POTTER RAPER PARTNERSHIP

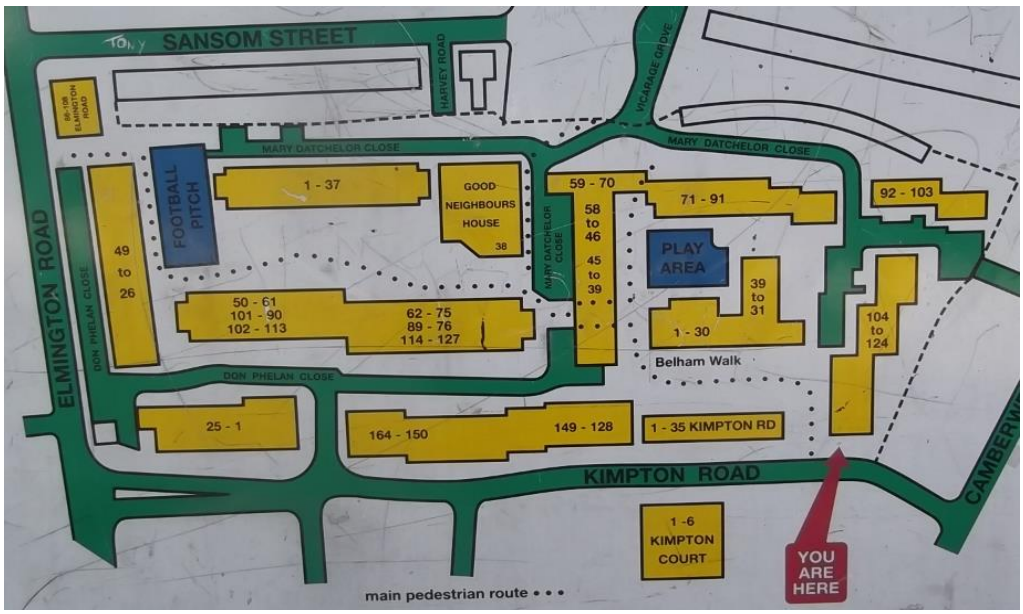
Cost Planning

Life Cycle Cost Options & Cost Estimates

D'Eynsford Estate

June 2015

London Borough of Southwark



POTTER RAPER PARTNERSHIP

QA Sheet

Title	Rev.	Design Stage	Prepared By	Date	Estimated Cost @3.5% NPV	Estimated Cost @1% NPV
Life Cycle Cost Options	**1**	**2**	**NKQ**	**25/06/15**	**-**	**-**
Option 1 Repair and Redecorate					£1,754,179.18	£2,216,349.28
Option 2 Renew UPVC					£1,774,138.48	£2,178,525.32
Option 3 Renew Aluminium					£1,760,134.89	£1,997,881.45
Option 2 Renew Hardwood					£2,456,947.97	£2,914,528.68
Cost Estimating					**-**	**-**
Kimpton Road - Renew Crittal Windows in UPVC					£84,825.00	n/a
Kimpton Court - Renew Balcony Doors in UPVC					£12,495.00	n/a

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POTTER RAPER PARTNERSHIP

Replacement of windows in different materials

Timber Windows

A1 OPTION 1 - REPAIR AND REDECORATE

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Repair and Redecorate existing timber windows	463,000		463,000
	Sub-Total			**463,000.00**
2	Preliminaries			**100,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**10.00%**		**46,300.00**
	CONSTRUCTION COST ESTIMATE			**825,300.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			3.5%	
5	Year 5	142,950.00	**120,360**	
6	Year 10	142,950.00	**101,340**	
7	Year 15	142,950.00	**85,326**	
8	Year 20 (Renew in UPVC)	1,114,500.00	**560,110**	
9	Year 25	116,800.00	**49,424**	
10	Year 30	116,800.00	**41,613**	
11	Year 35	116,800.00	**35,037**	
12	Year 40	116,800.00	**29,500**	1,022,709.85
13	Residual Cost at Year 40 (assume UPVC Windows have 30 year life)	- 371,500.00	**- 93,831**	**- 93,830.67**
	TOTAL 40 YEAR LIFE CYCLE COST			**928,879.18**
	TOTAL COMBINED COMPARITIVE COST			**1,754,179.18**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for UPVC Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 3.5% for the calculation of NPV
- We have assumed that by repairing and redecorating the existing windows we have prolonged their life by a further 20 years.

Replacement of windows in different materials

Timber Windows

A1a OPTION 1 - REPAIR AND REDECORATE

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Repair and Redecorate existing timber windows	463,000		463,000
	Sub-Total			**463,000.00**
2	Preliminaries			**100,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**10.00%**		**46,300.00**
	CONSTRUCTION COST ESTIMATE			**825,300.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			1.0%	
5	Year 5	142,950.00	**136,012**	
6	Year 10	142,950.00	**129,411**	
7	Year 15	142,950.00	**123,130**	
8	Year 20 (Renew in UPVC)	1,114,500.00	**913,382**	
9	Year 25	116,800.00	**91,077**	
10	Year 30	116,800.00	**86,657**	
11	Year 35	116,800.00	**82,451**	
12	Year 40	116,800.00	**78,449**	1,640,568.43
13	Residual Cost at Year 40 (assume UPVC Windows have 30 year life)	- 371,500.00	- **249,519**	- **249,519.14**
	TOTAL 40 YEAR LIFE CYCLE COST			**1,391,049.28**
	TOTAL COMBINED COMPARITIVE COST			**2,216,349.28**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for UPVC Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 1% for the calculation of NPV
- We have assumed that by repairing and redecorating the existing windows we have prolonged their life by a further 20 years.

POTTER RAPER PARTNERSHIP

Replacement of windows in different materials

Timber Windows

A2 OPTION 2 RENEW UPVC

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Renew existing timber windows in UPVC	770,000		770,000
	Sub-Total			**770,000.00**
2	Preliminaries			**90,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**5%**		**38,500.00**
	CONSTRUCTION COST ESTIMATE			**1,114,500.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			3.5%	
5	Year 5	116,800.00	**98,342**	
6	Year 10	116,800.00	**82,802**	
7	Year 15	116,800.00	**69,717**	
8	Year 20	116,800.00	**58,700**	
9	Year 25	116,800.00	**49,424**	
10	Year 30 (renew in UPVC)	1,114,500.00	**397,072**	
11	Year 35	116,800.00	**35,037**	
12	Year 40	116,800.00	**29,500**	820,594.32
13	Residual Cost at Year 40 (assume 30 year life)	- 637,266.00	- **160,956**	- **160,955.85**
	TOTAL 40 YEAR LIFE CYCLE COST			**659,638.48**
	TOTAL COMBINED COMPARITIVE COST			**1,774,138.48**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for UPVC Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 3.5% for the calculation of NPV

POTTER RAPER PARTNERSHIP

Replacement of windows in different materials

Timber Windows

A2a OPTION 2 RENEW UPVC

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Renew existing timber windows in UPVC	770,000		770,000
	Sub-Total			**770,000.00**
2	Preliminaries			**90,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**5%**		**38,500.00**
	CONSTRUCTION COST ESTIMATE			**1,114,500.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			1.0%	
5	Year 5	116,800.00	**111,131**	
6	Year 10	116,800.00	**105,738**	
7	Year 15	116,800.00	**100,606**	
8	Year 20	116,800.00	**95,723**	
9	Year 25	116,800.00	**91,077**	
10	Year 30 (renew in UPVC)	1,114,500.00	**826,873**	
11	Year 35	116,800.00	**82,451**	
12	Year 40	116,800.00	**78,449**	1,492,047.03
13	Residual Cost at Year 40 (assume 30 year life)	- 637,266.00	- **428,022**	- **428,021.71**
	TOTAL 40 YEAR LIFE CYCLE COST			**1,064,025.32**
	TOTAL COMBINED COMPARITIVE COST			**2,178,525.32**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for UPVC Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 1% for the calculation of NPV

Replacement of windows in different materials

Timber Windows

A3 OPTION 3 RENEW POWDER COATED ALUMINIUM

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Renew existing timber windows in ALUMINIUM	970,000		970,000
	Sub-Total			**970,000.00**
2	Preliminaries			**90,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**5%**		**48,500.00**
	CONSTRUCTION COST ESTIMATE			**1,324,500.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			3.5%	
5	Year 5	116,800.00	**98,342**	
6	Year 10	116,800.00	**82,802**	
7	Year 15	116,800.00	**69,717**	
8	Year 20	116,800.00	**58,700**	
9	Year 25	116,800.00	**49,424**	
10	Year 30	116,800.00	**41,613**	
11	Year 35	116,800.00	**35,037**	
12	Year 40 (renew in Aluminium)	1,324,500.00	**334,532**	770,167.12
13	Residual Cost at Year 40 (assume 40 year life)	- 1,324,500.00	- **334,532**	- **334,532.23**
	TOTAL 40 YEAR LIFE CYCLE COST			**435,634.89**
	TOTAL COMBINED COMPARITIVE COST			**1,760,134.89**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for Aluminium Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 3.5% for the calculation of NPV

Replacement of windows in different materials

Timber Windows

A3a OPTION 3 RENEW POWDER COATED ALUMINIUM

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Renew existing timber windows in ALUMINIUM	970,000		970,000
	Sub-Total			**970,000.00**
2	Preliminaries			**90,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**5%**		**48,500.00**
	CONSTRUCTION COST ESTIMATE			**1,324,500.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			1.0%	
5	Year 5	116,800.00	**111,131**	
6	Year 10	116,800.00	**105,738**	
7	Year 15	116,800.00	**100,606**	
8	Year 20	116,800.00	**95,723**	
9	Year 25	116,800.00	**91,077**	
10	Year 30	116,800.00	**86,657**	
11	Year 35	116,800.00	**82,451**	
12	Year 40 (renew in Aluminium)	1,324,500.00	**889,605**	1,562,986.03
13	Residual Cost at Year 40 (assume 40 year life)	- 1,324,500.00	- **889,605**	- **889,604.58**
	TOTAL 40 YEAR LIFE CYCLE COST			**673,381.45**
	TOTAL COMBINED COMPARITIVE COST			**1,997,881.45**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for Aluminium Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 1% for the calculation of NPV

POTTER RAPER PARTNERSHIP

Replacement of windows in different materials

Timber Windows

A4 OPTION 4 RENEW HARDWOOD

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Renew existing timber windows in HARDWOOD	1,250,000		1,250,000
	Sub-Total			**1,250,000.00**
2	Preliminaries			**90,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**5%**		**62,500.00**
	CONSTRUCTION COST ESTIMATE			**1,618,500.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			3.5%	
5	Year 5	224,800.00	**189,276**	
6	Year 10	224,800.00	**159,365**	
7	Year 15	224,800.00	**134,181**	
8	Year 20	224,800.00	**112,977**	
9	Year 25	224,800.00	**95,123**	
10	Year 30	224,800.00	**80,091**	
11	Year 35	224,800.00	**67,435**	
12	Year 40 (renew in Hardwood)	1,618,500.00	**408,789**	1,247,236.51
13	Residual Cost at Year 40 (assume 40 year life)	- 1,618,500.00	- **408,789**	- **408,788.54**
	TOTAL 40 YEAR LIFE CYCLE COST			**838,447.97**
	TOTAL COMBINED COMPARITIVE COST			**2,456,947.97**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for Hardwood Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 3.5% for the calculation of NPV

POTTER RAPER PARTNERSHIP

Replacement of windows in different materials

Timber Windows

A4a OPTION 4 RENEW HARDWOOD

Ref	Element	£		
CAPITAL COST ASSESMENT				
1	Renew existing timber windows in HARDWOOD	1,250,000		1,250,000
	Sub-Total			**1,250,000.00**
2	Preliminaries			**90,000.00**
3	Scaffolding / Access provision			**216,000.00**
4	Contingency	**5%**		**62,500.00**
	CONSTRUCTION COST ESTIMATE			**1,618,500.00**
			NPV	
LIFE CYCLE COSTS (40 Year Cycle)			1.0%	
5	Year 5	224,800.00	**213,889**	
6	Year 10	224,800.00	**203,509**	
7	Year 15	224,800.00	**193,631**	
8	Year 20	224,800.00	**184,234**	
9	Year 25	224,800.00	**175,292**	
10	Year 30	224,800.00	**166,784**	
11	Year 35	224,800.00	**158,690**	
12	Year 40 (renew in Hardwood)	1,618,500.00	**1,087,071**	2,383,099.29
13	Residual Cost at Year 40 (assume 40 year life)	- 1,618,500.00	- **1,087,071**	- **1,087,070.61**
	TOTAL 40 YEAR LIFE CYCLE COST			**1,296,028.68**
	TOTAL COMBINED COMPARITIVE COST			**2,914,528.68**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for Hardwood Windows
- Lifecycles allowed have been based upon BCIS, Component life schedules
- Costs for maintenance are based on the average of expected works by window. Decorations Inc. We have allowed for 30% of the block to be scaffold against all 4 options for maintenance.
- We have assumed an average interest rate of 1% for the calculation of NPV

Replacement of windows in different materials

A.5 Cost Estimates

Renew Crittal Windows and Balcony Doors in UPVC

Ref	Element	£		
COST ESTIMATE - Kimpton Road Crittal Window Replacement				
1	Remove Existing Crittal Windows	7,000		7,000
2	Install New UPVC Windows	52,000		52,000
	Sub-Total			**59,000.00**
3	Preliminaries	**12.5%**		**7,375.00**
4	Scaffolding / Access provision			**15,500.00**
5	Contingency	**5%**		**2,950.00**
	CONSTRUCTION COST ESTIMATE			**84,825.00**

Ref	Element	£		
COST ESTIMATE - Kimpton Court Renew Balcony Doors and Frames				
1	Clean and Overhaul Existing Windows	1,200		1,200
2	Remove Existing Doors	900		900
3	Install New UPVC Balcony Doors	8,100		8,100
	Sub-Total			**10,200.00**
2	Preliminaries	**12.5%**		**1,275.00**
3	Scaffolding / Access provision			**-**
4	Contingency	**10%**		**1,020.00**
	CONSTRUCTION COST ESTIMATE			**12,495.00**

Notes and Assumptions

- Costs are based upon current data and no uplifts have been included for increased costs.
- Costs have been based upon an assumed specification throughout
- Costs are based upon our assesment of the market value for replacement windows based upon tenders received for UPVC Windows and Doors
- For works to Kimpton Court we have assumed access will be granted via the property to the existing balconies and therefore no access costs will be associated.

B - Specification Information

1	**The following information was used in the preparation of this Feasibility Estimate:**
	Drawings
a	None
2	**Photographs**
	Potter Raper Partnership Site Survey Photographs Dated
	05/11/2014 18/11/2014 05/12/2014 19/01/2015 20/03/2015 13/05/2015 02/06/2015 08/06/2015 09/06/2015
3	**Scope of works**
a	**Life Cycle Cost Options Appraisal Detailing costs for the repair or renewal of timber windows at Don Phelan Close, Mary Datchelor Close and Belham Walk:**
i	Repair and Redecoration
ii	Renew in UPVC
iii	Renew in Aluminium
iv	Renew in Hardwood
b	**Cost Estimates for:**
i	Renewal of existing Crittal Windows at Kimpton Road
ii	Renewal of existing Balcony Doors at Kimpton Court