

For the attention of Martin Foerder Project Director Bilfinger Berger Siemens CAF Consortium Edinburgh Park 9 Lochside Avenue EDINBURGH EH12 9DJ Our Ref: INF CORR 1457/FMcF

Date: 13th May 2009

Dear Sirs

Edinburgh Tram Infraco Infraco Progress Meeting

Please find attached herewith Minutes of Progress Meeting No 12 Period 01 as agreed by **tie**/BSC representatives.

In addition, we enclose **tie's** comments on Progress Report No 2-1 for your information/action as required.

Yours faithfully

Steven Bell Project Director – Edinburgh Tram





tie Limited

Minutes:	Infraco Progress M	eeting				
Date:	21 April 2009					
Time:	1300 - 15.30					
Venue:	Training Room, 1 st	Floor Ed	inburgh	Park		
Attendees:	Frank McFadden Robert Bell Tom Hickman Bob Cummins Colin Neil Colin Matlock Julie Smith (mins)	FM RB TH BC CN CM JS	tie tie tie tie tie tie	Martin Foerder Colin Brady Kevin Russell Jim Donaldson Stefan Rotthaus Jim Cowie Roland Brueckmann Miguel Berrozpe Jim Noblett Douglas Ross Michael Wilken Alan Dolan David Steel	MF CB KR JD SR JC RB MB JN R MD DS	BSC BSC BSC BSC BSC BSC BSC BSC BSC BSC
Apologies:	Steven Bell Susan Clark Dennis Murray Tony Glazebrook Colin Kerr Alastair Richards	SB SC DM TG CK AR	tie tie tie tie tie TEL	Alfred Brandenburger Jason Chandler Alejandro Urriza	AB JC AU	BSC SDS CAF

1.0	Welcome and Introductions	
1.1	FMF welcomed everyone to the meeting and introduced Colin Neil, Construction Manager and Colin Matlock who will be covering for Tony Glazebrook whilst he is on annual leave. MF introduced Miguel Berrozpe who will replace RBr as the Siemens representative.	Note
2.0	Agreement / Corrections of previous minutes	
2.1	MF advised of additions and removal of personnel for the BSC attendees of the meeting, this will be updated by tie. MF noted that BSC had not agreed to the previous minutes and would prefer if in future these were distributed in draft prior to the meeting to allow for comments to be provided and then tie could issue the minutes formally. MF also stated that BSC do not acknowledge tie's commentary and will continue to deal with significant issues in correspondence, hence BSC will not review or comment on this.	Hazel Kennedy
2.2	Item 4 Programme, Design and Consents Programme Status. MF advised that tie had not provided the export of MUDFA dates and summary matrix to BSC by 15 April 2009.	

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2.3	Item 7 AOB, Extended Construction Support. The statement by tie regarding the additional CAD operators is not accepted as this relates to the MUDFA	
	contract.	
3.0	Progress Report - HSQE	
3.1	JN confirmed that the reportable accidents in the report had been taken "to date" rather than for the period.	Note
3.2	BC noted that he will provide the KPIs by the end of this week.	BC
3.3	BC requested that the Balfour Beatty incident be in the next Progress Report as this needs to be reported for CDM requirements. JN will take this forward to the next report.	JN
3.4	FMF noted his thanks to the BSC staff for their support on the Princes Street incident, he understands that this will be investigated by BSC and tie will also hold their own investigation.	Note
3.5	BC requested visibility of the CDM Management Plan for Princes St for when there will be multiple Infraco sites and utilities works ongoing at the same time. JN will take this forward to the next report.	JN
3.6	JN agreed to investigate the possible increased risk in lifting irregularities with the incident at Verity House.	JN
3.7	RB requested clarity on the projects policy of glove wearing on site. JN advised that glove wearing was not mandatory and the wearing of gloves will be ascertained by risk assessments and the details of the task on site. BSC agreed to issue this notice formally.	JN
3.8	BC corrected that it is the Submittal Report not Schedule (as stated in the Employer's Requirements).	Note
3.9	BSC to clarify with Sheena Smith the earthing and bonding arrangements as FMF raised concerned to the quality of this. [Post Meeting: The issue relates to the Submittals Programme which is excpected to be submitted before the next meeting]	BSC
3.10	FMF requested visibility of the NCR closeout. DR explained that details of NCRs are being handed to Sheena Smith and BSC will provide a summary every period/month if required by tie'. RB then explained that providing such information in the Period Report was unnecessary.	DR
4.0	Progress Report - Programme	
4.1	JC stated that the recovery programme when accepted would be Revision 2 of the Programme.	Note
4.2	TH pointed out that BSC were using V43 of the design programme and questioned why V44 was not used as this would have been due from SDS. AD confirmed that this had been sent through separately. [Post Meeting: BSC advise that a cut off date needed to be used for incorporation of the design programme into the revised programme].	Note
4.3	There were no further comments from tie on the dates.	Note
4.4	FMF requested the IFC submission date for the South Gyle Access Bridge; this will be discussed further at the SDS meeting on 23.04.09. It was noted that the current design has been approved but not the changed design.	
4.5	FMF requested confirmation that the misalignment issues would be noted in	Note

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	the revised program	ne. This wa	as confirmed by MF.		1		
4.6			d efforts in producing the Prir	ices St	Note		
	programmes.						
5.0	Progress Report - D	esign and	Consents				
5.1			ng issue between Scottish Wa work process as the consents		Note		
5.2	A LEAST CONTRACTOR PROPERTY CONTRACTOR	ith the plar	n 3.3 and believes that tie sho mer to view potential program f Rev 2.		Note		
5.3	SRo proposed to report progress of design submission on the basis of drawings per section rather than design packages. RB expressed his concern as the lack of reporting on IFC packages could impact on the design assurance process. SR explained that reporting on IFC packages would be difficult and time consuming due to the amount of packages which had been split and parts moved to different areas. FMF was also apprehensive regarding this as IFCs are required for the evidence files and for ICP assurance. It was agreed that further discussion was required between SR and RB.						
5.4	RB requested an update regarding the OLE Development Report and Estimate which was yet to be received. RB asked for the report and estimate to be issued together. CB confirmed that SDS were still working on the estimate and this will be delivered with report by 08.05.09.						
5.5	FMF indicated that he was not aware of any track misalignments within the Infraco Proposals. RBr has received comments and will review and report back.						
5.6		FMF proposed that TRO be added to the AOB for the SDS meeting on the 23.04.09 to discuss with S Reynolds. This was agreed.					
5.7	AD and FMF/ RB will	AD and FMF/ RB will discuss the extended construction and design support off line as the organogram was not accepted at the Progress Meeting.					
5.8	AD advised that when geotechnical enginee delay in work starting for the moment is ade	e more site ring suppor or continui quate but r	es open there will be a require t. MF confirmed that this will ng. AD believes that the geot eaching saturation point. Thi	ment for more not create a echnical support	Note		
5.9	RB and SR will review cleared and obsolete	there are further issues on soft ground conditions. RB and SR will review the RFI database as this contains many already cleared and obsolete items. RB noted that although tie has received notifications that their response was unsatisfactory no reasons have been received.					
6.0	Progress Report - P						
6.1	MF confirmed that Mo	Keanes ar	e to be awarded as a key sub		MF		
6.2	FMF requested an up they would be taking Haymarket Viaduct to dates when Grahams	date of the up. JD con Murrayfield would be s	procurement of Grahams and firmed that Grahams would b d Underpass (inclusive). FMF starting this work; JD commen commercial changes have be	d what work e working on Frequested ited that the	Noted		
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	within the contract they are obliged to have exclusive access. FMF	
	requested evidence of this within the Contract. FMF cannot see effective mobilisation of Grahams and requested a start date and who they will subcontract to as they have limited direct workforce. JD clarified that the only	
	work available was the 400m of trackwork which could only be started once the drainage consent has been awarded. FMF proposed to debate this further offline.	
6.3	FMF requested confirmation of BSC procurement plan. MF confirmed that this is compliant with the Contract and is the productive and cost effective method of procurement in the current circumstances. FMF expressed his concern that there were no subcontracts in place and letters of intent were currently being used. MF reminded FMF of the existing invitation to review the letters of intent which FMF welcomed.	FMF
6.4	It was noted that Siemens will deal with long lead procurement separately.	
7.0	Progress Report - Progress	
7.1	JD raised concerns with section 1A Lindsay Road as this required co- ordination between MUDFA / Infraco. CN will take this forward as a key issue.	CN
7.2	FMF requested confirmation that the work on the Princes St Carrier drain was complete.	MF
7.3	AD confirmed that there will be no risk in programme durations involved in the Crawley Tunnel / Leith Walk issue and SDS have communicated this to BSC. FMF asked that this be formally recorded in the design meeting.	AD
7.4	RB asked for an update on the Haymarket Bridge estimate which was requested seven months ago. KR will follow this up.	KR
8.0	Progress Report – E and M	
8.1	RBr confirmed that there will be an offer for the Guided Busway submitted to tie by the end of the week.	Note
8.2	RBr requested a meeting as soon as possible to discuss the tram stop equipment.	RBr
9.0	Progress Report - Tramco	
9.1	DS raised the issue of the bus tracker. It was agreed that a meeting will be held between CAF, Siemens and tie.	RB
10.0	Progress Report- System Integration	
10.1	BSC confirmed that earthing and bonding was in place for all structures which are being built.	Note
10.2	MW acknowledged that Noise and Vibration had been missed for the report but will be added to the next.	MW
10.3	BB requested a discussion and viability of the Stray Current Working Group meetings and progress.	MW
11.0	Progress Report - Commercial	
11.1	KR advised that he and Dennis Murray will be meeting on Friday to discuss change management. FMF requested that they discuss table 7.2.2 and formally agree this with a minute.	KR
12.0	AOB	

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12.1	There was no AOB raised.	
13.0	Next meeting	
13.1	The next meeting will take place 19th May at 13.00 at Edinburgh Park	

Prepared by Julie Smith, 22 April 2009

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For the attention of Martin Foerder Project Director Bilfinger Berger Siemens CAF Consortium 9 Lochside Place Edinburgh EH12 9DJ Our Ref: INF CORR 1188/ FM

Date: 07th April 2009

Dear Sirs

Edinburgh Tram Network-Infraco Infraco Progress Meeting

Please find attached herewith Minutes of Progress Meeting No 11 Period 13, along with tie's comments on Progress Report 13 for your information/action as required.



Project Director – Edinburgh Tram

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Comments on Infraco Period 1 Report

Item No	Section	BSC Comments	Comments
1	Executive Summary	None	No mention of Depot commencement or commercial resolution. No
	1		mention of BSc issues regarding: Progress delays due to SEPA consents at
		Senteral and Contemport	section 7 or poor progress at A8 Underpass.
1	Executive Summary – last paragraph	Virtually all construction works are impacted by external issues which require resolution through the change process or contract.	Not true – some items may require a change, but a lot of the issues can be resolved by BSC, e.g. Grahams were due to start on 2A on 05 Jan 2009; however they still have not turned up. BSC report states they are still negotiating with Graham's. Verity House access started w/c 23/02/09, should have commenced January 2009. Verity House Access was programmed to take 6 weeks, however it is still not complete. Contractor for Carrick Knowe Bridge still not in place. Bridge beams for Carrick Knowe now due for delivery September 2009 [11 months late]. BSC refusing to progress works at Carrick Knowe Bridge until the alleged Changes are agreed – formal submission of Estimate still outstanding. Delivery & installation of the ridge beams for Edinburgh Park commenced 08 April 2009 – these beams should have been installed at Christmas 2008.
			Russell Road Bridge works now delayed to late May 2009 due BSC/Graham's changing the temporary works support to the railway embankment from sheet piles to soil nails. Trial soil nails were due to commence early April 2009, however no WPP has been submitted to date. BSc advised 09 April 09 that they want a Change agreed for the soil nails before proceeding – no Estimate received to date. BSC currently redesigning the retaining walls at Murrayfield & Baird Drive to reduce the extent of the temporary works, therefore not in a position to start these structures. Programmes for the structures [apart from Edinburgh Park Bridge] are still in draft.
3.1	Programme – 3 rd Paragraph	No IFC date has been received for the redesign of the South Gyle Access Bridge.	BSC to provide programme for delivery of the revised design as per tie's instruction.
3.1	Programme – 8 th paragraph	Programme: Incorporating Depot additional volumes puts programme back with Tram into Revenue now 26 th September 2012.	Logic for identifying additional 61,000m3 of material as critical path is flawed. The effect of the additional volume is based on the volume required to commence the Depot Building. tie are currently evaluating.

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Item No	Section	BSC Comments	Comments
3.2	Look Ahead programme		No mention of depot Programme.
4.1.1.1	Production of OFC Design - System Wide	IFC progress reported by drawing numbers not packages	It is not clear whether this is helpful or not. It gives us no real ability to track the accuracy of the BSC figures but presents a truer picture of design readiness. The reason for issuing packages was so that a complete package could allow construction to start – if BSC are willing to start construction with less than a full IFC pack then this is helpful. The design integration risk increases with this approach and we need to step up pressure for evidence of effective Design Assurance by both BSC and SDS.
4.1.1.2	Approval & Consents	Scottish Water (SW) has granted technical approvals/	BSC will require temporary consent in Depot. Permanent consent will only be valid when the works are completed ie roads, drainage etc.
4.1.1.3	Issues and Concerns	New Ingliston Limited:	Revised BSC Estimate issued and to be reviewed by tie by 24/4/09.
4.1.1.3	Issues and Concerns	RBS Tramstop:	Critical to design close out. tie awaiting RBS preferred contractors for stonework and glazing to allow costs to be compared and agreed.
4.1.1.3	Issues and Concerns - System Wide	Design Issues & Concerns	Generally factually accurate at time of report production (but see below). Progress made on some issues since time of report production, eg West End Tram Stop change authorised.
4.1.1.3	Issues and Concerns - System Wide	Transdev comments received late and need tie instruction	Don't agree that they need tie instruction – some clearly do not. Internal tie meeting scheduled for this week to review means of handling this. BSC owes tie evidence that any Transdev comment requires tie instruction.
4.1.1.4	Extended Construction Support	Proposed Org chart for upcoming month is unchanged	 No split in report between construction & design support – most /all activities listed appear to be construction support related, so on that basis there is no info to support the design function requirements. Insufficient detail on tasks to be undertaken. Previously this was split by person with roughly 6-8 tasks listed. No split on likely work for engineering / inspectors. No details on annual leave. Although this service will have an element unplanned, does this detail warrant the proposed team full time in May?

Item No	Section	BSC Comments	Comments
4.1.2.1	Procurement - Subcontractors	Sections 2A & 5A [part] – Final Negotiations are proceeding to conclude a subcontractor order.	Are Grahams still doing these works? Graham's should have started 05/01/09. There are several areas where Graham's could be working now – Haymarket Viaduct, Haymarket Yards – track works, Russell Road Bridge, Russell Road retaining walls, Murrayfield pitches retaining walls, Murrayfield Underpass.
4.1.2.1	Procurement - Subcontractors	Section 5A [Part], 5B & 5C [part] – Dunne, Expanded and Farrans have provided competitive lump sum fixed price quotations for the balance of the structures.	The subcontractor should be on site now, let alone still be negotiating. The report makes no mention of Geddes – are they still doing the earthworks at Carrick Knowe? Geddes should be on site now as well.
4.1.4	Long Lead Procurement Management		No mention of Depot cladding 26 week lead in and how this process is being managed.
4.1.4	Long Lead Procurement Management	A letter of intent was issued to Fairfield Mabey.	Paint Specification still to be resolved for bridge beams. Fairfield Mabey also waiting for bearing details.
4.1.5.6	Progress on site	Haymarket Station Viaduct – no activity during the period.	No activity as Graham's are not on site & BSC are still negotiating the contract with them – see subcontract section of the report. BSC have also stated that they will not start the work until the alleged Change at the structure is agreed. Late start [23/02/09] and now late completion [still not complete] of the verity House Access Road is also delaying re-start of work on the viaduct.
4.1.5.6	Progress on site	Haymarket to Roseburn Track work – No activity during the period.	BSC should have been getting on with this - however Graham's not on site.
4.1.5.7	Progress of site	Russell Road Bridge – No activities carried out during the period.	BSC [J. Rice] stated 09/04/09 that BSC wanted the change from Sheet piles to soil nails agreed as a Change before Graham's would progress the works. Start of works now delayed to late May 2009, due to BSC/Graham's changing the temporary works details.
4.1.5.7	Progress of site	Russell Road Retaining Walls [W3 & W4] – 22 weeks behind programme.	Late demolition of buildings, Graham's late mobilising, and no submission of Form C's, Site clearance started Dec. 08, but still not complete. SDS redesigning W3B to remove the lateral loading on the brick sewer. Should be constructing the New Scotrail Car park and associated sections of the retaining wall.
4.1.5.7	Progress of site	Murrayfield Stadium Retaining Wall	BSC should be re-designing the Roseburn St. Viaduct so that this retaining wall can be construction in advance of the viaduct.

Item No	Section	BSC Comments	Comments
4.1.5.7	Progress of site	Murrayfield Stadium Underpass [S21C] - No activities carried out during the period.	Sewer Diversion is completed. Underpass structure is an in situ box culvert, BSC should be progressing this structure and design the adjacent retaining wall around the underpass. BSc stated 09/04/09 that they were looking at using soil nails to retain the sheet piles as they did not think they could achieve the design toe level due to the presence of boulder clay.
4.1.5.7	Progress of site	Murrayfield Retaining Wall [S21D] – No activities carried out during the period.	Structure being redesigned by BSC/SDS. BSC [J. Rice] stated 09/04/09 that they were expecting a response from grahams in 2-3 weeks regarding proposals for ground treatment in this section. No WPP in place, Graham's not on site, 3 rd Party notification not in place.
4.1.5.7	Progress of site	Baird Drive Retaining Wall - No activities carried out during the period.	Redesign of the Baird Drive retaining wall should have been completed by Christmas 2008.
4.1.5.8	Progress of site	Carrick Knowe Bridge – 29 weeks behind programme.	Delay due to slow start by BSC, late Form C & WPP submissions, poor possession planning, missing the key disruptive possession in October 2008, plant break-downs at Christmas, non-use of New Year possession, and lack of package contractor for the structure. BSC have also missed the March 2009 disruptive possession due to the above. BSC also refusing to progress the works until the alleged Change is agreed – Estimate still outstanding.
4.1.5.8	Progress of site	South Gyle Access Bridge	BSC should be getting on with the east abutment.
4.1.5.8	Progress of site	Edinburgh Park Bridge – 20 weeks behind programme.	Lost 2.5 weeks in the period. Works delayed by late submission of Form C's for the bridge beam installation. Late casting/delivery of the bridge beams. Installation of the bridge beams commenced 08 April 09.
4.1.5.8	Progress of site	Edinburgh Park Bridge to Edinburgh Park Central.	14/04/09 – BSC had not yet looked at the utility diversions that have been passed over to them. BSC do not have a programme for this section. Trial pits to locate services to be diverted at Edinburgh Park Central carried out 16/17 April 09.
4.1.5.9	Progress on site	Section 5C A8 Underpass	Temporary Works piling in delay since 12/3/09 due to obstructions at 4.5m. awaiting BSC proposals. No mention of combing phases 1&2 which tie and BSC PM have a preference for due to overall programme flexibility and saving. Approx 8 weeks. BSC to complete commercial review.

Item No	Section	BSC Comments	Comments
4.1.5.10	Progress on site	Section 6: 1% progress	Approximately 80% of Depot footprint handed over to BSc on 13/4/09. Agreed with J Donaldson and B Bell. 800 water main into service 17/2/09 and existing main ready for decommissioning. Remaining Depot area due for handover 29/4/09.
4.1.5.11	Progress on site	Section 7: 10% Progress	No mention of progress on Gogarburn bridge Pile cap, columns and capping beams completed. No mention of SEPA delays or BAA approvals required which are affecting progress to Culvert 1 and 3 and W14, W15 respectively.
4.2.5	Signalling, Communication , SCADA, PIS, PA	Joint Hazard Workshop "Use of Track Circuits" carried out with tie/ICP/Siemens/Transdev whereby the proposed Signalling track layout has been considered acceptable.	PM understanding is that this was not agreed as stated, this is because the system proposed, does not meet the ER which states a "Line of Sight" system is to be provided for the Edinburgh tram. This however needs to be clarified by the Engineering Director/TEL. However the system proposed is safe.
4.2.5	Signalling, Communication , SCADA, PIS, PA – System Wide	Design Issues & Concerns – need for BSC/ tie meeting to resolve issues with tram stop equipment	Claims that these issues go beyond ERs – not yet demonstrated by BSC. Agree that we need a meeting with BSC to resolve. Need to ensure we keep TEL in loop so that we end up with solution that works for passengers.
4.3.1	Design – 6 th paragraph	CAF considers as an outstanding issue the full definition of the bus tracker system provided by tie/Lothian Buses	This has been outstanding for some considerable time – TEL to provide.
6	Stakeholder and Third Party Issues		No mention of progress on BAA approvals.
10.3	Look ahead Programme		Murrayfield Pitches Retaining Wall S21D, Water of Leith bridge and Baird Drive omitted from the programme.
		South Gyle Access bridge to Edinburgh Park Station – Agreement of change	Agreement of change shown up to mid June – not aware of an Estimate for this.
		Edinburgh Park Station to Edinburgh Park Central	Utility diversions omitted from the programme.

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