

INFRACO NEGOTIATION SUMMARY POSITION

Date:- 14/12/07

	Current £m	Comments
Fixed Elements		See Appendix A2 for further details
Core contract sum - firm price	212,910,342	
Provisional elements taken into firm	0	All previously provisional items taken to firm
VE taken into firm price	-83,000	
VE taken into firm price - but conditional	-11,065,006	See conditions referred to in Appendix A3
Premium for current provisional items	8,000,000	Negotiated sum for firming up all elements
Total firm price	209,762,336	95%
Provisional Sums	10,170,090	Previous normalisations which are still relevant - See Appendix A4
Total Provisional	10,170,090	
Sub total	219,932,426	
Remaining Identified VE	-2,670,000	To be stated in contract with rules for adjustment of price and commitments for both parties work to deliver these items
Anticipated Infraco Contract Sum (Final Deal)	217,262,426	

DETAILED SUMMARY OF CONTRACT PRICE

APPENDIX A2

Item	Prelims	Trackform - System	Depot	Structures - Superstructure	Highways	Tramstops	Buildings	Supervisory & Comms	OLE	Tramstop Equipment	Trams	Reduction as BBS letter 11/10/07	Reduction for taking CAF into BBS Consortia	Traction Power	Power for commissioning	System Wide	Network Rail	Total
Base																		
Firm	75,437,757	43,918,161	18,686,351	31,415,121	11,893,955	3,270,376	3,275,180	5,296,482	14,974,462	1,513,587	1,018,910	-1,000,000	-1,000,000		1,330,000	-120,000	3,000,000	212,910,342
Provisional																		
Firm price addition																8,000,000		8,000,000
Sub-total Base	75,437,757	43,918,161	18,686,351	31,415,121	11,893,955	3,270,376	3,275,180	5,296,482	14,974,462	1,513,587	1,018,910	-1,000,000	-1,000,000	0	1,330,000	7,880,000	3,000,000	220,910,342
Provisional (See Appendix A4 for details)																		
Provision of pumped surface water outfall system at A8 underpass			100,000															100,000
Spares not included in Price									174,762									174,762
Scottish Power Connections to Depot and IPR									750,000									750,000
Relocation of Ancient Monuments	53,700																	53,700
Allowance for minor utility diversions		750,000																750,000
Archaeological Officer - impact on productivity		405,755																405,755
Ballast		300,000																300,000
Piccardy Place, York Place and London Road junction					6,340,324													6,340,324
E/O Shell Grip					319,343													319,343
Mains Power Connection to street lights and traffic signals					115,287													115,287
Adjust for Network Rail Possessions support				755,307														755,307
Leith Walk substation demolition				55,662														55,662
Additional Crew Relief Facilities at Haymarket				49,950														49,950
Sub-total - Provisional Normalisation	53,700	1,455,755	100,000	860,919	6,774,955	0	0	0	924,762	0	0	0	0	0	0	0	0	10,170,090
Value Engineering																		
Firm																		
NR Immunisation. NOW IN FIRM PRICE - SEE ABOVE																		0
Signalling & Comms - fewer CCTV cameras .																		-33,000
Reduced to 55Nr . (Tramstops 45Nr, Depot 10Nr)																		-50,000
UPS - reduce capacity from 4hrs to 3hrs																		0
Sub-total - Firm Value Engineering	0	0	0	0	0	0	0	0	-83,000	0	0	0	0	0	0	0	0	-83,000
Firm with conditions																		
Delete depot pumping station/storm tanks by utilising existing gravity system.			-193,526															-193,526
Depot - Build part now with provision to expand in the future/reduce size of car park facilities			-230,000															-230,000
Delete under floor lift plant and utilise mobile jacks. Incl mobile future proofing.			-250,000															-250,000
Depot - delet split vehicle accommodation system - requirement dependant on tram vehicle selection			-27,500															-27,500
Depot - Track Maintenance Equipment - rationalise scope requirement and consider renting.			-27,500															-27,500
Depot - deletion of one pavement (inner) .			-36,000															-36,000
Depot - delete requirement for concrete apron to security fence			-6,080															-6,080
Depot - delete compressed air system, utilise 1 or 2 local /mobile compressors			-54,400															-54,400
Consolidated VE items 7, 10, 11, 19 which results from changes to initial Depot design driven by proximity to BAA runway and EARL decision.			-2,200,000															-2,200,000
Delete standby generator and substitute with hardstanding and power connection for portable generator.			-150,000															-150,000
Material recovery and reprocessing (Infracore); 2 options - reconstituted planings & Type 1R					-500,000													-500,000
Reduce Kerb and associated re-instatement of pavement					-100,000													-100,000
Reduce drainage run from guideway					-100,000													-100,000
Overhead Contact system - Switchgear - rationalise specification - considered "quite onerous"									-160,000									-160,000
Edinburgh Park Bridge - 7 span to 2 , utilise steel beams in lieu of concrete Edinburgh Park Viaduct				-1,470,000														-1,470,000
Carricknowe Bridge Parapet - down grade from P6 / P5 to N2 (reduced cost of parapet plus knock on effect on deck design/cost)				-85,000														-85,000
A8 Underpass various initiatives				-850,000														-850,000
Roseburn Street viaduct various initiatives				-1,375,000														-1,375,000

17/12/2007

DETAILED SUMMARY OF CONTRACT PRICE

APPENDIX A2

Item	Prelims	Trackform - System	Depot	Structures - Superstructure	Highways	Tramstops	Buildings	Supervisory & Comms	OLE	Tramstop Equipment	Trams	Reduction as BBS letter 11/10/07	Reduction for taking CAF into BBS Consortia	Traction Power	Power for commissioning	System Wide	Network Rail	Total	
Water of Leith various initiatives				-150,000															-150,000
Eight maintenance walkway structures - delete or reduce				-250,000															-250,000
Class 7 material conversion -																			
Optimise the work site lengths wherever practical to ensure efficient construction outputs				-300,000															-300,000
Accept more disruption over shorter period to maximise efficiency of construction operations -																			-300,000
Option to lease UPS provision from Supplier rather than purchase																			-100,000
Rationalising spares supplied with the Infraco bid																			-300,000
PM Integration including shared resources and co-location.																			-300,000
Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing		-50,000																	-1,000,000
Reduce ballasted track thickness from 300 to 200mm		-200,000																	-50,000
Power Supply (up to passenger operation) - possible over allowance in DFBC														-300,000					-200,000
Sub-total - Provisional Value Engineering	0	-250,000	-3,175,006	-4,480,000	-700,000	0	0	0	-160,000	0	0	0	0	-300,000	0	-2,000,000	0	0	-11,065,006
Further project management integration over 3 years																			-500,000
SDS design scope economy, variation and reduction																			-500,000
Tramstops, standard finishes to circa 20-30% of stops										-500,000									-500,000
Picardy place level flexing - MUDFA savings																			-500,000
Picardy place level flexing - construction savings																			-500,000
Siemens agreement to reduce fixed price on item 49 above by £10,000. Now included in item 49 above.																			0
Siemens agreement to reduce fixed price on item 145 above by £200,000. Now included in item 145 above.																			0
Value engineer finishes on EPV and other structures				-170,000															-170,000
Other unidentified VE items																			0
Sub-total - Provisional Value Engineering	0	0	0	-170,000	-1,000,000	0	0	0	0	-500,000	0	0	0	0	0	-1,000,000	0	0	-2,670,000
Total Anticipated Value	75,491,457	45,373,916	18,786,351	32,106,040	17,668,910	3,270,376	3,275,180	5,213,482	15,899,224	1,013,587	1,018,910	-1,000,000	-1,000,000	0	1,330,000	6,880,000	3,000,000	217,262,426	

PROVISIONAL SUMS

APPENDIX A4

Description	Synopsis	BBS 3			Elemental tag
		1A	1B	Total	
34	Provision of pumped surface water outfall system at A8 underpass	100		100	Depot
62	Spares not included in Price	175	100	275	OLE
70	Scottish Power Connections to Depot and IPR	750		750	OLE
71	Relocation of Ancient Monuments	54		54	Prelims
63	CCTV cameras		313	313	Supervisory&Comms - Removed under VE
8	E/O carrier drains		1,645	1,645	Track & Form
16	Allowance for minor utility diversions	750	250	1,000	Track & Form
23	Archaeological Officer - impact on productivity	406		406	Track & Form
64	Ballast	300		300	Track & Form
50	Gogarburn Tram Stop By RBS				Tramstops - additional funding not construction cost saving
Sub Total Infraco Normalisation exc. Highways & Structures		2,534	2,307	4,842	
3	Piccadly Place, York Place and London Road junction	6,340		6,340	Highways
4	Extent of road refinishing in critical on street areas				Highways - all additional costs included in firm price
22	E/O Shell Grip	319	126	445	Highways
27	Mains Power Connection to street lights and traffic signals	115	29	144	Highways
Sub Total Highways		6,775	154	6,929	
19	Adjust for Network Rail Possessions support	755		755	Structures
20	Balgreen Road - new structure reqd				Structures - all additional costs taken into account in firming up price
26	S23 Carrick Knowe Widening				Structures - all additional costs taken into account in firming up price
28	Leith Walk substation demolition	56		56	Structures
31	Additional Crew Relief Facilities at Haymarket	50		50	Structures
32	Structure S18 allowance for anticipated works				Structures - all additional costs taken into account in firming up price
61	Roseburn corridor retaining wall align assumptions		3,228	3,228	Structures
Sub Total Structures		861	3,228	4,089	
Total		10,170	5,690	15,860	

71214 Single VE List v31 agreed bbs tie v1

VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE		NOTES	Key Qualifications
			Target	Agreed BBS position		
	BUILDINGS					
					The 2 sub-station items have been rejected by BBS.	
	BUILDINGS TOTAL		£0	£0		
	DEPOT					
8	Delete depot pumping station/storm tanks by utilising existing gravity system.	Depot	£193,526	£193,526	tie may need to add in cost of a small pump	tie's carries specification/acceptance risk and cost of additional pump
9	Depot - Build part now with provision to expand in the future/reduce size of car park facilities	Depot	£230,000	£230,000	Initial supply of 100 car park places agreed.	tie's carries specification/acceptance risk
14	Delete under floor lift plant and utilise mobile jacks. Incl mobile future proofing.	Depot	£250,000	£250,000		tie's carries specification/acceptance risk
16	Depot - delet split vehicle accommodation system - requirement dependant on tram vehicle selection	Depot	£27,500	£27,500	Accomodation bogies are in CAF offer	tie's carries specification/acceptance risk
17	Depot - Track Maintenance Equipment - rationalise scope requirement and consider renting.	Depot	£27,500	£27,500		tie's carries specification/acceptance risk
20	Depot - deletion of one pavement (inner) .	Depot	£36,000	£36,000	Shown on latest site plan drawings.	tie's carries specification/acceptance risk
24	Depot - delete requirement for concrete apron to security fence	Depot	£6,080	£6,080		tie's carries specification/acceptance risk
129	Depot - delete compressed air system, utilise 1 or 2 local /mobile compressors	Depot	£54,400	£54,400		tie's carries specification/acceptance risk
145	Consolidated VE items 7, 10, 11, 19 which results from changes to initial Depot design driven by proximity to BAA runway and EARL decision.	Depot	£3,181,264	2,000,000	Includes rreductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope), reductions in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms, locke	DTC but compliant with current technical /design info. Subsequent saving of £200,000 added see below.
New	Delete standby generator and substitute with hardstanding and power connection for portable generator.	Depot	£250,000	150,000		tie's carries specification/acceptance risk

VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE	VALUE	NOTES	Key Qualifications
DEPOT TOTAL			£4,256,270	£2,975,006		
HIGHWAYS						
36b	Material recovery and reprocessing (Infracore); 2 options - reconstituted planings & Type 1R	Highways	£500,000	£500,000		Subject to confirmation from SDS; level of saving subject to adjustment of quantity of this item based on the final design
152	Reduce Kerb and associated re-instatement of pavement	Highways	£100,000	£100,000		Subject to confirmation from SDS; level of saving subject to adjustment of quantity of this item based on the final design
153	Reduce drainage run from guideway	Highways	£100,000	£100,000		Subject to confirmation from SDS; level of saving subject to adjustment of quantity of this item based on the final design
HIGHWAYS TOTAL			£700,000	£700,000		
NETWORK RAIL						
42	NR Immunisation - ensure design of immunisation is based on minimum safe propagation distance (e.g. <100m). Project budget previously very conservative.	NR	£4,700,000	4,700,000	Original proposal work by BBS suggests a target of less <50m may be achievable.	Terms remain as BBS letter; particularly that tie carries NR cost risk
NETWORK RAIL TOTAL			£4,700,000	£4,700,000		
OLE						
49	Overhead Contact system - Switchgear - rationalise specification - considered "quite onerous"	OLE	£336,000	150,000	Price change requested for manual, three position cubicle mounted line isolators throughout, with the exception of the depot where they can be pole mounted. Status of isolator to be shown via SCADA.	Siemens commitment related to non specific items
135	OLE - Catenary opportunity in Sections 5 to 7 - replace trolley wire with catenary on segregated sections.	OLE		0	Detailed price change requested for: catenary with 3-step poles Haymarket Yard-Russell Road (Russell Road-Airport already catenary); fixed termination Haymarket Yards-Newhaven; Tapered Poles Haymarket-Newhaven.	No net savings. All in price. Assumes fully compliant with planning and technical requirements but excludes tapered poles.
149	Provision of combined incoming and return cabinet.	OLE	£42,000	0		tie proven to be incompatible with SP feeder arrangements.
OLE TOTAL			£378,000	£150,000		
STRUCTURES						
54	Value Engineering/ de-risked pricing approach developed for the final designs for all structures, particularly substructures and foundations (where not covered below)	Structures	£2,000,000	0		Unable to commit
55	Edinburgh Park Viaduct various savings including use of cross heads to eliminate temp works, steel or concrete beams.	Structures	£1,470,000	1,470,000	This assumes continuation with 7 span structure.	Subject to approval of design by NEL/ CEC and subject to SDS designing to cost

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VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE		NOTES	Key Qualifications
56	Carricknowe Bridge Parapet - down grade from P6 / P5 to N2 (reduced cost of parapet plus knock on effect on deck design/cost)	Structures	£85,000	85,000		Subject to approval of design by Network Rail
57	A8 Underpass various initiatives	Structures	£850,000	850,000	Changing to a contiguous piled wall/ leaner designs	Subject to being able to design to cost
New	Roseburn Street viaduct various initiatives	Structures	£1,375,000	£1,375,000		Subject to approval by stakeholders - SRU and Network Rail
New	Water of Leith various initiatives	Structures	£150,000	150,000		Subject to being able to design to cost
New	Eight maintenance walkway structures - delete or reduce	Structures	£250,000	250,000	Unlikely to yield net savings unless structure needs to be redesigned for other purposes.	Subject to being able to design to cost; and tie taking approvals risk
New	Russel rd Bridge piling changes	Structures	£100,000	0		Subject to being able to design to cost
154	Class 7 material conversion -	Structures	£300,000	£300,000		Subject to confirmation of SDS agreeing to principle; level of saving subject to adjustment of quantity of fill required by the final design
STRUCTURES TOTAL			£6,580,000	£4,480,000		
SUPERVISORY & COMMS						
65	Signalling & Comms - fewer CCTV cameras . Reduced to 55Nr . (Tramstops 45Nr, Depot 10Nr)	Supervisory & Comms	£100,000	33,000	Price requested for 55 off for Phase 1a	
69	Signalling & Comms - rationalise fibre optic ring. More economic architecture that performs the same function could be employed	Supervisory & Comms	£100,000	0	Ensure separation 1a and 1b costs	
73	Signalling & Comms - Current requirement for location and interface of the SCADA and Points controllers etc is unnecessarily complex.	Supervisory & Comms	£50,000	0	A simpler solution e.g. as in Nottingham, would be cheaper and more user friendly.	
74	Signalling & Comms - rationalise loop quantities by combining some loop functions	Supervisory & Comms	£87,500	0		
75	Signalling & Comms - Remove ambient noise sensing on the passenger announcement system	Supervisory & Comms	£7,000	0	Price change requested.	
163	UPS - reduce capacity from 4hrs to 3hrs	Supervisory & Comms	£50,000	50,000	Would be included in financial advantage for proposal to outsource UPS provision to Chloride.	
165	Reduce nr of Signalised Pedestrian Xings.	Supervisory & Comms	?	0	From review of latest road layouts there is a significant increase in qtys. May need to challenge CEC (c.£50k/ crossing)	
SUPERVISORY & COMMS TOTAL			£394,500	£83,000	BBS have agreed to review Phase 1a/1b split. Still outstanding.	
SYSTEM WIDE						
77	Optimise the work site lengths wherever practical to ensure efficient construction outputs	System Wide	£300,000	300,000	Linked to other discussions e.g. Rhaeda City trackform (see 138 too)	Subject to further Programme development with CEC, confirm by 9th January.
80	Accept more disruption over shorter period to maximise efficiency of construction operations -	System Wide	£100,000	100,000	Initial discussions suggests CEC are likely to be flexible	Subject to further Programme development with CEC, confirm by 9th January.

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VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE		NOTES	Key Qualifications
148	Remove spare capacity from OTN (linked to item 69)	System Wide	£180,000	0		
150	Option to lease UPS provision from Supplier rather than purchase	System Wide	£300,000	300,000	Originally BBS proposal	Subject to agreement of operator
151	Rationalising spares supplied with the Infraco bid	System Wide	£300,000	300,000	Originally BBS proposal	Subject to agreement of operator
160	PM Integration including shared resources and co-location.	System wide	£1,000,000	1,000,000	Late BBS VE proposal	Subject to BBS /tie agreeing savings in resources and facilitates items from BBS and tie costs
SYSTEM WIDE TOTAL			£2,180,000	£2,000,000		
TRACK FORM						
100	Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing	Trackform	£50,000	50,000	Also a timing issue, because we would not necessarily install during construction but await reaction if any.	Subject to property owner claims
138	Trackform - changing embedded to ballast rail. Ballasted track adjacent to NwkRail	Trackform	£2,000,000	0	Awaiting a formal technical and financial proposal for Rhaeda City trackform for both embedded and grass and a validated construction programme.	Unlikely to yield savings because of short distance. Plus maintenance implications.
156	Track installation install in strips.	Trackform	£0	0	Would need v strong justification.	Unacceptable
164	Reduce ballasted track thickness from 300 to 200mm	Trackform	£300,000	200,000		Design to cost.
TRACK FORM TOTAL			£2,350,000	£250,000		
TRACTION POWER						
103	11Kv Traction Power feeds to sub stations including any network reinforcement required (separate VE 104).	Traction Power	?	0	Dialogue needed with tie to incorporate SP negotiated savings into BBS proposal.	Defer until SP current phase of negotiations is complete.
109	Power supply - Russell Rd TPH - equipment for future upgrade to substation to be supplied when needed i.e. don't supply transformer rectifier now.	Traction Power	?	0	BBS have been instructed to assume that for Ph 1a on its own nothing at all will be required at Russell Road. Separate discussion re Phase 1b still continuing.	BBS to check equipment included and advise. ASAP
158	Power Supply (up to passenger operation) - possible over allowance in DFBC	Traction Power	£300,000	300,000		Subject to tie demonstrating evidence.
TRACTION POWER TOTAL			£300,000	£300,000		
New	Other unidentified VE items	Other	£1,000,000	£0		Need specifics for BBS commitment therefore zero.
UNIDENTIFIED VE TOTAL			£1,000,000	£0		Need specifics for BBS commitment therefore zero.
NEW INITIATIVES AGREED AFTER MAIN MEETING						

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VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE	NOTES	Key Qualifications
New	Further project management integration over 3 years		£500,000		Joint target
New	SDS design scope economy, variation and reduction		£500,000		Joint target
New	Tramstops, standard finishes to circa 20-30% of stops		£500,000		Joint target
New	Picardy place level flexing - MUDFA savings		£500,000		tie led initiative
New	Picardy place level flexing - construction savings		£500,000		Joint target
NOTE	BB agreement to reduce fixed price £120,000		£120,000	for the record only (not part of VE savings)	BB risk
NOTE	Siemens agreement to reduce fixed price on item 49 above by £10,000		£10,000		Siemens risk
NOTE	Siemens agreement to reduce fixed price on item 145 above by £200,000		£200,000		Siemens risk
New	Value engineer finishes on EPV and other structures	Structures	£170,000		Subject to approval by NEL/CEC
	NEW VE INITIATIVES TOTAL		£0	£3,000,000	
	TOTAL			18,638,006	