



**GIG**  
CYMRU  
**NHS**  
WALES

Bwrdd Iechyd Prifysgol  
Hywel Dda  
University Health Board

# Canolbarth a Gorllewin Iachach

Cenedlaethau'r  
dyfodol yn byw  
bywydau iach

## Appendix A7 Lifecycle Costs

### Cross Hands Health and Wellbeing Centre



# **Cross Hands Wellbeing Hub**


Option 1 Do Minimum  
Elemental Life Cycle Costs  
Outline Business Case

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<b>Elemental Cost Comparison</b>
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<b>10 Year Fit-out Strategy</b>

# Document Control

## Document control

<b>Project name</b>	Cross Hands Wellbeing H	<b>Project number</b>	CFCM0116
<b>Date of Issue</b>	11 May 2022	<b>Version number</b>	1
<b>Reason for issue</b>	Crosshands Option 1 Life Cycle Costs April 2022		
<b>Document author</b>	Ian Bailey	<b>Grade</b>	Executive Surveyor
<b>Contributors</b>	Luke Sullivan	Angharad Slee	
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<b>Signature</b>			
<b>Security classification</b>	External Confidential		
<b>Distribution to</b>	Hywel Dda University Health Board		

# Project Appointment

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Gleeds have been appointed by Hywel Dda University Health Board to provide Elemental Life Cycle Costs in line with 'Standardised method of life cycle costing for construction procurement' PD 156865:20081.'

This report considers the proposed building elements in its analysis.

The lifecycle of the elements is based on BCIS Replacement Periods, and the relevant works.

Separate graphs and summaries for Life Cycle Costs and Facilities Management costs allow the client to use their own Facilities Management costs if required.

# Life Cycle Report Summary



## Life Cycle Report Summary

### Summary Pricing Notes

Costs are at 2Q 2022 rates with no allowance for inflation;

The costs included are real costs, i.e future costs are not discounted to net present values (NPV);

The exact year of replacement is unknown. To reflect this, costs have been smoothed over a five-year period:

-2 Years	-1 Year	Year	+1 Year	+2 Years
10%	20%	40%	20%	10%

The Facilities Management figures mentioned throughout the report are calculated using BCIS

BUILDING TYPE	£/100m <sup>2</sup>		
	Cleaning	Utilities	Total Ops'
Health Centres, Clinics, Group Practice Surgeries	4,066	3,336	7,402
AREA (m2)	Total Annual Cleaning	Total Annual Utilities	
3,851	156,582	128,469	

Maintenance (Fabric and Services) costs are contained within Gleeds' own LCC analysis aided by BCIS replacement figures

# Assumptions and Exclusions

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It should be noted that the model is a prediction of what works will be required to keep the building operational and when they will occur. Life cycle replacement is in practice not an exact science and there are many factors that impact upon a component's life.

This report therefore attempts to generate a realistic overall fund of monies to maintain the building and an estimate as to when these funds will be required to be drawn down.

### The following assumptions have been used in calculating the Life Cycle Costs:

Construction costs are based on the Options cost plan from Wilmott Dixon Cost Plan - Crosshands Rev 23.03.2022;

Base date for costs: 2Q 2022

Costs are calculated at real costs, i.e. there is no allowance for inflation and increased costs included in the projected figures;

The costs included are real costs, i.e. future costs are not discounted to net present values (NPV); and

Calculated costs exclude allowances for management costs and the overheads and profits of an FM Operator

Costs within 6. Complete building & Building Units have been allocated to the elemental group in which they belong. i.e. Mechanical and Electrical installations were added to 5. Services

### General assumptions include:

- a) Life cycle replacement periods and work intervals included in the model are based on those published by the RICS in their Life Expectancy of Buildings and CIBSE's Guide M for services replacement;
- b) The replacement periods assume that the appropriate planned preventative maintenance (PPM) is carried out;
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### Allowances and enhancements have been made on a component by component basis for:

- a) Strip out costs;
- b) Sub-contract preliminaries;
- c) Accessibility enhancement for works not easily reached;
- d) Out of sequence enhancements where replacement of the component is not naturally sequenced; and
- e) 3% contingency has been included on all items.

**General exclusions include:**

- a) Structural works;
- b) Out of hours working premium;
- c) ICT equipment;
- d) Professional fees;
- e) Temporary roofs;
- f) Damage caused through vandalism;
- g) Effects of future legislation on Building Regulations;
- h) Value Added Tax;
- i) Potential capital allowances and other tax rebates;
- j) Insurances and rates; and
- k) Decommissioning or demolition of the building at its end of life.

**Calculations**

- a) The exact replacement of components is not known. Therefore, the replacement cycles inputted into the model have been 'smoothed' across a range of five years.
- b) It is anticipated that the building will remain in operation beyond the end of the 60-year concession period. The costs do not include any tailed-off period, i.e. are not reduced in the final years of the study.

# General Summary

Including Facilities Management Costs							
Option	Description	LCC	GIFA (m²)	£/m²	£/m²/pa	Construction Capital Cost	% LCC of Capital Cost
1	Crosshands Option 1 Life Cycle Costs April 2022	£ 30,324,000	3,851	£ 7,870	£ 130	£ 13,558,463	224%

Excluding Facilities Management Costs							
Option	Description	LCC	GIFA (m²)	£/m²	£/m²/pa	Construction Capital Cost	% LCC of Capital Cost
1	Crosshands Option 1 Life Cycle Costs April 2022	£ 13,227,000	3,851	£ 3,430	£ 55	£ 13,558,463	98%

# 60 Year Smoothed Cashflows

Inc. FM

Option	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Sub-total
1	315,000	315,000	339,000	363,000	410,000	377,000	367,000	431,000	462,000	566,000	433,000	374,000	381,000	461,000	608,000	6,202,000

Option	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Sub-total
1	504,000	409,000	462,000	581,000	846,000	581,000	462,000	373,000	432,000	464,000	389,000	345,000	615,000	914,000	1,529,000	15,108,000

Option	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Sub-total
1	943,000	672,000	368,000	377,000	411,000	363,000	339,000	497,000	680,000	1,044,000	680,000	497,000	382,000	448,000	582,000	23,391,000

Option	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
1	463,000	410,000	480,000	560,000	763,000	531,000	423,000	339,000	373,000	431,000	399,000	349,000	361,000	398,000	653,000	30,324,000



## Exc. FM

Option	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Sub-total
1	30,000	30,000	54,000	78,000	125,000	92,000	82,000	146,000	177,000	281,000	148,000	89,000	96,000	176,000	323,000	1,927,000

Option	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Sub-total
1	219,000	124,000	177,000	296,000	561,000	296,000	177,000	88,000	147,000	179,000	104,000	60,000	330,000	630,000	1,244,000	6,559,000

Option	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Sub-total
1	658,000	387,000	83,000	92,000	127,000	78,000	54,000	212,000	395,000	759,000	395,000	212,000	97,000	163,000	297,000	10,568,000

Option	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
1	178,000	125,000	195,000	275,000	478,000	246,000	138,000	54,000	88,000	146,000	114,000	64,000	76,000	113,000	369,000	13,227,000

# 60 Year Elemental Cashflows

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16
Substructure																
Superstructure																
Frame																
Upper Floors																
Roof	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Windows & External Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Walls & Partitions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Finishes																
Wall Finishes	-	-	-	-	228,741	-	-	-	-	228,741	-	-	-	-	228,741	-
Floor Finishes	-	-	-	-	10,390	-	-	143,092	-	14,300	-	-	-	-	10,390	143,092
Ceiling Finishes	-	-	-	-	-	-	-	-	-	188,965	-	-	-	-	-	-
Fittings & Furnishings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Services																
Mechanical	-	-	-	-	-	-	-	-	-	-	-	-	-	-	302,141	-
Electrical	-	-	-	-	-	-	-	-	-	159,907	-	-	-	-	94,483	-
External Works	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	54,564	29,741
	29,741	29,741	29,741	29,741	268,872	29,741	29,741	172,834	29,741	621,654	29,741	29,741	29,741	29,741	690,320	172,834

	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Total
Substructure															-
															-
Superstructure															-
Frame															-
Upper Floors															-
Roof	-	-	-	-	-	-	-	-	3,795	-	-	-	-	33,643	37,439
Stairs	-	-	-	19,398	-	-	-	-	-	-	-	-	-	4,037	23,435
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	132,377	132,377
Windows & External Doors	-	-	-	-	-	-	-	-	54,642	-	-	-	-	101,690	156,333
Internal Walls & Partitions	-	-	-	7,994	-	-	-	-	15,700	-	-	-	-	-	23,694
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	163,641	163,641
															-
Internal Finishes															-
Wall Finishes	-	-	-	228,741	-	-	-	-	228,741	-	-	-	-	228,741	1,372,443
Floor Finishes	-	-	-	99,175	-	-	-	143,092	29,314	-	-	-	-	14,300	607,148
Ceiling Finishes	-	-	-	188,965	-	-	-	-	-	-	-	-	-	188,965	566,896
															-
Fittings & Furnishings	-	-	-	265,577	-	-	-	-	-	-	-	-	-	48,645	314,222
															-
Services															-
Mechanical	-	-	-	328,927	-	-	-	-	82,818	-	-	-	-	1,205,677	1,753,927
															-
Electrical	-	-	-	181,895	-	-	-	-	52,003	-	-	-	-	728,446	1,216,735
															-
External Works	29,741	29,741	38,231	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	178,479	29,741	1,074,282
	29,741	29,741	38,231	1,350,412	29,741	29,741	29,741	172,834	331,119	29,741	29,741	29,741	178,479	2,879,903	7,442,570

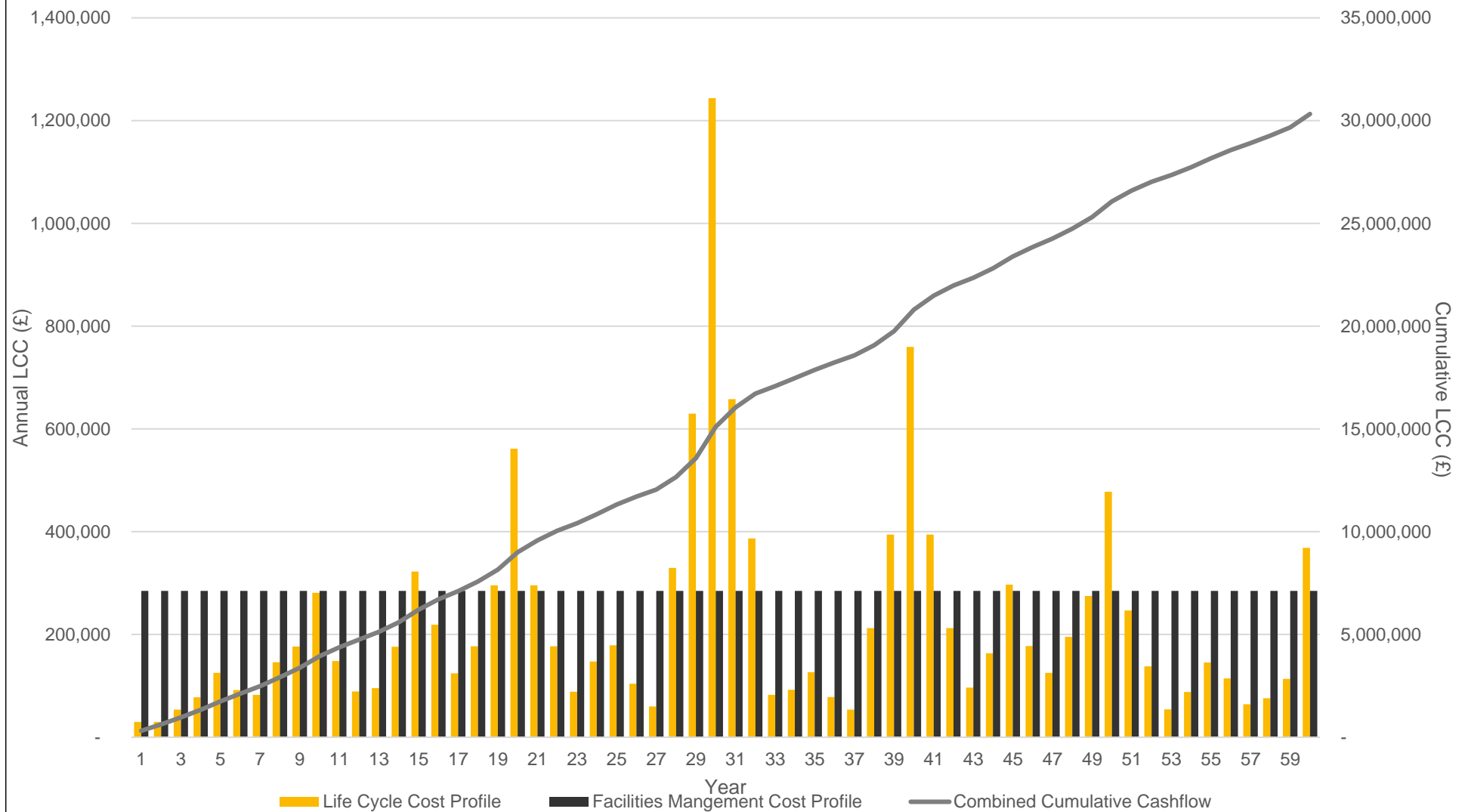
	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Year 46
<b>Substructure</b>																
<b>Superstructure</b>																
Frame																
Upper Floors																
Roof	-	-	-	-	-	-	-	-	-	439,908	-	-	-	-	-	-
Stairs	-	-	-	-	-	-	-	-	-	19,398	-	-	-	-	-	-
External Walls	-	-	-	-	2,793	-	-	-	-	-	-	-	-	-	-	-
Windows & External Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Walls & Partitions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,994	-
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Internal Finishes</b>																
Wall Finishes	-	-	-	-	228,741	-	-	-	-	228,741	-	-	-	-	228,741	-
Floor Finishes	-	143,092	-	-	10,390	-	-	-	-	242,268	-	-	-	-	10,390	-
Ceiling Finishes	-	-	-	-	-	-	-	-	-	188,965	-	-	-	-	-	-
<b>Fittings &amp; Furnishings</b>	-	-	-	-	-	-	-	-	-	48,645	-	-	-	-	-	-
<b>Services</b>																
<b>Mechanical</b>	-	-	-	-	-	-	-	-	-	328,927	-	-	-	-	302,141	-
<b>Electrical</b>	-	-	-	-	-	-	-	-	-	181,895	-	-	-	-	94,483	-
<b>External Works</b>	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	175,085	29,741	29,741	29,741	29,741	54,564	29,741
	29,741	172,834	29,741	29,741	271,665	29,741	29,741	29,741	29,741	1,853,831	29,741	29,741	29,741	29,741	698,313	29,741

	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
Substructure															-
															-
Superstructure															-
Frame															-
Upper Floors															-
Roof	-	-	-	-	-	-	-	-	3,795	-	-	-	-	5,046	448,749
Stairs	-	-	-	11,068	-	-	-	-	-	-	-	-	-	3,515	33,981
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	18,009	20,802
Windows & External Doors	-	-	-	54,642	-	-	-	-	-	-	-	-	-	15,254	69,896
Internal Walls & Partitions	-	-	-	172,384	-	-	-	-	-	-	-	-	-	-	180,378
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	24,546	24,546
															-
Internal Finishes															-
Wall Finishes	-	-	-	228,741	-	-	-	-	228,741	-	-	-	-	34,311	1,178,014
Floor Finishes	-	143,092	-	33,224	-	-	-	-	10,390	107,319	-	-	-	14,876	715,044
Ceiling Finishes	-	-	-	188,965	-	-	-	-	-	-	-	-	-	28,345	406,276
															-
Fittings & Furnishings	-	-	-	265,577	-	-	-	-	-	-	-	-	-	7,297	321,518
															-
Services															
Mechanical	-	-	-	82,818	-	-	-	-	-	-	-	-	-	230,191	778,441
Electrical	-	-	-	211,911	-	-	-	-	-	-	-	-	-	112,565	600,854
															-
External Works	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	29,741	22,306	17,845	13,383	8,922	28,045	1,004,194
	29,741	172,834	29,741	1,113,435	29,741	29,741	29,741	29,741	272,667	129,625	17,845	13,383	8,922	522,000	5,782,692

Total 60 Year Life Cycle Cost 13,225,262

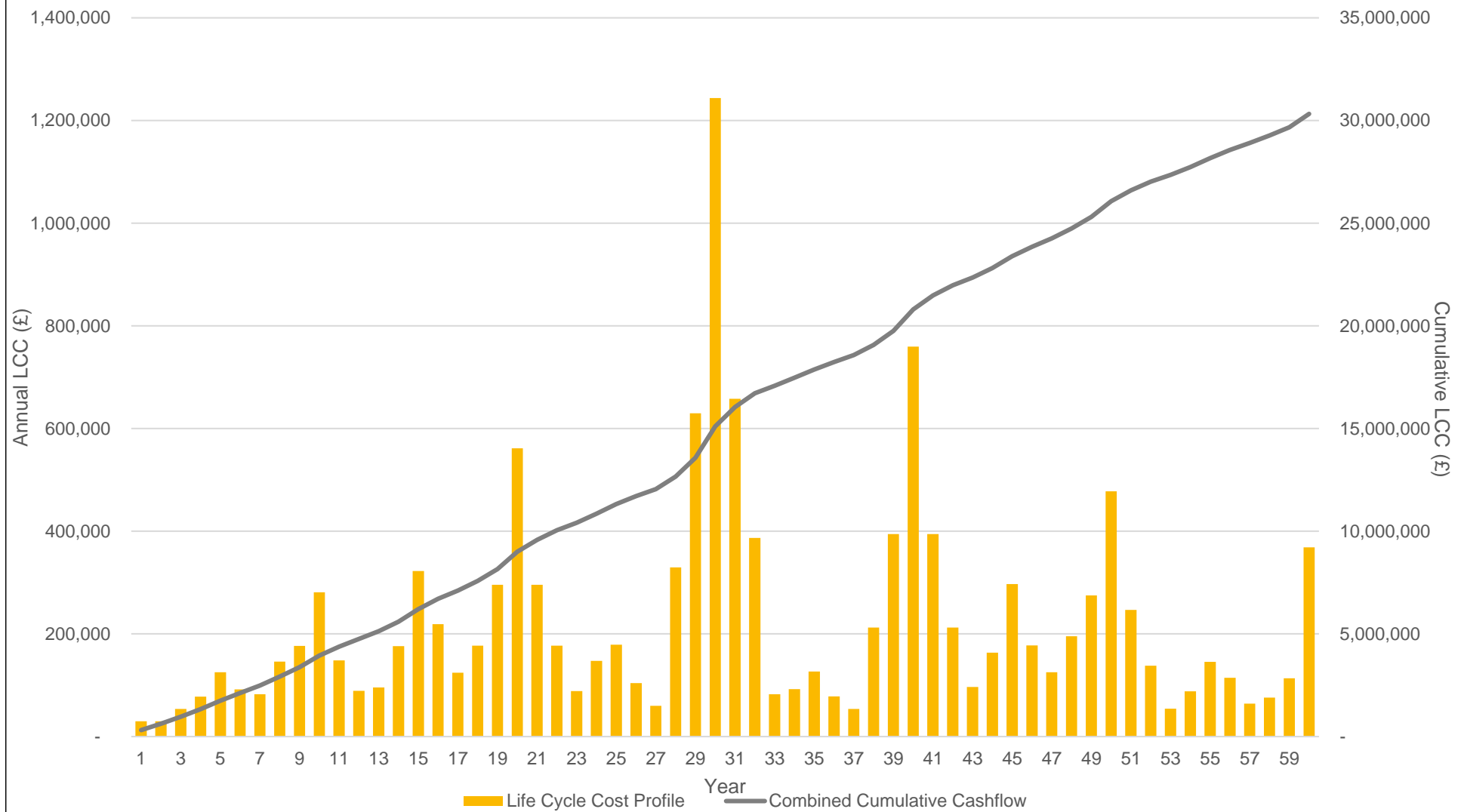
Smoothed Cashflow Total

B7. Breakdown of LCC Costs Annual Cashflow Histogram  
(Costs Smoothed but not Discounted)



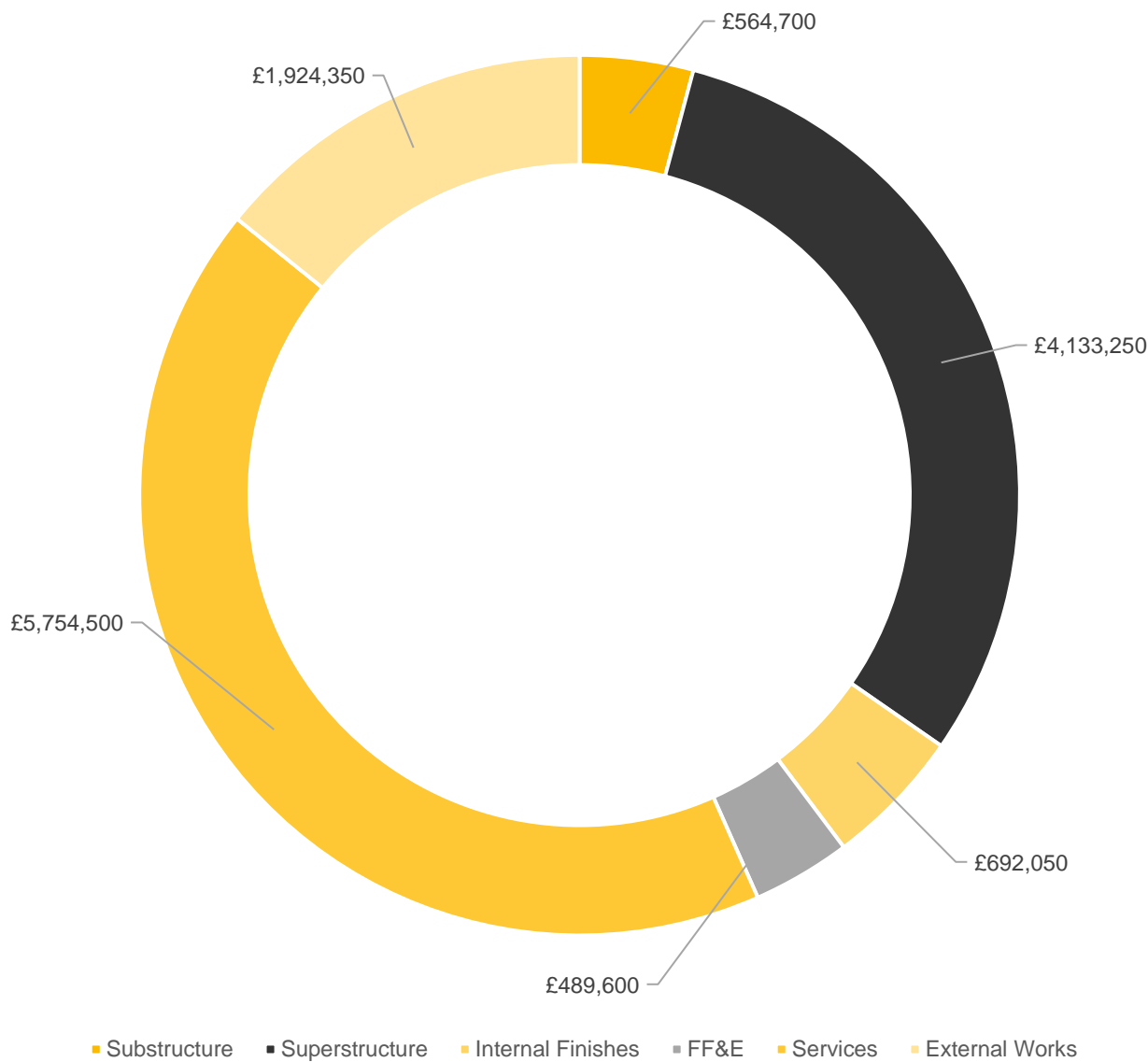


B7. Breakdown of LCC Costs Annual Cashflow Histogram  
(Costs Smoothed but not Discounted) Exc. FM

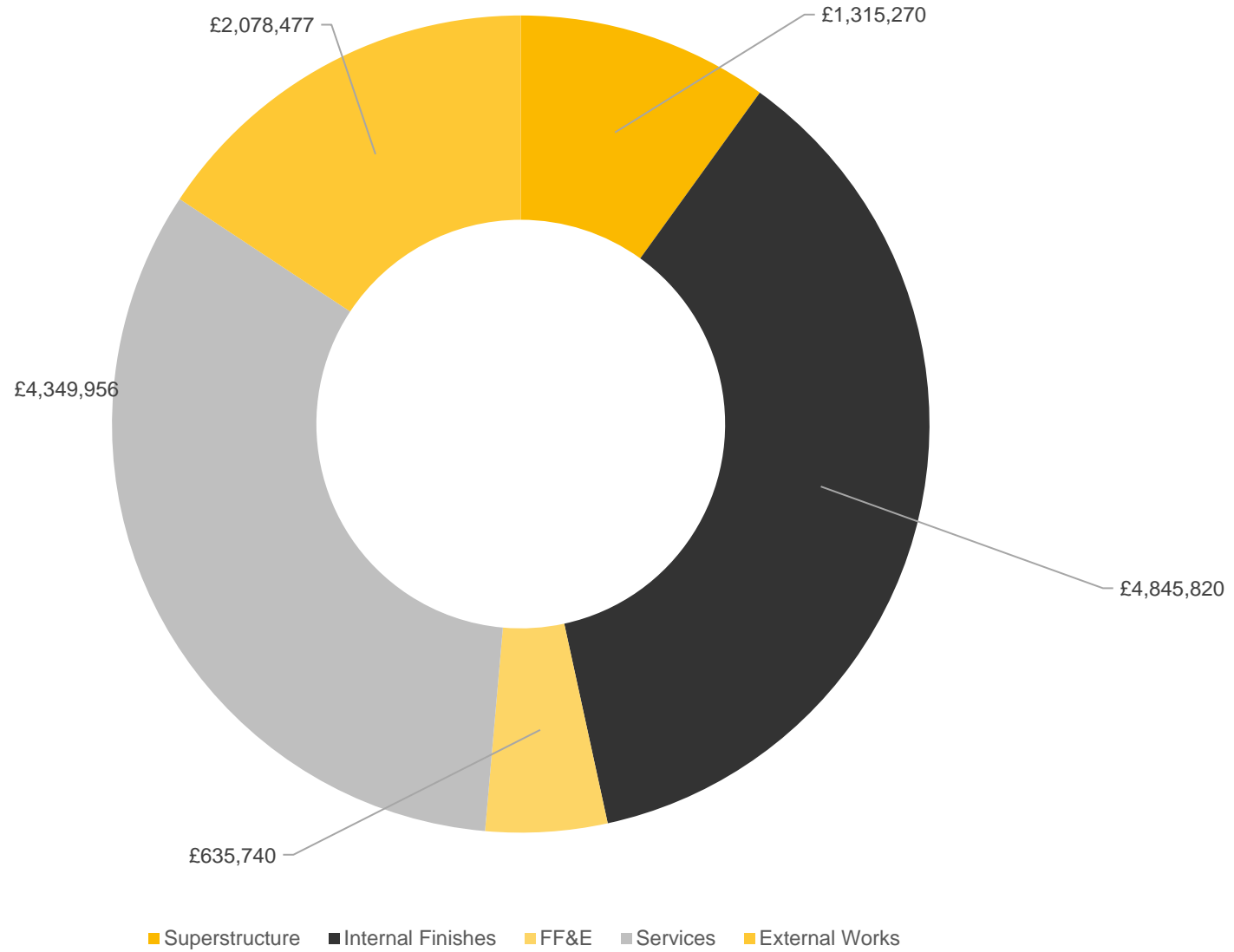


Cost Breakdowns

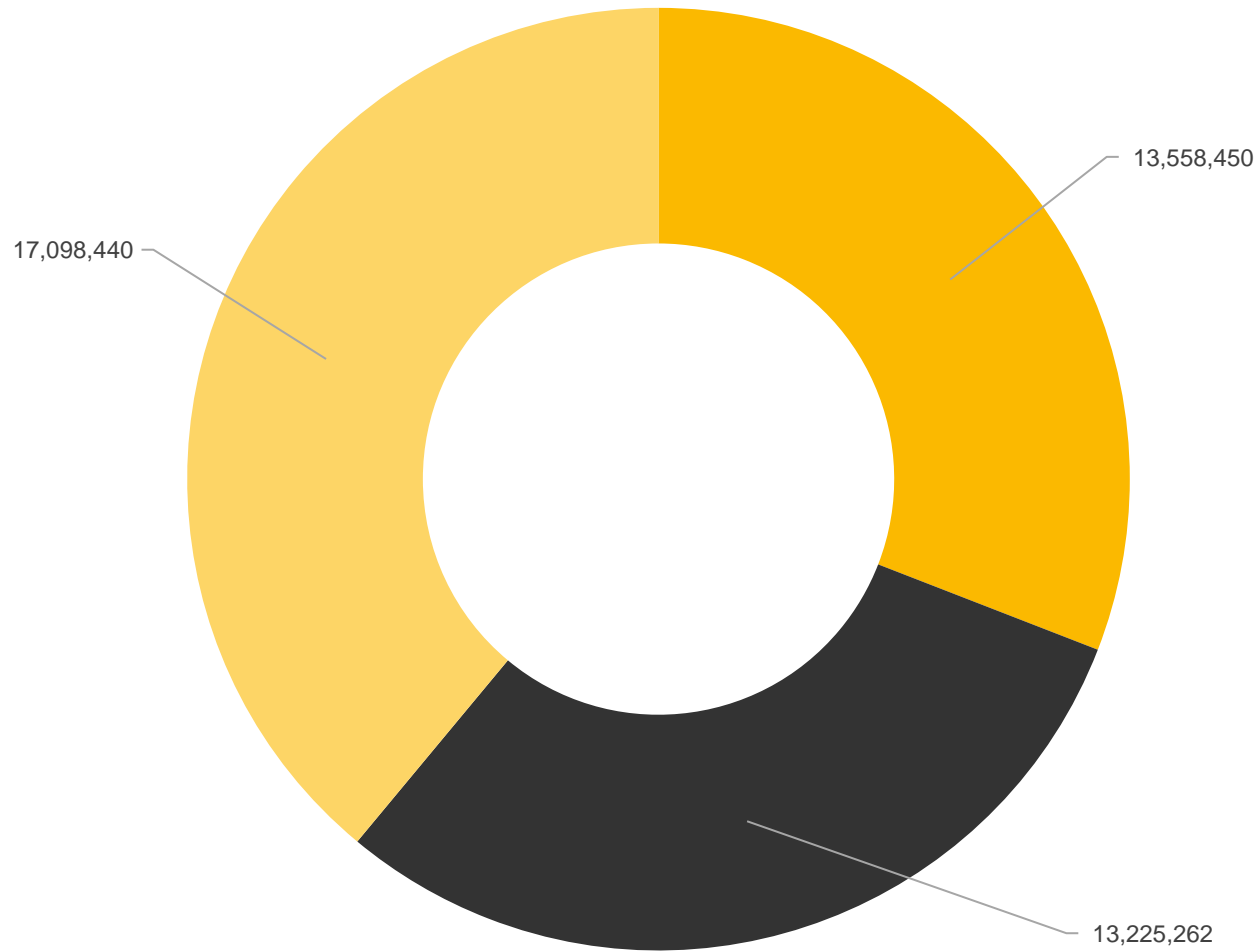
Capital Costs



## Life Cycle Costs



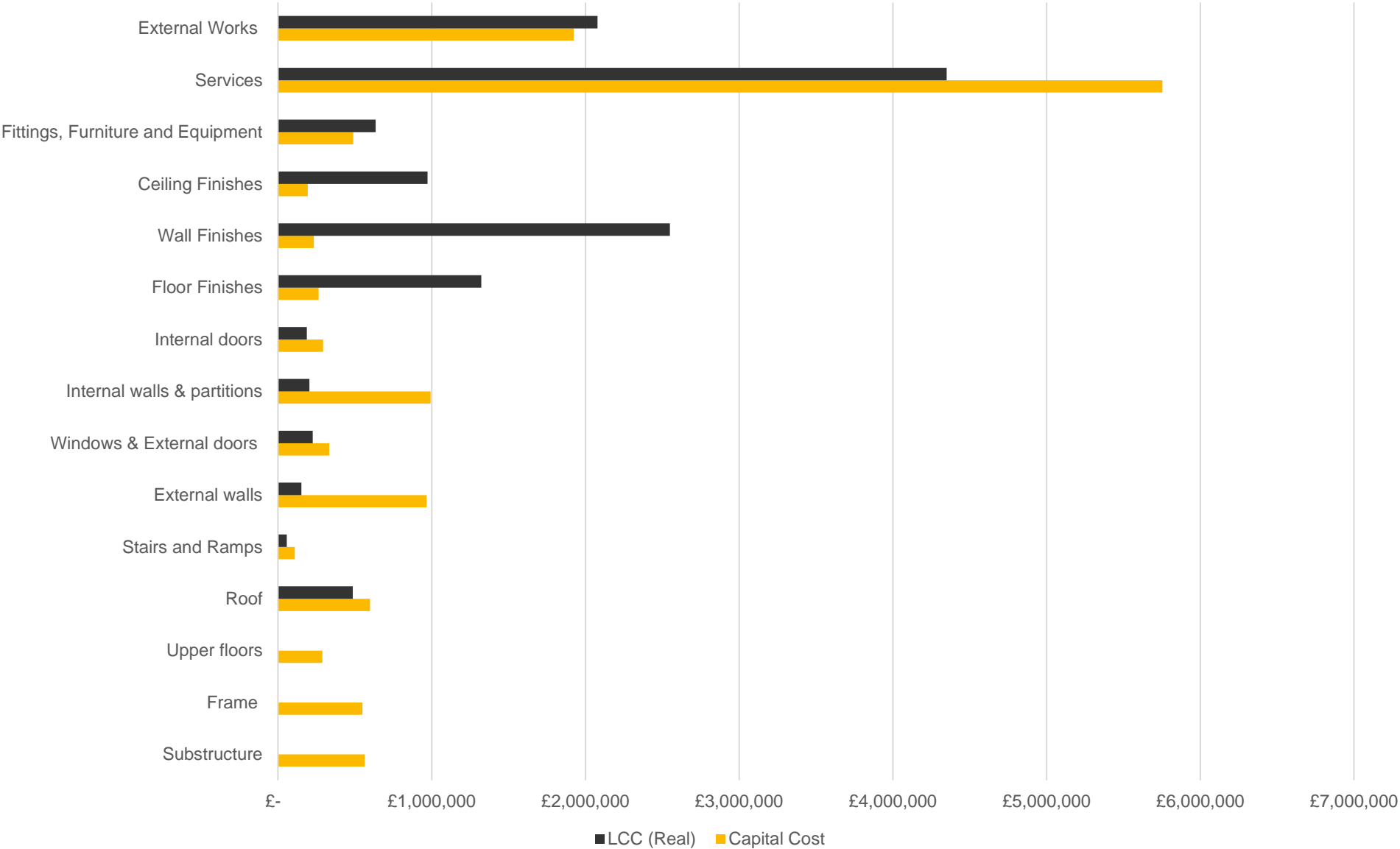
## Whole Life Costs



■ (A) Capital cost of Construction    ■ (B) Life Cycle Costs sub-total    ■ (C) FM Total

# Elemental Cost Comparison

Capital Cost & LCC Comparison



[illegible]



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Total
10 Year Fit-out Strategy											
3 Internal Finishes											
3.1 Wall Finishes	-	-	-	-	204,417	-	-	-	-	204,417	408,834
3.2 Floor Finishes	-	-	-	-	21,969	-	-	143,092	-	21,969	187,030
3.3 Ceiling Finishes	-	-	-	-	10,390	-	-	-	-	14,300	24,690
4 Fittings, Furniture and equipment											
4.1 Fittings, Furniture and equipment	-	-	-	-	-	-	-	-	-	14,270	14,270
	-	-	-	-	236,776	-	-	143,092	-	254,955	634,823



# **Cross Hands Wellbeing Hub**


Option 2 Less Ambitious  
Elemental Life Cycle Costs  
Outline Business Case  
May 2022

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<b>Date of Issue</b>	11 May 2022	<b>Version number</b>	2
<b>Reason for issue</b>	Crosshands Option 2 Life Cycle Costs May 2022		
<b>Document author</b>	Ian Bailey	<b>Grade</b>	Executive Surveyor
<b>Contributors</b>	Luke Sullivan	Angharad Slee	
<b>Approved by</b>	Nigel Watkins	<b>Grade</b>	Director
<b>Signature</b>			
<b>Security classification</b>	External Confidential		
<b>Distribution to</b>	Hywel Dda University Health Board		

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The Facilities Management figures mentioned throughout the report are calculated using BCIS

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**General exclusions include:**

- a) Structural works;
- b) Out of hours working premium;
- c) ICT equipment;
- d) Professional fees;
- e) Temporary roofs;
- f) Damage caused through vandalism;
- g) Effects of future legislation on Building Regulations;
- h) Value Added Tax;
- i) Potential capital allowances and other tax rebates;
- j) Insurances and rates; and
- k) Decommissioning or demolition of the building at its end of life.

**Calculations**

- a) The exact replacement of components is not known. Therefore, the replacement cycles inputted into the model have been 'smoothed' across a range of five years.
- b) It is anticipated that the building will remain in operation beyond the end of the 60-year concession period. The costs do not include any tailed-off period, i.e. are not reduced in the final years of the study.

# General Summary

Including Facilities Management Costs							
Option	Description	LCC	GIFA (m²)	£/m²	£/m²/pa	Construction Capital Cost	% LCC of Capital Cost
2	Crosshands Option 2 Life Cycle Costs May 2022	£ 35,224,000	4,465	£ 7,890	£ 130	£ 15,814,289	223%

Excluding Facilities Management Costs							
Option	Description	LCC	GIFA (m²)	£/m²	£/m²/pa	Construction Capital Cost	% LCC of Capital Cost
2	Crosshands Option 2 Life Cycle Costs May 2022	£ 15,396,000	4,465	£ 3,450	£ 60	£ 15,814,289	97%

# 60 Year Smoothed Cashflows



Inc. FM

Option	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Sub-total
2	365,000	365,000	393,000	420,000	476,000	437,000	426,000	500,000	535,000	656,000	502,000	434,000	441,000	535,000	704,000	7,189,000

Option	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Sub-total
2	584,000	475,000	536,000	673,000	981,000	673,000	536,000	433,000	501,000	538,000	451,000	400,000	718,000	#####	1,795,000	17,555,000

Option	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Sub-total
2	#####	785,000	426,000	438,000	477,000	421,000	393,000	576,000	788,000	1,211,000	788,000	576,000	442,000	520,000	675,000	27,176,000

Option	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
2	537,000	476,000	557,000	649,000	884,000	616,000	491,000	393,000	433,000	499,000	463,000	404,000	419,000	463,000	764,000	35,224,000

## Exc. FM

Option	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Sub-total
2	34,000	34,000	62,000	90,000	145,000	107,000	95,000	169,000	205,000	326,000	172,000	103,000	111,000	204,000	374,000	2,231,000

Option	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Sub-total
2	254,000	144,000	205,000	343,000	651,000	343,000	205,000	103,000	171,000	207,000	121,000	69,000	388,000	741,000	1,464,000	7,640,000

Option	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Sub-total
2	774,000	454,000	96,000	107,000	147,000	91,000	63,000	246,000	457,000	880,000	457,000	246,000	112,000	190,000	345,000	12,305,000

Option	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
2	206,000	145,000	226,000	319,000	554,000	286,000	160,000	63,000	102,000	169,000	132,000	74,000	89,000	133,000	433,000	15,396,000

# 60 Year Elemental Cashflows

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16
Substructure																
Superstructure																
Frame																
Upper Floors																
Roof	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Windows & External Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Walls & Partitions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Finishes																
Wall Finishes	-	-	-	-	265,211	-	-	-	-	265,211	-	-	-	-	265,211	-
Floor Finishes	-	-	-	-	12,047	-	-	165,907	-	16,580	-	-	-	-	12,047	165,907
Ceiling Finishes	-	-	-	-	-	-	-	-	-	219,094	-	-	-	-	-	-
Fittings & Furnishings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Services																
Mechanical	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350,314	-
Electrical	-	-	-	-	-	-	-	-	-	185,403	-	-	-	-	109,548	-
External Works	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	63,264	34,483
	34,483	34,483	34,483	34,483	311,741	34,483	34,483	200,390	34,483	720,770	34,483	34,483	34,483	34,483	800,384	200,390

	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Total
Substructure															-
															-
Superstructure															-
Frame															-
Upper Floors															-
Roof	-	-	-	-	-	-	-	-	4,400	-	-	-	-	39,007	43,408
Stairs	-	-	-	22,490	-	-	-	-	-	-	-	-	-	4,681	27,171
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	153,483	153,483
Windows & External Doors	-	-	-	-	-	-	-	-	63,355	-	-	-	-	117,904	181,258
Internal Walls & Partitions	-	-	-	9,268	-	-	-	-	18,203	-	-	-	-	-	27,472
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	189,732	189,732
															-
Internal Finishes															-
Wall Finishes	-	-	-	265,211	-	-	-	-	265,211	-	-	-	-	265,211	1,591,264
Floor Finishes	-	-	-	114,988	-	-	-	165,907	33,988	-	-	-	-	16,580	703,951
Ceiling Finishes	-	-	-	219,094	-	-	-	-	-	-	-	-	-	219,094	657,282
															-
Fittings & Furnishings	-	-	-	307,920	-	-	-	-	-	-	-	-	-	56,401	364,321
															-
Services															-
Mechanical	-	-	-	381,371	-	-	-	-	96,023	-	-	-	-	1,447,793	2,083,456
															-
Electrical	-	-	-	210,896	-	-	-	-	60,295	-	-	-	-	850,825	1,416,966
															-
External Works	34,483	34,483	44,327	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	206,936	34,483	1,245,565
	34,483	34,483	44,327	1,565,721	34,483	34,483	34,483	200,390	383,912	34,483	34,483	34,483	206,936	3,395,192	8,685,327

	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Year 46
<b>Substructure</b>																
<b>Superstructure</b>																
Frame																
Upper Floors																
Roof	-	-	-	-	-	-	-	-	-	510,046	-	-	-	-	-	-
Stairs	-	-	-	-	-	-	-	-	-	22,490	-	-	-	-	-	-
External Walls	-	-	-	-	3,238	-	-	-	-	-	-	-	-	-	-	-
Windows & External Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Walls & Partitions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,268	-
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Internal Finishes</b>																
Wall Finishes	-	-	-	-	265,211	-	-	-	-	265,211	-	-	-	-	265,211	-
Floor Finishes	-	165,907	-	-	12,047	-	-	-	-	280,895	-	-	-	-	12,047	-
Ceiling Finishes	-	-	-	-	-	-	-	-	-	219,094	-	-	-	-	-	-
<b>Fittings &amp; Furnishings</b>	-	-	-	-	-	-	-	-	-	56,401	-	-	-	-	-	-
<b>Services</b>																
<b>Mechanical</b>	-	-	-	-	-	-	-	-	-	381,371	-	-	-	-	350,314	-
<b>Electrical</b>	-	-	-	-	-	-	-	-	-	210,896	-	-	-	-	109,548	-
<b>External Works</b>	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	203,000	34,483	34,483	34,483	34,483	63,264	34,483
	34,483	200,390	34,483	34,483	314,979	34,483	34,483	34,483	34,483	2,149,404	34,483	34,483	34,483	34,483	809,652	34,483

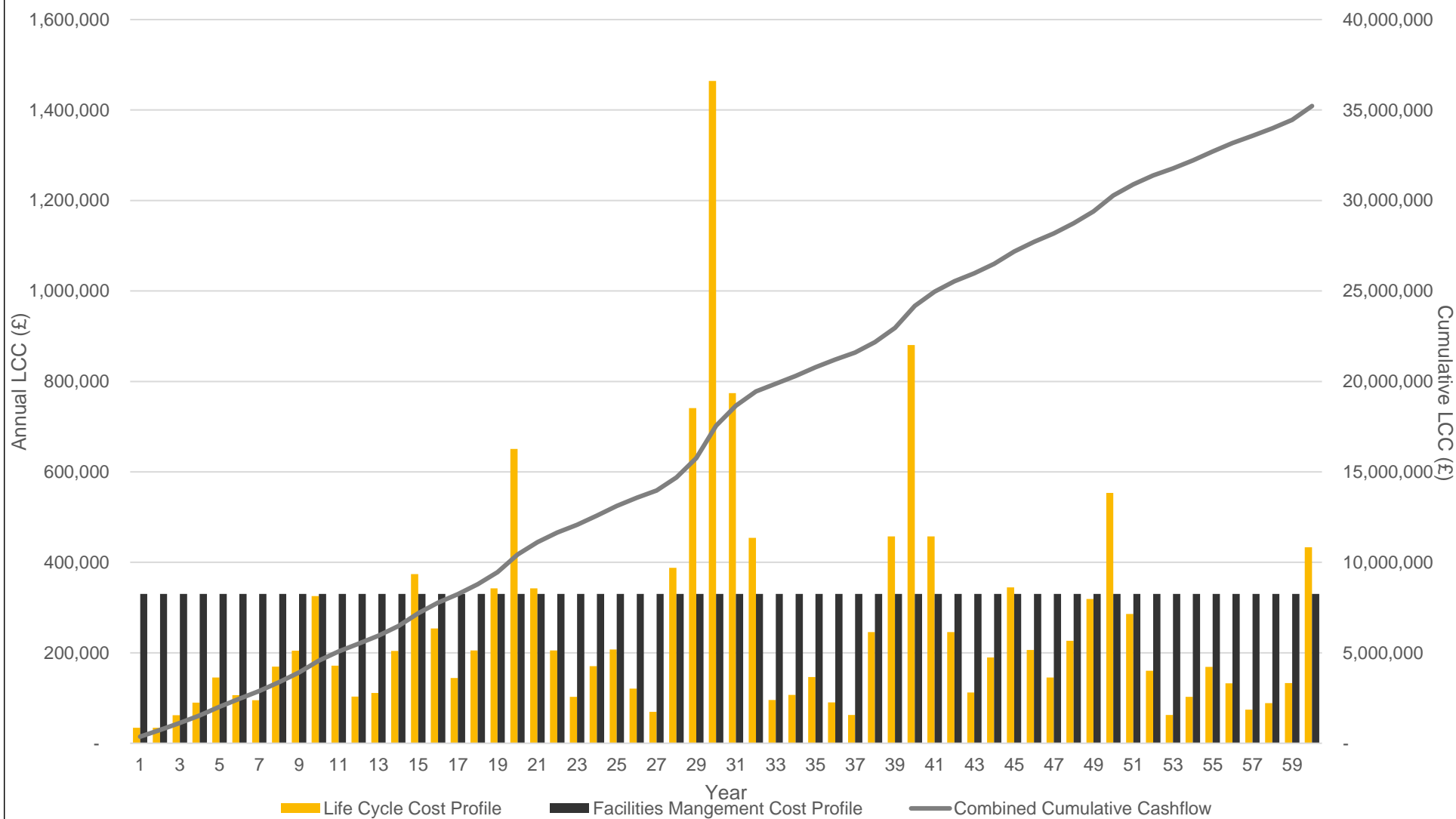
	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
Substructure															-
															-
Superstructure															-
Frame															-
Upper Floors															-
Roof	-	-	-	-	-	-	-	-	4,400	-	-	-	-	5,851	520,298
Stairs	-	-	-	12,832	-	-	-	-	-	-	-	-	-	4,076	39,398
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	20,880	24,118
Windows & External Doors	-	-	-	63,355	-	-	-	-	-	-	-	-	-	17,686	81,040
Internal Walls & Partitions	-	-	-	199,869	-	-	-	-	-	-	-	-	-	-	209,137
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	28,460	28,460
															-
Internal Finishes															-
Wall Finishes	-	-	-	265,211	-	-	-	-	265,211	-	-	-	-	39,782	1,365,835
Floor Finishes	-	165,907	-	38,521	-	-	-	-	12,047	124,430	-	-	-	17,248	829,049
Ceiling Finishes	-	-	-	219,094	-	-	-	-	-	-	-	-	-	32,864	471,052
															-
Fittings & Furnishings	-	-	-	307,920	-	-	-	-	-	-	-	-	-	8,460	372,781
															-
Services															
Mechanical	-	-	-	96,023	-	-	-	-	-	-	-	-	-	274,375	910,037
Electrical	-	-	-	245,698	-	-	-	-	-	-	-	-	-	131,448	697,589
															-
External Works	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	34,483	25,862	20,690	15,517	10,345	32,517	1,164,302
	34,483	200,390	34,483	1,290,960	34,483	34,483	34,483	34,483	316,141	150,292	20,690	15,517	10,345	613,645	6,713,097

Total 60 Year Life Cycle Cost 15,398,424

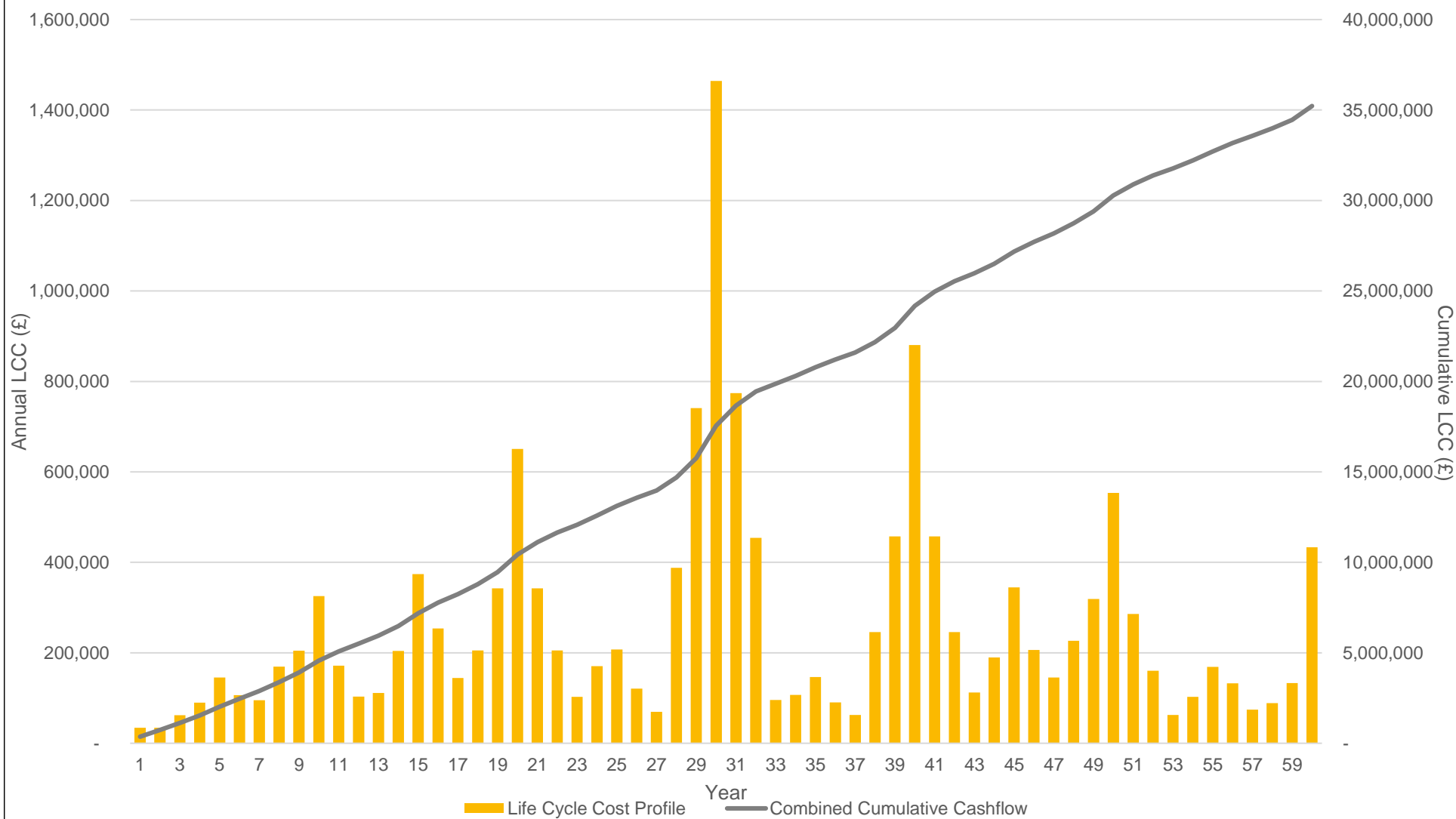
Smoothed Cashflow Total



B7. Breakdown of LCC Costs Annual Cashflow Histogram  
(Costs Smoothed but not Discounted)

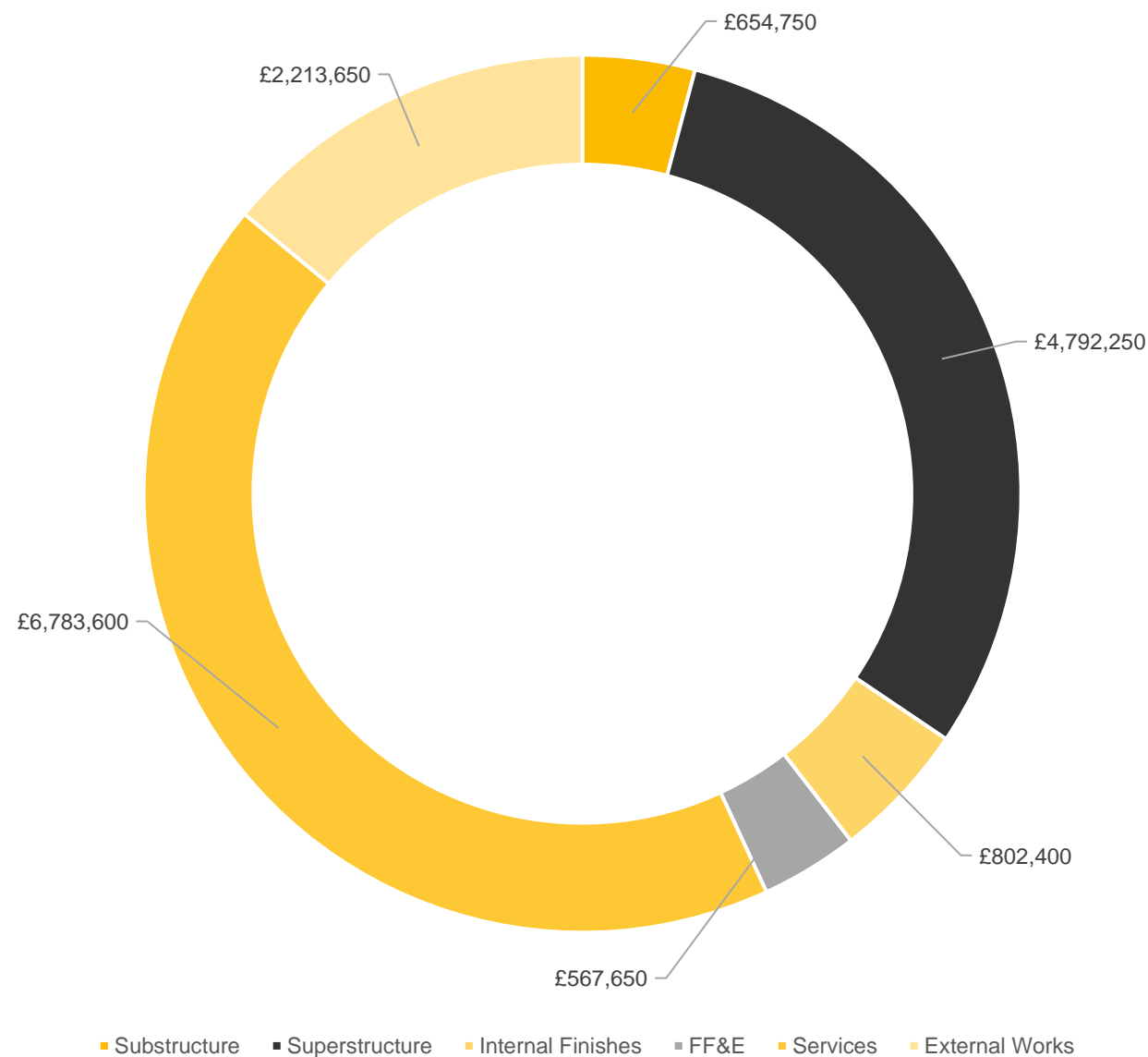


B7. Breakdown of LCC Costs Annual Cashflow Histogram  
(Costs Smoothed but not Discounted) Exc. FM

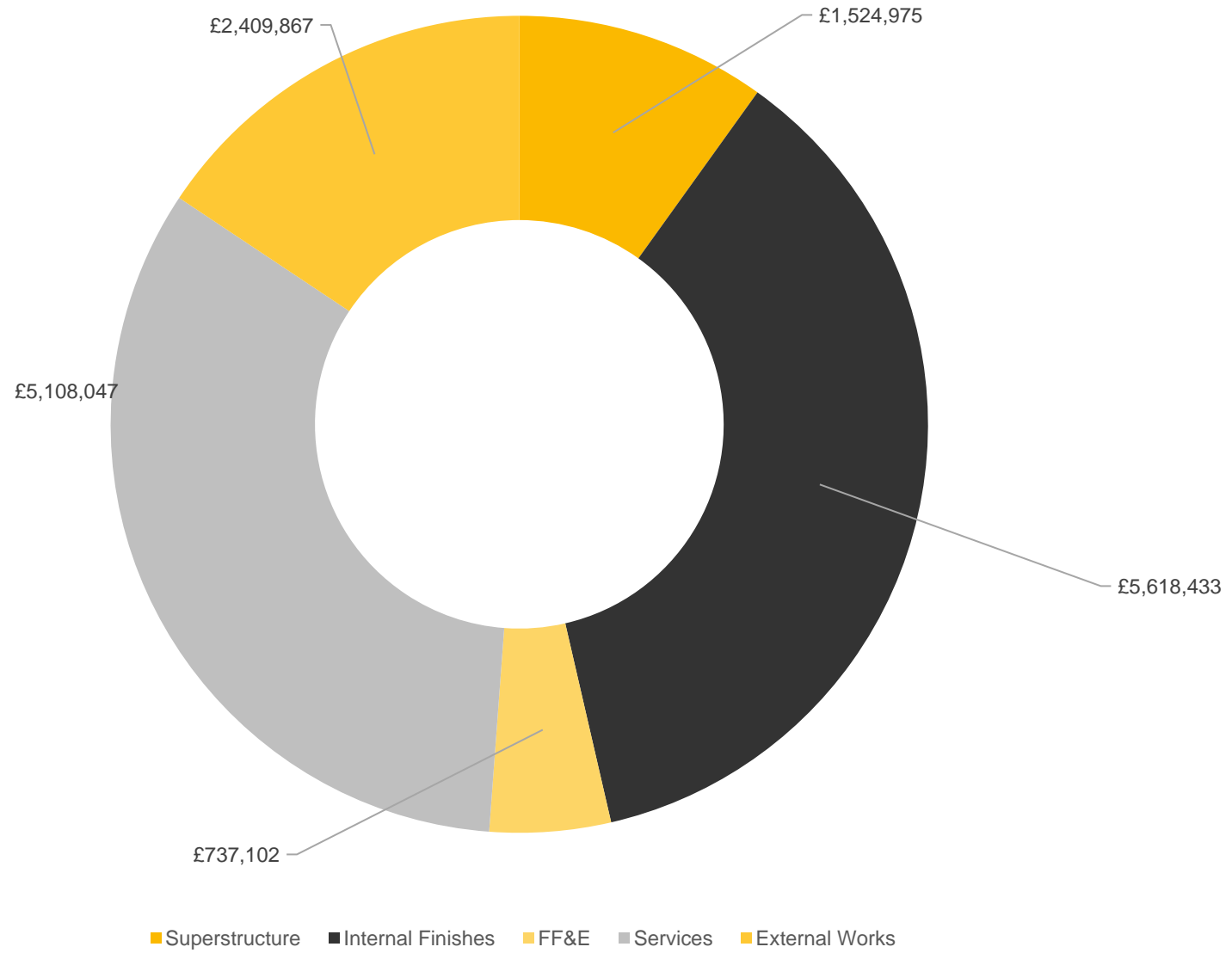


Cost Breakdowns

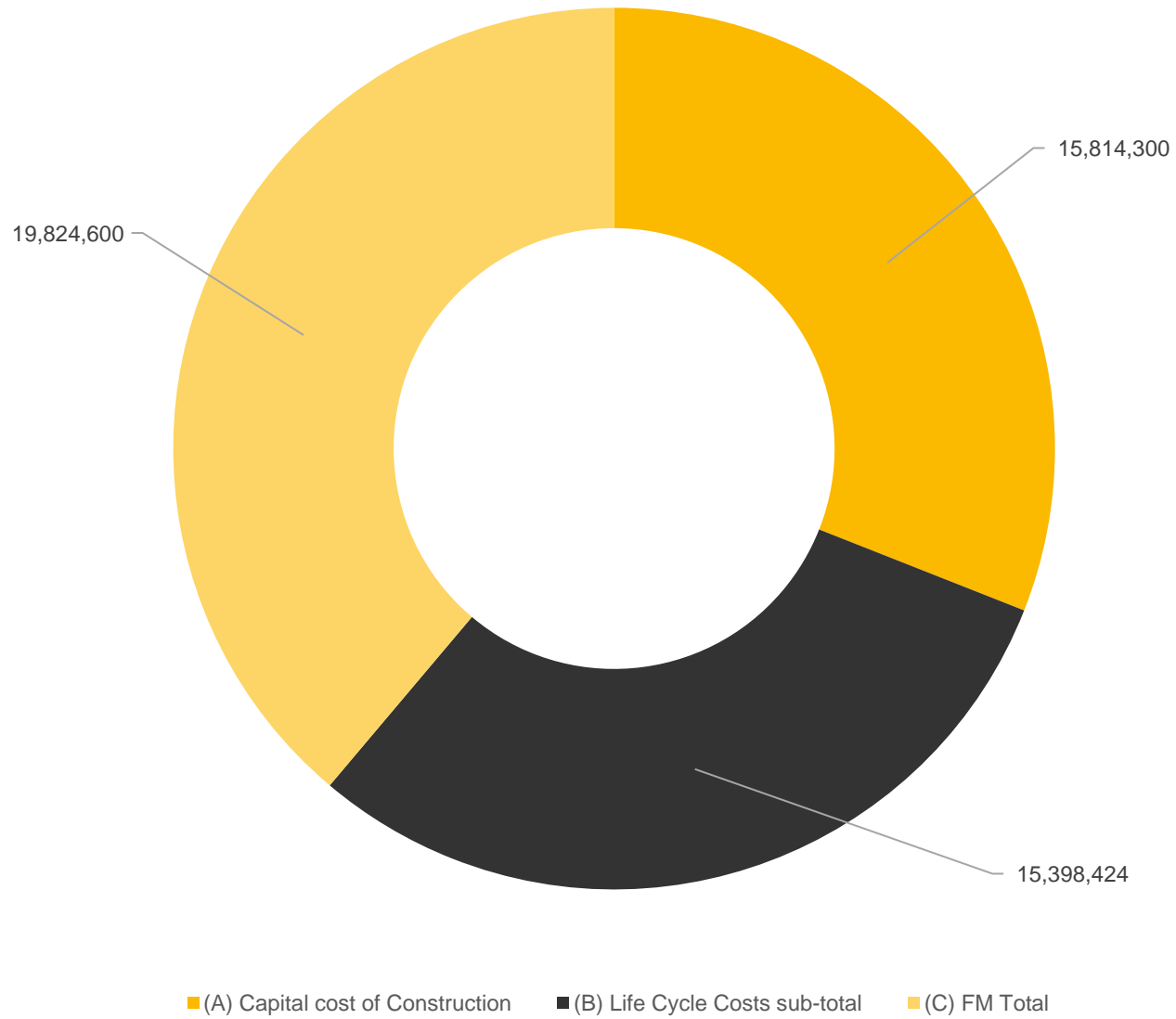
Capital Costs



## Life Cycle Costs

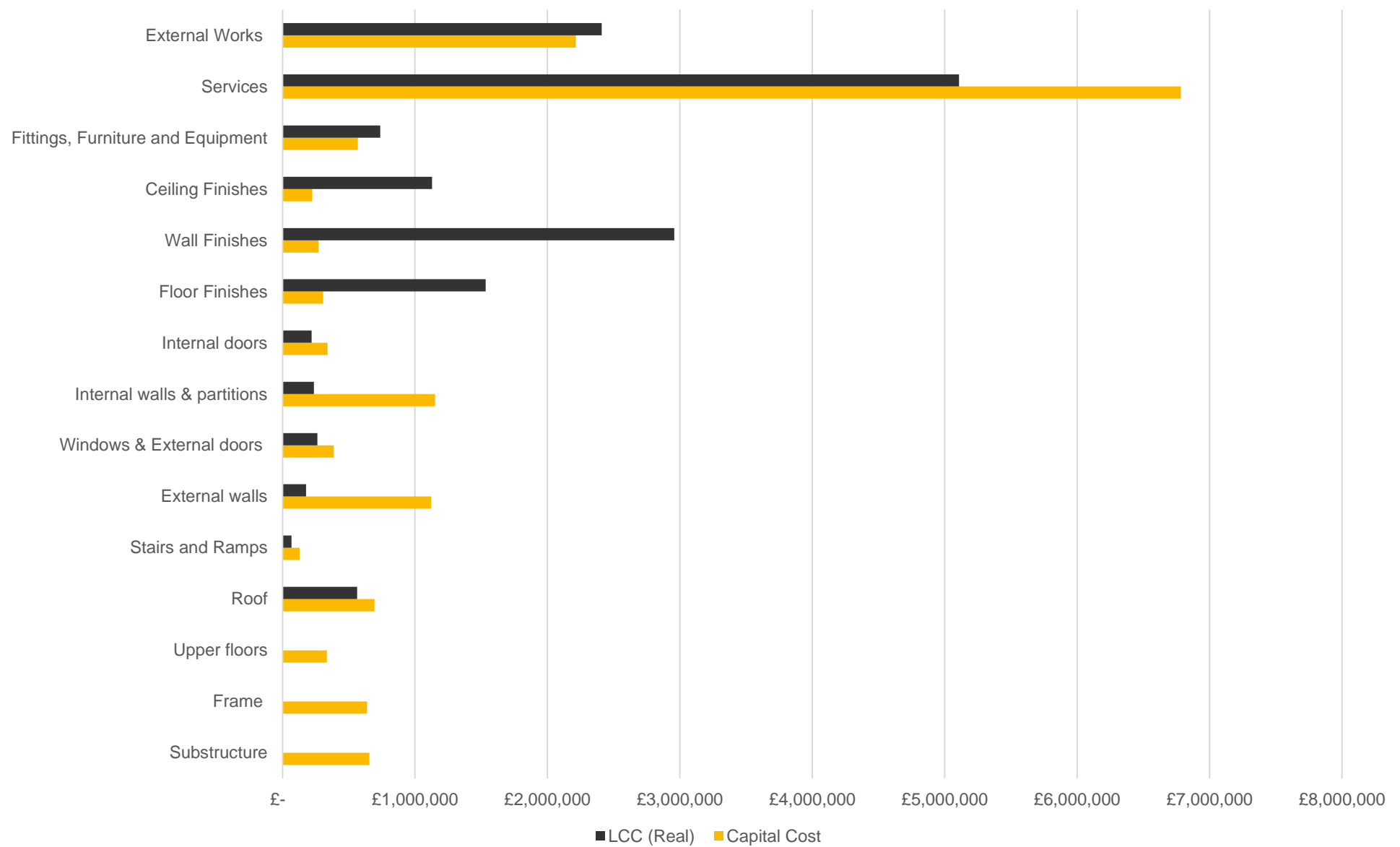


## Whole Life Costs



# Elemental Cost Comparison

## Capital Cost & LCC Comparison





[illegible]

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Total
10 Year Fit-out Strategy											
3 Internal Finishes											
3.1 Wall Finishes	-	-	-	-	237,009	-	-	-	-	237,009	474,018
3.2 Floor Finishes	-	-	-	-	25,471	-	-	165,907	-	25,471	216,849
3.3 Ceiling Finishes	-	-	-	-	12,047	-	-	-	-	16,580	28,627
4 Fittings, Furniture and equipment											
4.1 Fittings, Furniture and equipment	-	-	-	-	-	-	-	-	-	16,545	16,545
	-	-	-	-	274,527	-	-	165,907	-	295,605	736,039



# **Cross Hands Wellbeing Hub**


Option 3 Preferred Way Forward  
Elemental Life Cycle Costs  
Outline Business Case  
May 2022

# Contents

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<b>15 Year Servicing Strategy</b>
<b>10 Year Fit-out Strategy</b>

# Document Control

## Document control

<b>Project name</b>	Cross Hands Wellbeing H	<b>Project number</b>	CFCM0116
<b>Date of Issue</b>	11 May 2022	<b>Version number</b>	1
<b>Reason for issue</b>	Crosshands Option 3 Life Cycle Costs May 2022		
<b>Document author</b>	Ian Bailey	<b>Grade</b>	Executive Surveyor
<b>Contributors</b>	Luke Sullivan	Angharad Slee	
<b>Approved by</b>	Nigel Watkins	<b>Grade</b>	Director
<b>Signature</b>			
<b>Security classification</b>	External Confidential		
<b>Distribution to</b>	Hywel Dda University Health Board		

# Project Appointment



## Project Appointment

Gleeds have been appointed by Hywel Dda University Health Board to provide Elemental Life Cycle Costs in line with 'Standardised method of life cycle costing for construction procurement' PD 156865:20081.'

This report considers the proposed building elements in its analysis.

The lifecycle of the elements is based on BCIS Replacement Periods, and the relevant works.

Separate graphs and summaries for Life Cycle Costs and Facilities Management costs allow the client to use their own Facilities Management costs if required.

# Life Cycle Report Summary

## Life Cycle Report Summary

### Summary Pricing Notes

Costs are at 1Q 2022 rates with no allowance for inflation;

The costs included are real costs, i.e future costs are not discounted to net present values (NPV);

The exact year of replacement is unknown. To reflect this, costs have been smoothed over a five-year period:

-2 Years	-1 Year	Year	+1 Year	+2 Years
10%	20%	40%	20%	10%

The Facilities Management figures mentioned throughout the report are calculated using BCIS

BUILDING TYPE	£/100m <sup>2</sup>		
	Cleaning	Utilities	Total Ops'
Hospitals - mixed specialist facilities	4,675	2,714	7,389
AREA (m2)	Total Annual Cleaning	Total Annual Utilities	
5,141	240,342	139,527	

Maintenance (Fabric and Services) costs are contained within Gleeds' own LCC analysis aided by BCIS replacement figures

# Assumptions and Exclusions

## Assumptions and Exclusions

It should be noted that the model is a prediction of what works will be required to keep the building operational and when they will occur. Life cycle replacement is in practice not an exact science and there are many factors that impact upon a component's life.

This report therefore attempts to generate a realistic overall fund of monies to maintain the building and an estimate as to when these funds will be required to be drawn down.

### The following assumptions have been used in calculating the Life Cycle Costs:

Construction costs are based on the Options cost plan from Wilmott Dixon Cost Plan - Crosshands Rev 23.03.2022;

Base date for costs: 1Q 2022

Costs are calculated at real costs, i.e. there is no allowance for inflation and increased costs included in the projected figures;

The costs included are real costs, i.e. future costs are not discounted to net present values (NPV); and

Calculated costs exclude allowances for management costs and the overheads and profits of an FM Operator

Costs within 6. Complete building & Building Units have been allocated to the elemental group in which they belong. i.e. Mechanical and Electrical installations were added to 5. Services

### General assumptions include:

- a) Life cycle replacement periods and work intervals included in the model are based on those published by the RICS in their Life Expectancy of Buildings and CIBSE's Guide M for services replacement;
- b) The replacement periods assume that the appropriate planned preventative maintenance (PPM) is carried out;
- c) All workmanships/installations/maintenance etc. are in accordance with manufacturers' recommendations;
- d) Economically sized competitive replacement contracts are placed;
- e) All contract areas to be empty of staff and public, and to be safe to allow for replacement access;
- f) No unreasonable restrictions on working hours; and
- g) Like for like replacements.

### Allowances and enhancements have been made on a component by component basis for:

- a) Strip out costs;
- b) Sub-contract preliminaries;
- c) Accessibility enhancement for works not easily reached;
- d) Out of sequence enhancements where replacement of the component is not naturally sequenced; and
- e) 3% contingency has been included on all items.

**General exclusions include:**

- a) Structural works;
- b) Out of hours working premium;
- c) ICT equipment;
- d) Professional fees;
- e) Temporary roofs;
- f) Damage caused through vandalism;
- g) Effects of future legislation on Building Regulations;
- h) Value Added Tax;
- i) Potential capital allowances and other tax rebates;
- j) Insurances and rates; and
- k) Decommissioning or demolition of the building at its end of life.

**Calculations**

- a) The exact replacement of components is not known. Therefore, the replacement cycles inputted into the model have been 'smoothed' across a range of five years.
- b) It is anticipated that the building will remain in operation beyond the end of the 60-year concession period. The costs do not include any tailed-off period, i.e. are not reduced in the final years of the study.

# General Summary

Including Facilities Management Costs							
Option	Description	LCC	GIFA (m²)	£/m²	£/m²/pa	Construction Capital Cost	% LCC of Capital Cost
3	Crosshands Option 3 Life Cycle Costs May 2022	£ 40,685,000	5,141	£ 7,910	£ 130	£ 18,405,123	221%

Excluding Facilities Management Costs							
Option	Description	LCC	GIFA (m²)	£/m²	£/m²/pa	Construction Capital Cost	% LCC of Capital Cost
3	Crosshands Option 3 Life Cycle Costs May 2022	£ 17,888,000	5,141	£ 3,480	£ 60	£ 18,405,123	97%



# 60 Year Smoothed Cashflows

Inc. FM

Option	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Sub-total
3	420,000	420,000	452,000	483,000	547,000	503,000	490,000	575,000	616,000	755,000	578,000	499,000	508,000	615,000	811,000	8,272,000

Option	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Sub-total
3	672,000	546,000	616,000	775,000	#####	775,000	616,000	498,000	577,000	619,000	519,000	460,000	840,000	#####	2,121,000	20,296,000

Option	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Sub-total
3	#####	917,000	490,000	503,000	549,000	484,000	452,000	663,000	907,000	1,394,000	907,000	663,000	509,000	598,000	777,000	31,408,000

Option	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
3	617,000	547,000	641,000	747,000	#####	709,000	564,000	452,000	498,000	574,000	532,000	465,000	484,000	537,000	893,000	40,685,000

## Exc. FM

Option	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Sub-total
3	40,000	40,000	72,000	104,000	167,000	123,000	110,000	195,000	236,000	375,000	198,000	119,000	128,000	235,000	431,000	2,573,000

Option	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Sub-total
3	292,000	166,000	236,000	395,000	749,000	395,000	236,000	118,000	197,000	239,000	139,000	80,000	460,000	881,000	1,741,000	8,897,000

Option	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Sub-total
3	919,000	537,000	110,000	123,000	169,000	104,000	72,000	283,000	527,000	1,014,000	527,000	283,000	129,000	218,000	397,000	14,309,000

Option	Year 46	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
3	237,000	167,000	261,000	367,000	637,000	329,000	184,000	72,000	118,000	195,000	153,000	85,000	104,000	157,000	513,000	17,888,000

# 60 Year Elemental Cashflows

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16
Substructure																
Superstructure																
Frame																
Upper Floors																
Roof	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Windows & External Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Walls & Partitions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Finishes																
Wall Finishes	-	-	-	-	305,364	-	-	-	-	305,364	-	-	-	-	305,364	-
Floor Finishes	-	-	-	-	13,871	-	-	191,025	-	19,090	-	-	-	-	13,871	191,025
Ceiling Finishes	-	-	-	-	-	-	-	-	-	252,265	-	-	-	-	-	-
Fittings & Furnishings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Services																
Mechanical	-	-	-	-	-	-	-	-	-	-	-	-	-	-	403,352	-
Electrical	-	-	-	-	-	-	-	-	-	213,473	-	-	-	-	126,133	-
External Works	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	72,842	39,704
	39,704	39,704	39,704	39,704	358,938	39,704	39,704	230,729	39,704	829,894	39,704	39,704	39,704	39,704	921,562	230,729

	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Total
Substructure															-
															-
Superstructure															-
Frame															-
Upper Floors															-
Roof	-	-	-	-	-	-	-	-	5,067	-	-	-	-	44,913	49,980
Stairs	-	-	-	25,895	-	-	-	-	-	-	-	-	-	5,390	31,285
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	176,721	176,721
Windows & External Doors	-	-	-	-	-	-	-	-	72,946	-	-	-	-	135,754	208,701
Internal Walls & Partitions	-	-	-	10,671	-	-	-	-	20,959	-	-	-	-	-	31,631
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	218,457	218,457
															-
Internal Finishes															-
Wall Finishes	-	-	-	305,364	-	-	-	-	305,364	-	-	-	-	305,364	1,832,181
Floor Finishes	-	-	-	132,397	-	-	-	191,025	39,134	-	-	-	-	19,090	810,529
Ceiling Finishes	-	-	-	252,265	-	-	-	-	-	-	-	-	-	252,265	756,794
															-
Fittings & Furnishings	-	-	-	354,539	-	-	-	-	-	-	-	-	-	64,940	419,479
															-
Services															-
Mechanical	-	-	-	439,110	-	-	-	-	-	110,560	-	-	-	1,804,237	2,536,139
															-
Electrical	-	-	-	242,826	-	-	-	-	69,423	-	-	-	-	979,639	1,631,494
															-
External Works	39,704	39,704	51,038	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	238,266	39,704	1,434,143
	39,704	39,704	51,038	1,802,771	39,704	39,704	39,704	230,729	442,037	39,704	39,704	39,704	238,266	4,046,472	10,137,532

	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40	Year 41	Year 42	Year 43	Year 44	Year 45	Year 46
<b>Substructure</b>																
<b>Superstructure</b>																
Frame																
Upper Floors																
Roof	-	-	-	-	-	-	-	-	-	587,267	-	-	-	-	-	-
Stairs	-	-	-	-	-	-	-	-	-	25,895	-	-	-	-	-	-
External Walls	-	-	-	-	3,728	-	-	-	-	-	-	-	-	-	-	-
Windows & External Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Internal Walls & Partitions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,671	-
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Internal Finishes</b>																
Wall Finishes	-	-	-	-	305,364	-	-	-	-	305,364	-	-	-	-	305,364	-
Floor Finishes	-	191,025	-	-	13,871	-	-	-	-	323,422	-	-	-	-	13,871	-
Ceiling Finishes	-	-	-	-	-	-	-	-	-	252,265	-	-	-	-	-	-
<b>Fittings &amp; Furnishings</b>	-	-	-	-	-	-	-	-	-	64,940	-	-	-	-	-	-
<b>Services</b>																
<b>Mechanical</b>	-	-	-	-	-	-	-	-	-	439,110	-	-	-	-	403,352	-
<b>Electrical</b>	-	-	-	-	-	-	-	-	-	242,826	-	-	-	-	126,133	-
<b>External Works</b>	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	233,735	39,704	39,704	39,704	39,704	72,842	39,704
	<b>39,704</b>	<b>230,729</b>	<b>39,704</b>	<b>39,704</b>	<b>362,666</b>	<b>39,704</b>	<b>39,704</b>	<b>39,704</b>	<b>39,704</b>	<b>2,474,823</b>	<b>39,704</b>	<b>39,704</b>	<b>39,704</b>	<b>39,704</b>	<b>932,233</b>	<b>39,704</b>

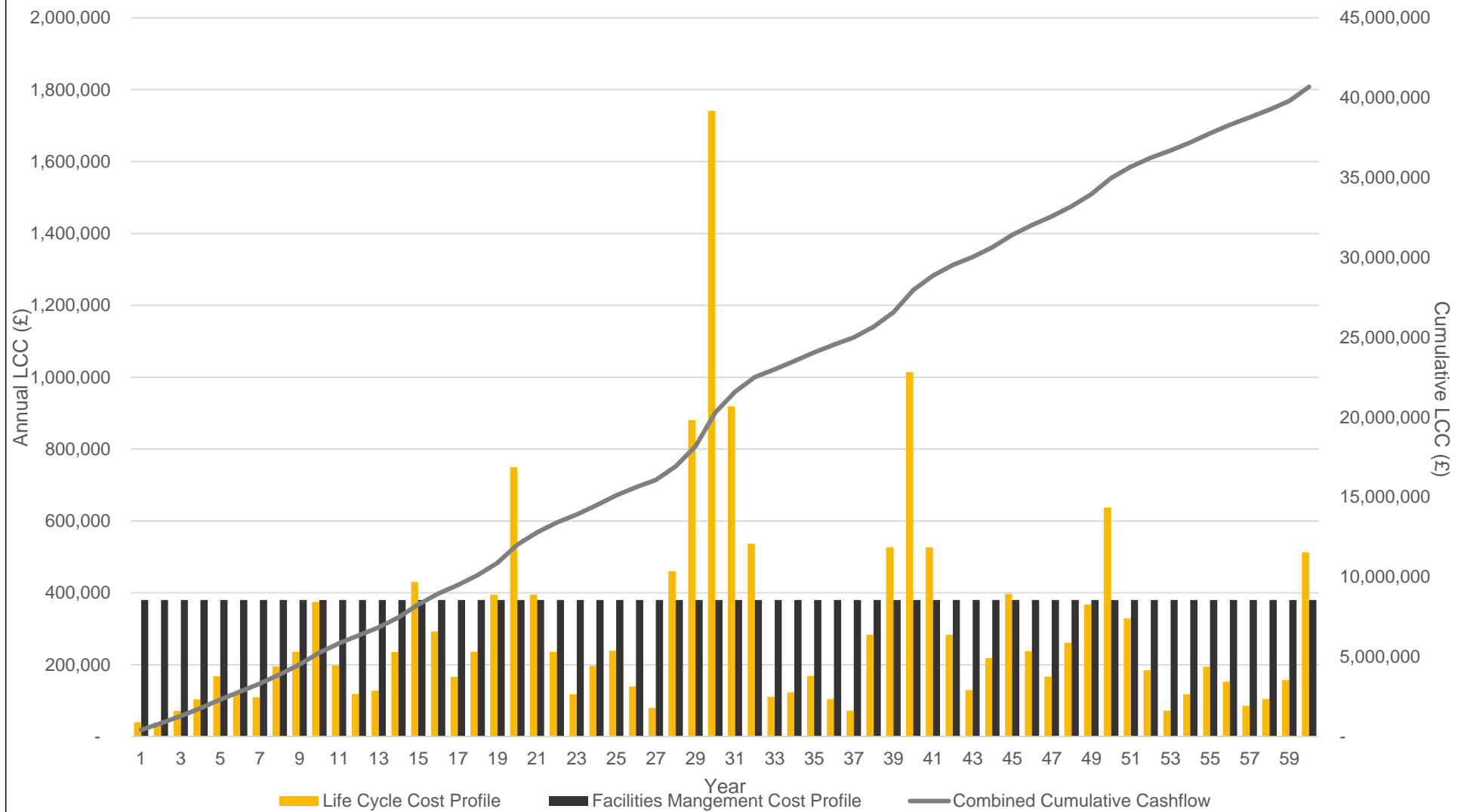
	Year 47	Year 48	Year 49	Year 50	Year 51	Year 52	Year 53	Year 54	Year 55	Year 56	Year 57	Year 58	Year 59	Year 60	Total
Substructure															-
															-
Superstructure															-
Frame															-
Upper Floors															-
Roof	-	-	-	-	-	-	-	-	5,067	-	-	-	-	6,737	599,071
Stairs	-	-	-	14,775	-	-	-	-	-	-	-	-	-	4,693	45,363
External Walls	-	-	-	-	-	-	-	-	-	-	-	-	-	24,041	27,770
Windows & External Doors	-	-	-	72,946	-	-	-	-	-	-	-	-	-	20,363	93,310
Internal Walls & Partitions	-	-	-	230,129	-	-	-	-	-	-	-	-	-	-	240,801
Internal Doors	-	-	-	-	-	-	-	-	-	-	-	-	-	32,769	32,769
															-
Internal Finishes															-
Wall Finishes	-	-	-	305,364	-	-	-	-	305,364	-	-	-	-	45,805	1,572,622
Floor Finishes	-	191,025	-	44,353	-	-	-	-	13,871	143,269	-	-	-	19,860	954,567
Ceiling Finishes	-	-	-	252,265	-	-	-	-	-	-	-	-	-	37,840	542,369
															-
Fittings & Furnishings	-	-	-	354,539	-	-	-	-	-	-	-	-	-	9,741	429,220
															-
Services															
Mechanical	-	-	-	110,560	-	-	-	-	-	-	-	-	-	336,502	1,068,404
Electrical	-	-	-	282,896	-	-	-	-	-	-	-	-	-	151,349	803,204
															-
External Works	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	39,704	29,778	23,822	17,867	11,911	37,440	1,340,577
	39,704	230,729	39,704	1,486,411	39,704	39,704	39,704	39,704	364,005	173,047	23,822	17,867	11,911	727,138	7,750,045

Total 60 Year Life Cycle Cost 17,887,578

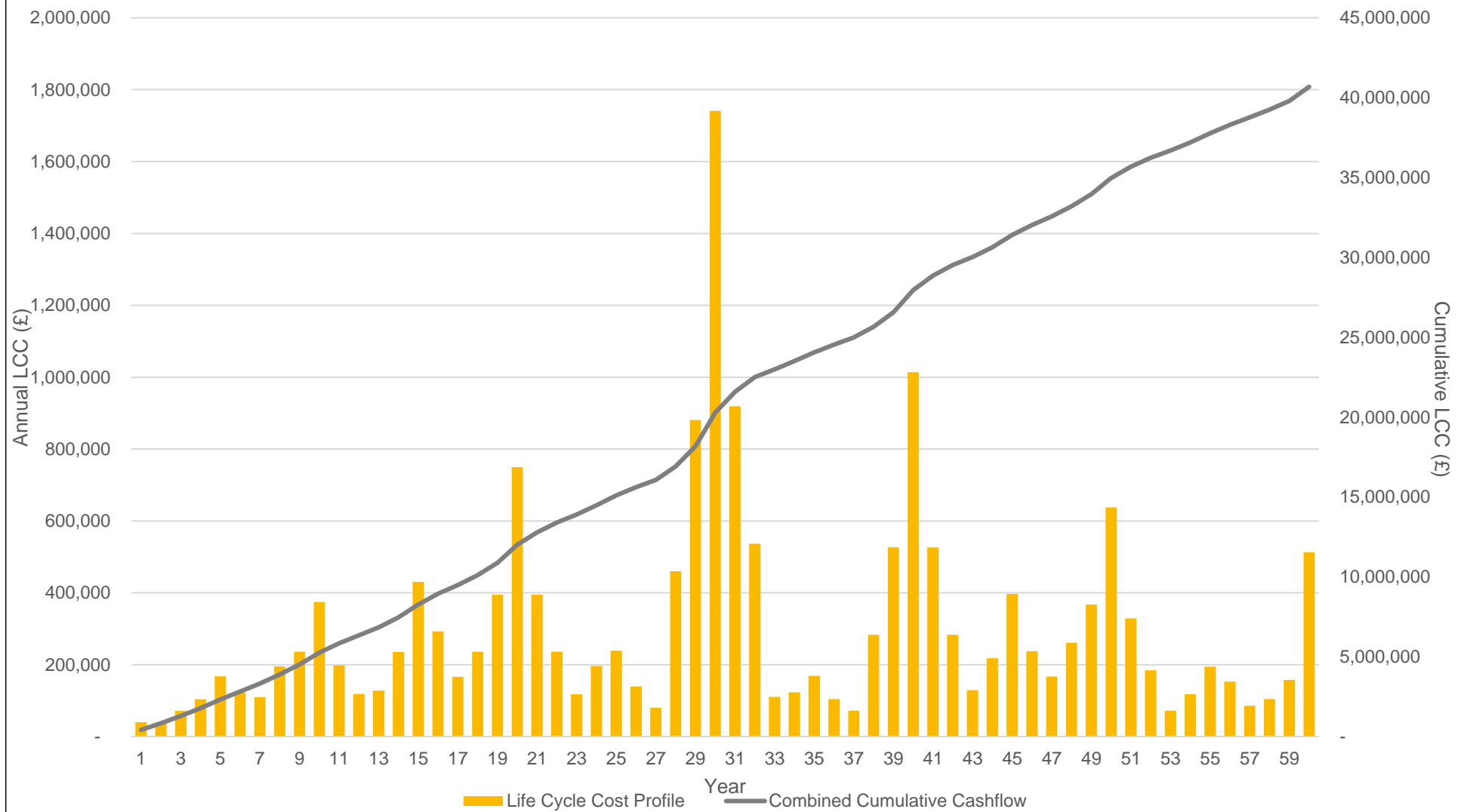


Smoothed Cashflow Total

B7. Breakdown of LCC Costs Annual Cashflow Histogram  
(Costs Smoothed but not Discounted)

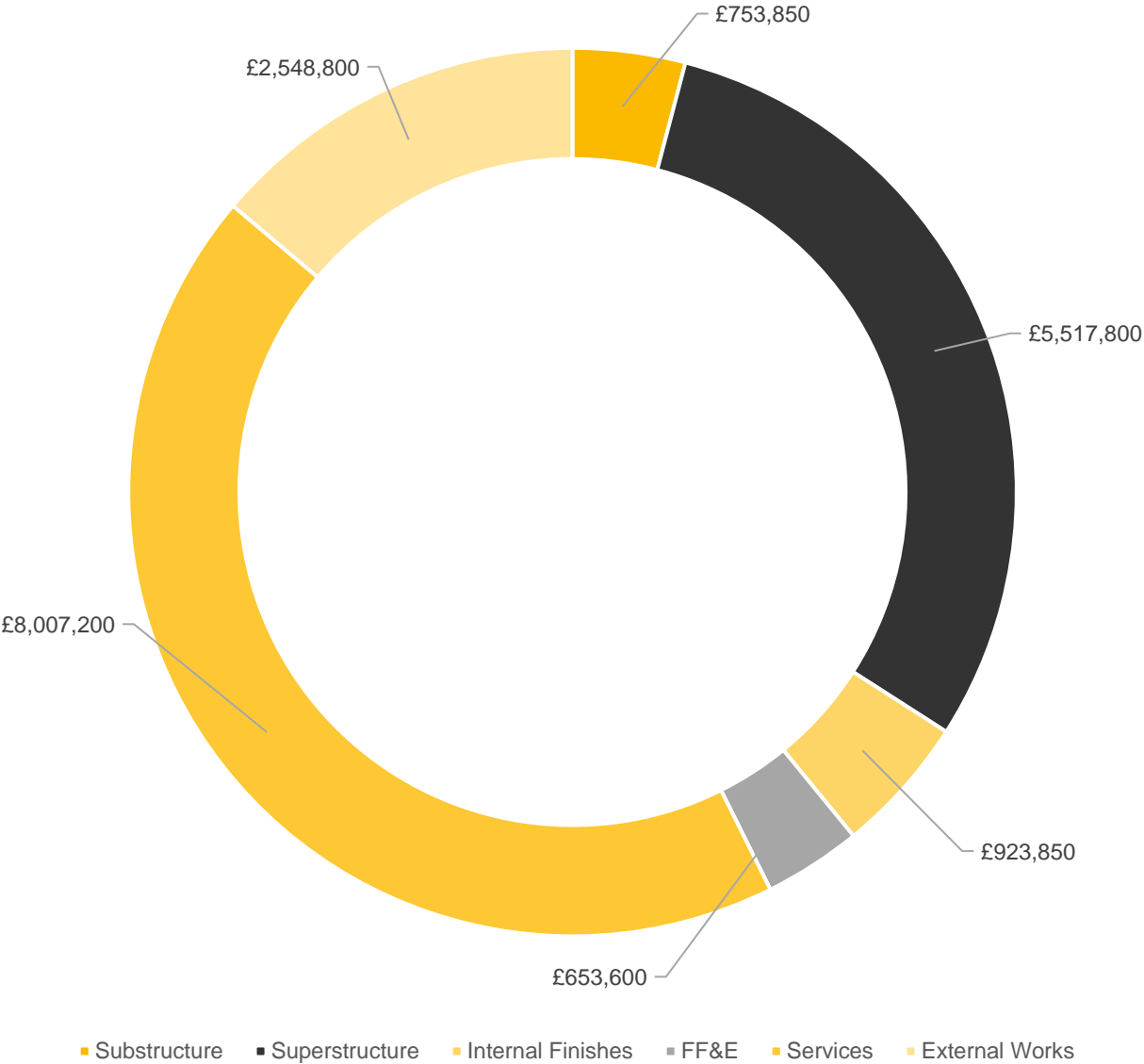


B7. Breakdown of LCC Costs Annual Cashflow Histogram  
(Costs Smoothed but not Discounted) Exc. FM

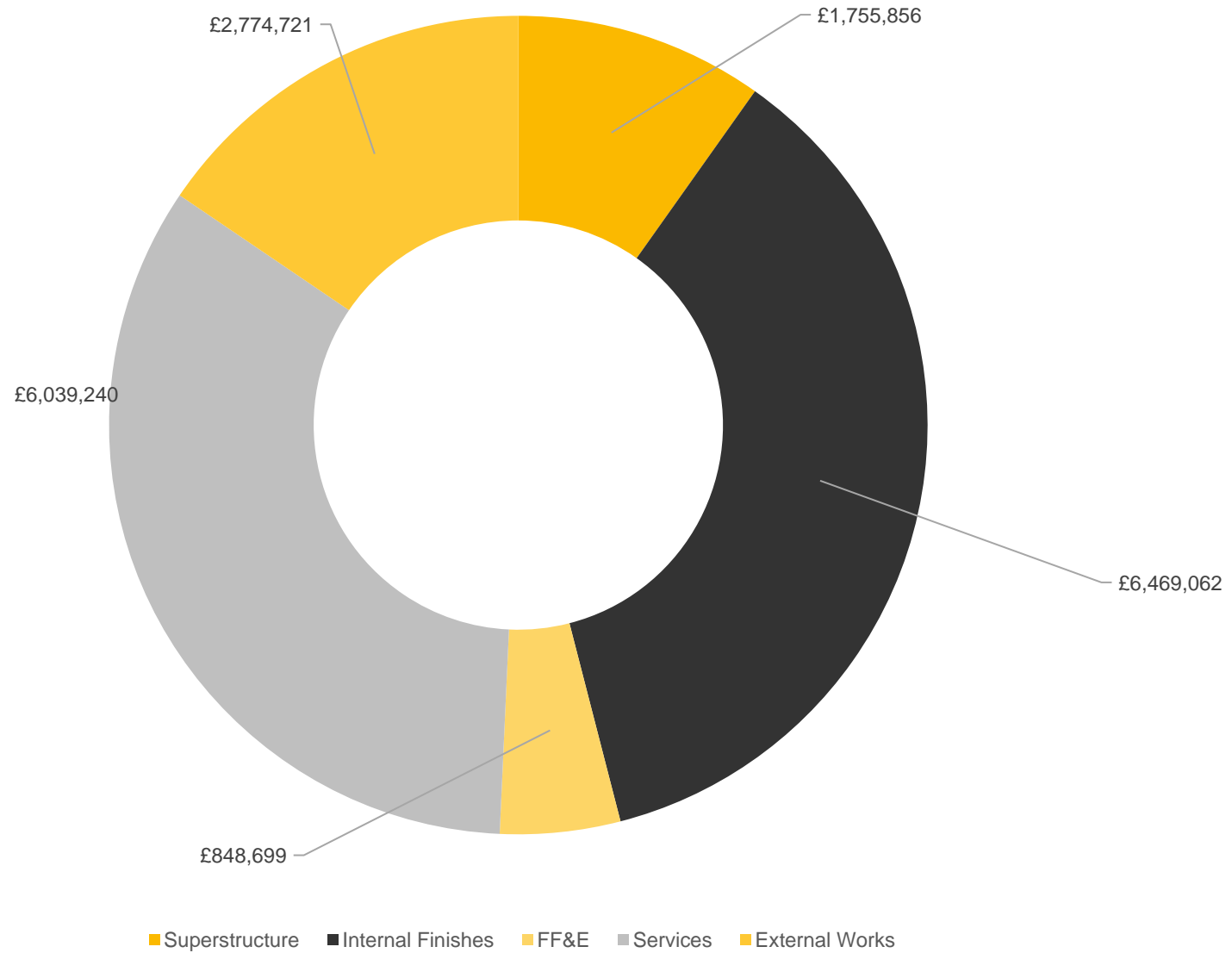


Cost Breakdowns

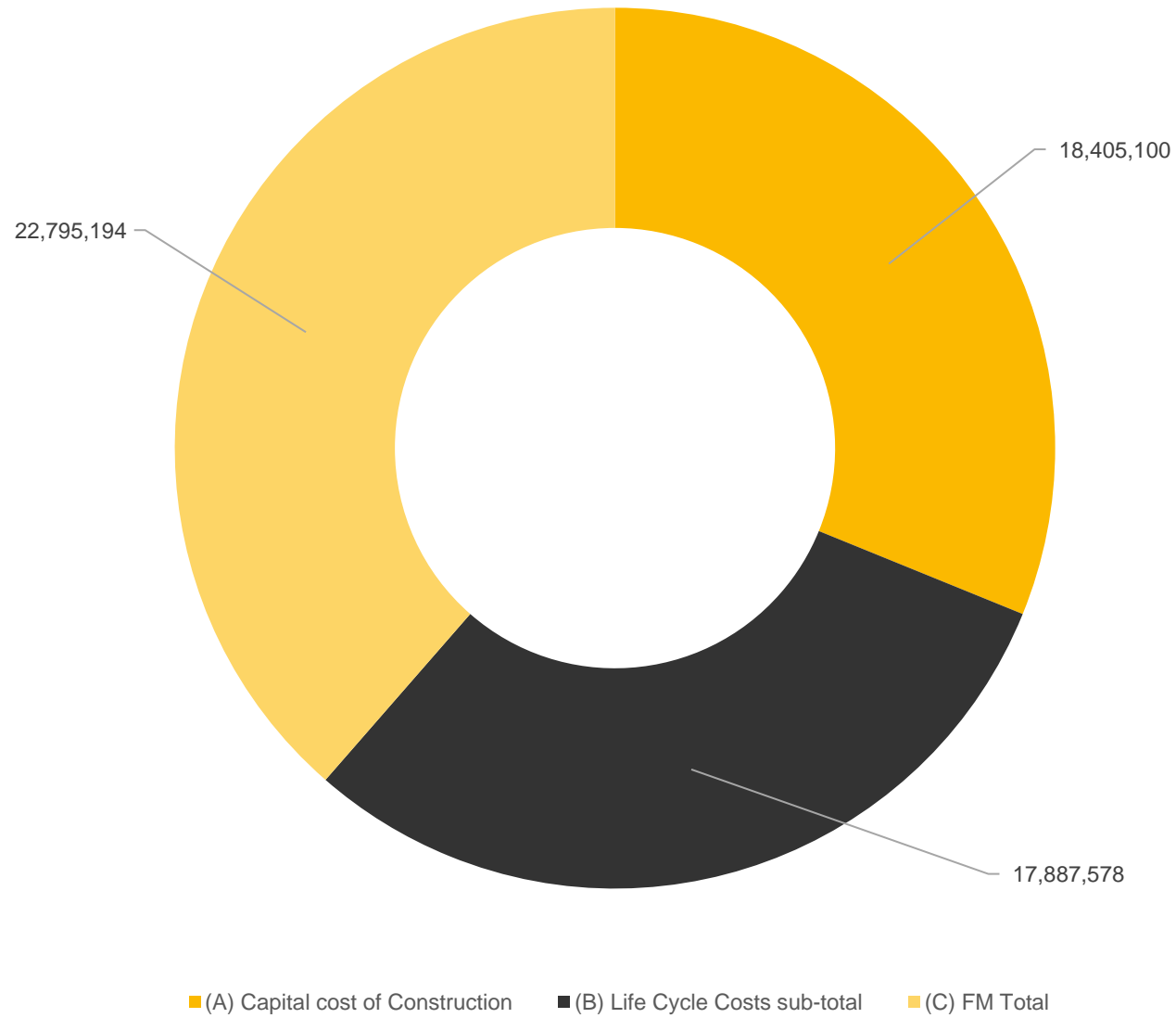
Capital Costs



## Life Cycle Costs



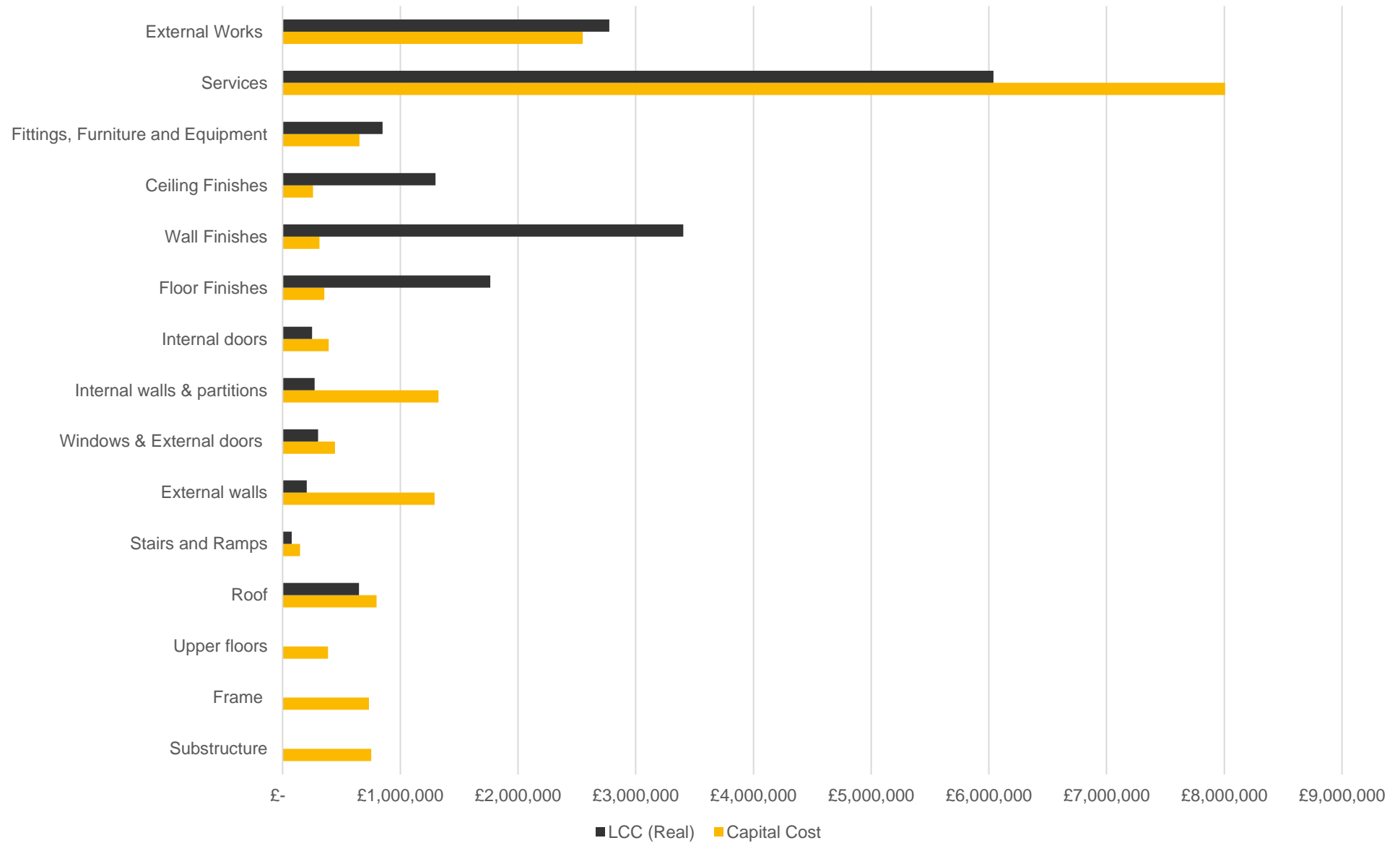
## Whole Life Costs



# Elemental Cost Comparison



## Capital Cost & LCC Comparison



[illegible]

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Total
10 Year Fit-out Strategy											
3 Internal Finishes											
3.1 Wall Finishes	-	-	-	-	272,892	-	-	-	-	272,892	545,784
3.2 Floor Finishes	-	-	-	-	29,328	-	-	191,025	-	29,328	249,680
3.3 Ceiling Finishes	-	-	-	-	13,871	-	-	-	-	19,090	32,961
4 Fittings, Furniture and equipment											
4.1 Fittings, Furniture and equipment	-	-	-	-	-	-	-	-	-	19,050	19,050
	-	-	-	-	316,091	-	-	191,025	-	340,359	847,475

