

GHP
GHP

EDINBURGH TRAMS

PHOENIX COSTS

DRAFT AND FOISA EXEMPT

GHP

25th FEBRUARY 2011

We have been asked to give a quick opinion on the Project Separation costs as prepared in the "deckchair" PowerPoint presentation by tie, to identify, in headline terms, any costs or 'premiums' not included, together with any other assessment/overview/comment on the credibility of the figures.

We have also been asked to provide an assessment/overview of the costs to complete Airport to Haymarket, and from Haymarket to St Andrew Square.

We set out indicative figures and stress that we cannot say that these can be taken as definitive without further work. However, we have referred to the work we have done on Project Carlisle and on the Potential Price for Project Phoenix.

In light of the importance we have attempted to be prudent in our assessments.

Project Separation

We assume that this option will entail an agreed termination and the price will be mutually agreed.

We suggest that the starting point would be the amount certified and paid to the Infraco:

Valuation Certificate 39 January 2011	£177.95m
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It is agreed that the amount certified is in advance of the true value of the work carried out and that the Mobilisation Payment of £45.2 million was in fact meant to be a payment in advance for items of work and materials not included in the works.

We have previously investigated pre-contract information and found that at one time what was articulated above was the intention. However in the end the intention became vague. Our investigation showed only that the mobilisation payment was split equally between Bilfinger Berger and Siemens and that Schedule Part 4 and Part 5 show that that the reductions for Bilfinger Berger was advanced preliminaries. There is no evidence what the payment to Siemens was for. However because mobilization is in equal proportions we are tempted to conclude that the advanced payment was without any other reason than to afford the contractors with a positive cash flow.

We have discussed the treatment with Tony Rush and are prepared to accept his definitions. The "value of the work" doesn't match the Construction Milestones – whatever "value" means. We would venture these definitions:-

"Certified Value" means payments due by reference to Schedule Part 5 (Construction Milestones + Preliminaries (including Mobilisation in full) + plus value of Changes carried out + additional costs agreed).

"Termination Value" means Certified Value adjusted for Preliminaries (Including Mobilisation) paid in advance and work done but not included in Construction Milestones or included but not done.

Project Separation (Continued)

On this basis we would assess the adjustments to the Certified Value (Assuming that Infracore clear the Site) as follows:-

Mobilisation paid		£45.20m
Preliminaries due		
Certified GHP assessment	£34.88m <u>£18.80m</u>	£16.08m
An allowance for making good defective work	Say 5% of Construction Milestone Value	£2.00 m
Protection of site/security/ Insurances/etc		£3.00m
Total Adjustment(deduction)		£66.28 m

In assessing the Termination Value it will be necessary to place a liability on claims not agreed. Currently these are:-

Difference between Infracore Application and tie Certificate	£31.31 m
Additional costs of delay	£43.50 m
Total Liability on Claims	£74.81 m

Without doing a detailed appraisal of the entitlement we would expect there to be a range of expectation from 30-60% recovery by Infracore. In the interests of prudence we would assume 60% recovery - £45 million.

We also note that the Infracore will most likely increase their claims before agreeing a Termination Value.

Taking the deduction in value above and an allowance for claims the Termination Value would be circa £20 million less than certified and paid. In the region of £155 million.

We note that Siemens are seeking payment for what may be as much as £35 million for materials and equipment contracted for. If tie were to purchase these there would be a value to tie and we would suggest that it would be prudent for tie to make a provision for losses. We suggest £10 million but we note that tie have allowed £16 million.

Project Separation (Continued)

On this basis it could be concluded that the Infraco should be willing to accept a “drop hands” solution. But we would assume that they will suffer costs of demobilisation and potential claims from sub-contractors. We are not convinced that their claims to date include for claims from BAM for example for disruption and we would expect the other Bilfinger Berger Sub-contractors to make claims for delay and disruption which Bilfinger Berger and Siemens will attempt to pass on. We would also suggest that there will be a cost of settling with CAF and SDS.

Additional cost of settling with CAF – allow in addition to current amount certified for 27 trams, storage, delivery, etc.		£13.00 m
Additional cost of settling with SDS – allow		£2.00 m
Loss of profit to BB Sub-contractors 3% of Sub-contract prices amounting to £66 million		£2.00 m
Extended preliminaries on £9.9 m to date		£4.00 m
There is little information on Siemens sub-contractors on which we can assess a provision. Against a value of work in the region of £40 million we would prudently allow		£5.00 m
Total Additional allowance for others		£26.00 m

Project Separation - Summary

Total Certified to date		£177.95m
Adjustment/Deduction from Infraco	- £66.28m	
Claims to be paid by tie	£45.00m	
	Balance – Overall Deduction	- £21.28m
	Sub-Total	£156.67m
Materials and Equipment		£10.00m
Allowance for Other Costs		£26.00m
Total Cost of Project Separation		£192.67m

Potential Cost of Re-Starting (excluding tie's own costs)

Procurement

We assume that the method of procurement will be by standard form that is not design and build.

Whatever value there is in the SDS design we would suggest that it would be prudent to assume that a new designer will in effect start afresh.

We would prudently allow for design fees of 7.5% on £200 million of work to Haymarket = £15 million.

It is a widely held view that current market prices may reduce the costs by 10%. However the project has a history and it will be recognised as being a risk. In our opinion contractors prices will increase; whilst their margins may not increase they won't decrease any further. Assuming 18 months to restart and 18 months to build we would suggest that it would be prudent to assume at least 5% inflation compounded over 3 years.

A)	Allowance for Professional Fees for appointment of Engineer for the Pre-contract re-design. 7.5% of £200.00m = £15.00m			£15.00m
B)	Allowance for Professional Fees for appointment of Engineer, Project Manager, Quantity Surveyor and Legal Advisors for the Construction of the Work. Assumed carried out by tie.			Nil
C)	Risk allowance for Market Influences that may have an effect on Tenders as follows:-			
i)	Competition in the present market is good	- 10%	- £20.00m	
ii)	History of the Contract/ Rise in price of Commodities/ Fall in value of Pound against Euro	+ 10%	+ £20.00m	
	Overall Effect of Market Influences			Nil
D)	Adjustment for Time required for Procurement and Completion All GHP costs assume completion middle to end 2012. Allowance for completion middle to end 2014		5% per annum	£18.00m
	Total Cost of Procurement			£33.00m

Cost of Infrastructure Airport to Saint Andrews Square

A)	<u>Off Street – (Airport to Haymarket):</u>			
	GHP Phoenix detailed cost reported to AJR 11 th Feb 2011	Total Off-Street		£219.20m
B)	<u>On Street – (Haymarket to St. Andrews Square):</u>			
	(Excluding PSSA and Other On Street and Enabling works)			
	GHP Estimate for Civils cost		£12.90m	
	GHP Estimate for System cost		£10.00m	
		Total On Street		£22.90m
	Note – See GHP Phoenix detailed cost		Sub-Total	£242.10m
C)	<u>Provisional Sums/Contingencies:</u>			
i)	Allowance based on measured items for removal of material from contaminated ground		£8.00m	
ii)	Allowance for dealing with unknown risk items over the 1.20km of new works comprising Voids, Utilities, Traffic Management Access, Sub Stations		£8.00m	
iii)	Contingency		£5.00m	
		Total Provisional Sums/Contingencies		£21.00m
	Total Cost of Infrastructure Airport to St. Andrews Sqr.			£263.10m

Cost of tie's Works

These costs are calculated from the "Deckchair" document.

Non BSC Costs to date – sheet (a)	£236.50m
Non BSC Project Costs to Go – sheet (c)	£29.90m
Non BSC Other Costs to Go – sheet (e)	£10.10m
Cost of tie's Works	£276.50m

SUMMARY – Project Separation

Termination Cost		£192.67m
Procurement		£33.00m
Infrastructure Airport to St. Andrews Sq.		£263.10m
	Sub-Total	£488.77m
Cost of tie's Works		£276.50m
Total Cost of Project Separation		£765.27m

We have discussed other risks with Tony Rush, in particular:

<u>Potential Risk</u>	<u>AJR's Response</u>
Potential additional costs of £25 million to trackwork.	Agrees that it is a risk but only if we use Rheda City and SDS.
Cross over and power to St Andrew Square	Agrees that it is a risk but believes that the 5% Contingency ought to cover it.
Other on Street Works	Agrees that there may be a risk in the low millions, less than £5 million.

We do warn that these additional risks could amount to > £30 million.

CONCLUSION:-

We have been requested to provide a high level opinion on the following two aspects:

- (A) Project Separation Costs based on the "deckchair" power point presentation by tie; and
- (B) Assessment of the costs to complete Airport to Haymarket and Haymarket to St Andrews Square.

Our figures represent a realistic assessment of the costs anticipated in both aspects based upon the following factors:

- (1) Valuation certificate No 39 dated January 2011.
- (2) assumptions set out in the report and in assessing the termination value adopting a prudent approach based upon our industry experience.
- (3) whilst we have recognised that current Market prices may be advantageous to tie currently that is only our opinion for the civils works and not the specialist works. The benefits of potential market savings are likely to be offset by the perceived risks well known in the market to the civil sub-contractors. With regard to the specialist systems market this is very much a limited market with the costs of raw materials being influenced by exchange rates and market forces.
- (4) In comparing the "deckchair" calculation of Separation costs to our estimates and assumptions the differences arise mainly in the valuing of the following three areas:
 - (i) recovery of contractors perceived entitlement for work done;
 - (ii) recovery of claims for disruption/loss of profit etc;
 - (iii) impact of market forces and inflation.

5. There are clear differences in our estimations of the cost to complete Airport to Haymarket. These appear to relate to our valuation of the works to be completed and the value of the overall work to be carried out.

This report has been produced at a high level, subject to tight time constraints and therefore the estimates are indicative and cannot be taken as definitive without carrying out further detailed investigation.

We were not asked to consider Project Phoenix – but in light of the fact that we understand that the revised price is £450 million against £410 million we give the following analysis which has been discussed with Tony Rush:

Project Phoenix

There are common costs:

tie's own costs	£277.00 m
Costs Haymarket to St Andrew Square	£24.00 m
Total Common Costs	£301.00 m

The offer made by Infracore amounted to £410 million

The price is obviously open to negotiation and a new price is about to arrive, but we believe that the £410 million is capable of being reduced for:

<p>Value Engineering</p> <p>Original Construction Works Price had 12.635 as a deduction for Value Engineering for the whole contract. (9.965 as Identified VE and 2.670 as Further VE). Tony Rush agrees that Value Engineering to be deducted as it was never achieved on technical grounds. GHP assessed Off Street Value Engineering is 8.051 of Identified VE and 0.920 of Further VE.</p>	(£8.971)m
<p>Purchasing Savings</p> <p>During open book discussions with BB for Project Carlisle it was mutually agreed that there was potential market savings to be achieved in follow up discussions with Sub-contractors for Preliminaries, Work and Risk.</p> <p>Total anticipated savings were £11.320m Risk allowance omitted above is 3.325. Add allowances for Head Office overheads and profit (10%), Consortium Preliminaries (7.4%) and Uplift for Preliminaries (17.5%)</p>	(£10.786)m
Contaminated Land and unforeseen utilities – add	£10.00m
Potential deductions	(£9.757) m

Therefore based on these assessments we can assess a cost for Project Phoenix (subject to negotiation) as:

Common costs		£301.00 m
Offer	£410.00 m	
Deduct:- On Street Works included PSSA – £12.82m Enabling Works – £8.65m Other On Street Works - £18.51m Total Deduct = £40.00m	- £40.00m	£370.00m
Deductions		(£10.00) m
Total		£661.00 m

Assuming a 5% risk factor the cost would be £700.0 million. However assuming that a GMP is agreed a risk factor of 5% may be excessive. We also note that the £410 million includes for materials and equipment for which tie would obtain a residual value. We understand the value sought is circa £16 m