards	Item	6.50	35.00	227.50
10	Site security guard / petrol	Hour	100.00		-
11	Hire of Security Guard Cabin (inc furniture)	Week	25.00		-
12	Transportation (delivery & collection per unit)	Item	150.00		-
13	Flag Pole	Each	15.00		-
14	Reinstate compound area	Item	10,000.00	1.00	10,000.00
15	Windows protection	Item	35,000.00		-
G Power					
1	Temporary Check Meter(s) installation	Item	75.00	1.00	75.00
2	Temp power and light to compound units	Week	225.00	410.00	92,250.00
3	Heating installation into storage container	Item	35.00		-
4	Heating - container running costs	Week	35.00		-

H	Water				-
1	Temp water installation to compound (assume 2 Nr sanitary)	Item	350.00	1.00	350.00
2	Connect sanitary unit to foul sewers	Item	150.00	1.00	150.00
3	Reinstate after removal	Item	100.00	1.00	100.00
					-
J	Communications - Landline				-
1	Landline installation	Item	125.00	1.00	125.00
2	Landline rental / calls	Week	12.50	410.00	5,125.00
3	Broadband installation	Item	35.00	1.00	35.00
4	Broadband connection / rental	Week	7.50	410.00	3,075.00
					-
K	Communications - 'Mobiles'				-
1	Mobile Phone Costs	Week	65.00	410.00	26,650.00
					-
L	Plant and Tools				-
	<u>Generally</u>				-
1	Cherry picker (7.5m)	Day	250.00	205.00	51,250.00
2	Concrete / mortar mixer (0.12/0.09m ³)	Week	15.00		-
3	Transit Van	Week	50.00	410.00	20,500.00
4	Beam Hoist	Week	175.00		-
5	Small Tools	Set	35.00		-
6	Hoist				-
	Transport	nr	2,500.00	8.00	20,000.00
	Electrical Connection	nr	421.32	4.00	1,685.28
	Erect & Test	nr	5,500.00	4.00	22,000.00
	Dismantle	nr	4,500.00	4.00	18,000.00
	Weekly Inspections	nr	70.00	4.00	280.00
	Weekly rental	wk	990.00	1,230.00	1,217,700.00
8	Crane on truck	day	225.00	1,230.00	276,750.00
	<u>Tower Crane</u>				-
9	Tower crane and operator hire	week	6,655.00		-
10	Tower crane erection	Item	34,000.00		-
11	Tower crane dismantle	Item	32,000.00		-
12	Foundation anchor/spigot/cruciform	Item	9,000.00		-
13	Appointed person	week	1,845.00		-
14	Lift Supervisor	week	1,625.00		-
15	Relief operator	week	1,525.00		-
16	Aircraft warning lights	Item	3,500.00		-
17	Blockcam (including installation and removal)	Item	1,750.00		-
18	CC90 Zoning	Item	800.00		-
19	Climb deterrent	week	30.00		-
20	Mobile crane mats (2 nr)	nr	4,500.00		-
21	Operator rescue package	Item	3,000.00		-
22	Radio equipment	Item	1,500.00		-
23	Remote anemometer (internet connection)	Item	2,800.00		-
24	Tower crane inspections	nr	600.00		-
25	Wind sails	nr	600.00		-
11	Crane base	nr	10,000.00		-
	<u>Scaffolding</u>				-
12	Scaffold including all associated equipment to accommodate site constraints	m ²	45.00	22,848.00	1,028,160.00
	Additional hire period over and above 70 week baseline	Item			1,997,568.00
					-
M	Towers / Youngmans				-
1	Towers / Youngman's	Item	75.00		-
					-
N	Licences				-
1	Local fees generally	Item	350.00	1.00	350.00
2	Skip Licence	Item	225.00	1.00	225.00
	Public footpath closure				-
	Suspended parking bays (7nr)				-
					-
O	TV Aerials/Satellite Dishes				-
1	Remove and refix aerial	Each	35.00		-
2	Remove and refix satellite dish	Each	65.00	224.00	14,560.00
					-
P	Rubbish Disposal Skips with Lockable Lids				-
1	Skips - 8 Cubic Yard	Each	175.00		-
2	Skips - 12 Cubic Yard	Each	185.00		-
3	Skips 30 Cubic Yard	Each	250.00	220.00	55,000.00
4	Skips - Roll On-Roll Off	Each	350.00		-

Q	Small Plant and Tools				
1	Bench Saw	Week	12.00		-
2	Grinder 4.5"	Week	12.00		-
3	Wall Chaser	Week	12.00		-
					-
R	Sundries				
1	Sundries	Week	50.00	410.00	20,500.00
			Sub-total £		10,905,240.78
			Inflation adjustment to costs (3Q 2018 - 4Q 2019)	0.05	511,183.16
			Preliminaries Estimate Total Carried to Cost Plan Summary £		11,416,423.94

6. Assumptions

The following has been assumed in the preparation of this Order of Cost estimate:

- 1 **Procurement** - Work will be carried out in at least two phases. It is intended that Phase 1 (Bromyard House) is procured in accordance with London Borough of Southwark's existing TPC 2005 Partnering Framework Agreement. Phase 2 and any subsequent phases that may be determined may be procured using a different process to that utilised for Phase 1 however for the purposes of this estimate we have assumed that the balance of the works will be undertaken by the same contractor as Phase 1, at rates and prices negotiated on the basis of those agreed for Phase 1.
- 2 **Preliminaries** - Preliminaries cost has been developed based on a 410 week construction period. Construction works will commence in August 2021 and be carried out in the sequence as set out in calfordseaden's notional programme. The programme identifies an overall duration of 440 weeks however 30 weeks are for the relocation of residents into the newly completed Bromyard House dwellings and will not incur preliminaries or similar oncosts.
- 3 **Overheads & Profit** - Taken at 8%.
- 4 **Main Contractor's Design Fee** - Taken at 0.25% assuming contractor design of temporary / enabling works.
- 5 **Construction Inflation** - Construction inflation is excluded from this estimate.
- 6 **Contingency** - Taken at 15%.
- 7 **CCTV** - No allowance made.
- 8 **Demolition and enabling work** - An allowance has been included for demolition of existing structures as necessary to undertake the works. Further investigations are required to verify that it is practicable to carry out works in the sequence assumed.
- 9 **Diversions & Services** - Costs exclude diversion and alteration of existing services to facilitate the works. The location of services around the other blocks has not yet been fully ascertained.
- 10 **Asbestos identification and removal** - is based on the pilot works undertaken at Bromyard House.
- 11 **Contaminated land** - No allowance has been made for remediating any contaminated ground that may be encountered.
- 12 **Heating** - Costs include for provision of a district heating system to supply all dwellings in the Ledbury high rise towers.
- 13 **General Construction** - Raft foundation to all blocks. New communal core to be steel framed construction. Existing residential blocks to be strengthened with steel frame and reinforced concrete.
- 14 **Existing Services** - Assumed that the existing services have sufficient capacity to serve the new development.
- 15 **Substation** - No allowance included for a substation; it is assumed that there is sufficient spare network capacity to accommodate the new development. This will be reviewed as discussions progress with service providers.
- 16 **Façade Enhancements** - The estimate includes an addition for external cladding, specification and design of which is unknown.
- 17 **MVHR** - Is not included in this cost estimate.
- 18 **Roof** - Flat roof to all blocks as existing.
- 19 **Specification** - The estimate has been based on London Borough of Southwark specifications.
- 20 **Accommodation schedule** - Numbers of units and types are as existing.

Qualifications and Exclusions

The following constraints influenced the accuracy of the estimated cost:

- Dimensioned internal layouts were not available.
- Full access scaffold included to external elevations.
- Allowance for new external cladding subject to review on design.
- Communal areas to be demolished and reconstructed.
- Decant of all dwellings required.
- Dwellings will be fully stripped out and refitted on completion to habitable standards.
- Existing footings remain in place and will be augmented to withstand new loadings.
- Existing roofs to be strengthened to receive new structural frame.
- Rooftop steel frame will not be clad to minimise additional wind loading on structure.
- Work will be procured under London Borough of Southwark's existing framework arrangement.
- Construction and tender inflation are excluded.
- Preliminaries, OH&P and Contingency are included in the estimated cost.
- No allowance for has been made for external works and landscaping.
- The estimate assumes average quality materials for external and internal works. Any change would increase the total cost.
- Flat layouts remain the same as existing.
- The number of units is as advised by London Borough of Southwark.
- A planning application will be required because the external cladding is being changed.

7. Exclusions

The following items are excluded from this Order of Cost Estimate. They are known to have costs and allowances should be provided from other budgets:

- 1 Professional/legal fees, planning/building control fees, statutory fees, site surveys, monitoring costs, environmental audits.
- 2 Project insurances.
- 3 Value Added Tax (VAT).
- 4 Inflation except as stated in the Summary.
- 5 Site acquisition fees/costs, air rights, rights to light (or any other third party compensation settlements), over-sailing licences, scaffold licences, sale or letting fees/costs and other developer's costs.
- 6 Costs arising from a Section 106 agreement.
- 7 Costs arising from a Section 278 agreement.
- 8 Costs arising from a Community Infrastructure Levy assessment.
- 9 Independent Commissioning Management fees.
- 10 Client finance costs and insurances.
- 11 Monitoring of adjacent buildings.
- 12 Local Authority charges, road closures, etc.
- 13 Archaeological survey.
- 14 Any off-site reinforcement of services infrastructure.
- 15 Developer's risk allowance/project contingency.
- 16 Party wall agreements.

The following items are excluded from this Order of Cost Estimate. They may result in additional costs and a separate contingency allowance should be retained to cover these costs:

- 1 Phasing of construction works is anticipated with Bromyard House to be completed first and the remaining blocks to follow. For the purposes of this estimate, it is assumed that Phase 2 (and any additional phases that may be identified) follows the completion of phase 1 without any intervals.
- 2 BREEAM assessment costs.
- 3 Abnormal ground conditions and unknown basements in existing structures.
- 4 Feature hoarding.
- 5 Out of hours working.
- 6 Cost of project collaboration tool (e.g. project intranet).
- 7 Deep sewer outfalls in excess of 3m.
- 8 Remediation of contaminated soils and/or groundwater.
- 9 Artworks.
- 10 Measures associated with barriers against methane/carbon dioxide gas.
- 11 Sewerage pumps.
- 12 Any works caused by aquifers.
- 13 Allowance for bee/bat boxes.
- 14 Allowance for service diversions except as specifically identified.
- 15 Any treatment of Japanese Knotweed
- 16 Any measures due to flood risk.
- 17 Tree survey.
- 18 CCTV

8. Definitions

Terms used in this Order of Cost Estimate have the following meanings:

Base Cost Estimate	The estimated cost of the works including allowances for preliminaries, overheads & profit and fees, but excluding risk and inflation
Building Works Estimate	The estimated cost of the construction works before the application of allowances for preliminaries, overheads & profit, fees, risk allowances and inflation
Construction Inflation	Inflation from the anticipated tender return date to the mid-point of the construction period
Construction Risk	Risks relating to the construction process (e.g. underground obstructions, geotechnical problems, services, site access, weather, disputes)
Consultants' Fees	Fees to consultants paid by the client (e.g. project and design team fees, specialist consultants' fees, site investigation fees)
Cost per square metre	The Cost Limit divided by the Gross Internal Area
Cost per unit	The Cost Limit divided by the total number of residential units
Cost Limit	The maximum estimated expenditure for the works including the estimated cost of the construction works with allowances added for fees, overheads & profit and risk
Design Development Risk	Risks relating to the development of the design (e.g. uncertainty of design, design coordination, uncertainty of area schedules)
Employer Change Risk	Risks relating to employer changes (e.g. changes in scope, quality or programme)
Employer Other Risk	Risks relating to other employer matters (e.g. brief changes, project programme, funding, tender strategy, insolvency, claims, planning delays, market conditions)
Gross Internal Area (GIA)	The internal area of the building measured to the inner face of the external walls with no deduction for the space occupied by internal walls, interruptions or voids
Main Contractor's Design Fees	Fees to consultants paid by the contractor to complete the design, including post novation fees
Main Contractor's Pre-construction Fees	Costs incurred by the main contractor during any pre-construction period project involvement (e.g. management and staff costs, specialist advice, temporary accommodation, overheads & profit on these)
Net Internal Area (NIA)	The useable internal area of the building - usually, the lettable or saleable area. This is measured to the inner face of the external walls with the space occupied by internal walls, interruptions or voids deducted. Note: architects' area schedules often use NIA for the total area of flats in a building, although this calculation may be composed of the individual GIAs for the flats added together and is not, strictly, in accordance with the definition of NIA.
Other Development/Project Costs	Other client costs not covered in the building works estimate, preliminaries, overheads & profit and fees (e.g. land acquisition costs, finance costs, planning fees, building control fees and the like, adoption charges, planning contributions, insurances, decanting costs, furniture, marketing)
Tender Inflation	Inflation from the estimate date to the anticipated tender return date