

Note to Chair of HoC Finance Committee

Elizabeth Tower refurbishment project

Key Benefits

1. The overall objective of the project is to conserve the Elizabeth Tower, the Great Clock and Big Ben for future generations.
 - Conserve and prevent further deterioration of the Elizabeth Tower.
 - Restoration of the clock mechanisms to mitigate the risk of failure with the huge risk of international reputational damage for Parliament
 - Carry out essential works, including fire safety compliance.
 - Improve the health and safety of the Elizabeth Tower for Members, staff and the public.
 - Improve the security and the efficiency of emergency evacuations.
 - Improve the efficiency of the tours in the Elizabeth Tower.

Costs

2. The table below charts cost increases between the Outline Business Case (Feb 16), Full Business Case (Sep 17) and Business Case Addendum (Feb 22) and outturn costs. Further funding for Covid (£9m) and Operation Marquee (£125k) was approved, giving a total approved budget of £89m.

	OBC (Feb 16)	FBC (Sept 17)	BCA (Feb 22)	+ Covid Funding	Outturn Cost
	£m	£m	£m	£m	£m
Pre-Construction Services	3.5	5.5	5.5	5.5	6.9
Main Works	4.8	9.5	11.9	15.0	32.8
Re-Measurable Packages	3.7	6	10.8	10.8	8.3
Clock Package	0.4	0.2	1.9	1.9	3.0
Fire Package	0	1.7	1.7	1.7	1.7
Scaffolding	3.3	6.2	8.6	8.6	7.3
Fees	2.9	4.8	6.5	10.6	11.3
Risk Budget	1	11.1	13.3	13.3	0.0
Optimism Bias Budget	4.9	5.8	6.4	6.8	0.0
Sub-Total	24.3	50.8	66.6	74.2	71.3
VAT	4.9	10.2	13.3	14.8	14.3
Total	29.2	60.9	79.9	89.0	85.5

3. Total outturn costs, including Covid expenses was £85.5.

Programme/Schedule

4. Project completions were stated as follows; OBC Dec 2019, FBC Jan 2020, BCA April 2021 and Actual project completion October 2023 (Inc 9months Covid impact).

Supply Chain

5. The Main Contractor was Sir Robert McAlpine. Form of contract was NEC3 ECC with secondary Pricing Option A (with Option B Bills of Quantities for Remeasured Packages)

6. Design Consultant was Purcell Architecture, and cost consultants were Curry and Brown. The consultants' appointments pre-dated Parliament's adoption of NEC standard contracts and were appointed using GC Works forms, standard in Parliament at the time (Government General Conditions of Contract for Building and Engineering Work)

Valuation of Change

7. Under NEC3 ECC Option A (Fixed Priced), compensation events are valued using the Defined Cost-plus Fee approach, not the original tendered rates. The contractor submits a quotation detailing the forecast 'actual' cost of the work affected plus the agreed fee. The Project Manager assesses the quotation for reasonableness and may adjust it (also option to agree lump sums/rates by mutual consent). This is a significant departure from other standard building contracts in that, (1) it seeks to establish the true cost of change rather than using tendered rates, this being fairer to both parties and (2) it values change on a 'prospective' basis. In essence, a forecast is produced and agreed for future costs and at the point of implementation, that becomes a fixed price. It can only be changed if any of the underlying assumptions change. The benefit of this approach is cost certainty and programme integrity. A disadvantage is the lack of retrospective visibility of actual costs post event. An alternative approach is Option C cost recovery, where in effect, only the actual costs are recovered retrospectively, but does not give cost certainty. Changes to the re-measurable element covered by Bills of Materials (Option B) were more straightforward as changes to quantity (eg, more stone etc.) were valued at bill rates.

Audits and Findings

8. Broom Report into Contract Structure. Findings: (1) Mixing of Pricing options (A&B) and bespoke amendments were ill-advised, (2) Lack of training of project team on 'new' form of contract. Lessons now embedded in Parliamentary commercial policy.
9. BDO Audit of Main Works Final Account including Covid Costs. Conclusion: "the fieldwork and further analysis conducted by the audit team did not identify any clear, obvious or material exceptions/errors which would necessitate withholding or delaying final account sign-off."
10. JCBA Audit: Focussed on the approach to the valuation of the COVID costs and broader recommendations of efficiency, productivity and commercial relationships.

Key Change Events

11. Site Discoveries (Defective structure, lead paint, asbestos): lack of intrusive surveys.
12. Re-measurable works (Stone and cast iron and Plastering): the quantum of work was underestimated. On stonework, over four times as much work as originally allowed for was needed: inadequate surveys and benchmarking could have avoided over optimism.
13. Clock Mechanics; previously assumed that Parliament's in-house team of specialist clock mechanics would undertake work, however, it subsequently became clear that this team did not have the capacity to undertake the demanding conservation work required. (c£2.0m)
14. Scaffolding: generic estimates not reflecting the unique nature (the largest free-standing scaffold in Europe) which only became apparent once detailed designed completed and tendered. (£5m growth from OBC)

15. Covid: this added £7.8m to the outturn cost of the project.