

Activity ID	Activity Name	Original Duration	Start	Finish	2008												2009												2010												2011											
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
160	Temporary Access Roads-Divert Flows-Bulk Excavation	19	14-Aug-08	09-Sep-08																																																
249	Precast Culvert Units	5	10-Sep-08	16-Sep-08																																																
259	Reinforced Concrete Apron and Wingwalls	20	17-Sep-08	14-Oct-08																																																
269	Backfill and Finishes	11	15-Oct-08	29-Oct-08																																																
Trackwork (1750m)		321	01-Aug-08	05-Nov-09																																																
13060	Issue Construction Drawings	0	01-Aug-08*	01-Aug-08*																																																
162	Bulk Excavation	22	15-Jan-09	13-Feb-09																																																
399	Drainage and OLE Foundations	35	16-Feb-09	03-Apr-09																																																
409	Track Foundations and Ducts	58	06-Apr-09	29-Jun-09																																																
419	Track Laying	35	30-Jun-09	18-Aug-09																																																
A1990	Track Finishes And Electrification Stanchions	22	19-Aug-09	17-Sep-09																																																
A2020	Fencing and Reinstatements	35	18-Sep-09	05-Nov-09																																																
Ingliston Park and Ride Tram Stop		466	08-May-08	12-Mar-10																																																
13070	Issue Construction Drawings	0	08-May-08*	08-May-08*																																																
153	Civil Engineering and Building Works	65	07-Jul-09	06-Oct-09																																																
218	Order REC Supply	0	15-Oct-09																																																	
A1940	Deliver and Install Shelter	10	26-Nov-09	11-Dec-09																																																
A5398	Access for visual inspection for E&M Tram Stop installation (07A Ingliston Park+Rid	0	11-Nov-09																																																	
A5399	Access for E&M Tram Stop installation (07A Ingliston Park+Ride)	0	11-Dec-09																																																	
A5400	Install LV Power Supply and LV Power Equipment	25	11-Dec-09	29-Jan-10																																																
A5410	Install Telecom Equipment	20	29-Jan-10	26-Feb-10																																																
A5420	Install Station Control Equipment + AFC Equipment	25	29-Jan-10	05-Mar-10																																																
A5430	Package Test Tramstop	5	05-Mar-10	12-Mar-10																																																
Ingliston Park and Ride Substation		138	01-May-09	13-Nov-09																																																
216	Order REC supply from Scottish Power	0	01-May-09																																																	
226	Civil Engineering and Building Works	65	26-May-09	25-Aug-09																																																
A1968	Access for visual inspection for E&M Substation installation (07A Ingliston Park and	0	27-Jul-09																																																	
A1969	Access for E&M Substation installation (07A Ingliston Park and Ride)	0	28-Aug-09																																																	
A5990	Power Infeed from Public Net available inc HV cable	0	26-Aug-09																																																	
A5990	Install LV Power Supply and LV Power Equipment	15	26-Aug-09	15-Sep-09																																																
A6000	Installation of TPS Equipment	30	15-Sep-09	26-Oct-09																																																
A6010	Install Telecom and Scada	15	08-Oct-09	26-Oct-09																																																
A6020	Testing and Commissioning	14	27-Oct-09	13-Nov-09																																																
Enabling Works		29	29-Feb-08	09-Apr-08																																																
A2000	Site and Vegetation Clearance	28	29-Feb-08	09-Apr-08																																																
Tram		14	16-Jan-10	04-Feb-10																																																
A6380	Track Testing of Tram	20	16-Jan-10	04-Feb-10																																																
Ingliston Park & Ride (exc.) to Edinburgh Airport (inc.)		542	29-Feb-08	18-Apr-10																																																
Enabling Works		29	29-Feb-08	09-Apr-08																																																
A1920	Construct New Hotel Car Park	20	29-Feb-08	28-Mar-08																																																
A1930	Site and Vegetation Clearance	28	29-Feb-08	09-Apr-08																																																
Gogarburn Retaining Wall (W14)		106	18-Aug-08	20-Jan-09																																																
13080	Issue Construction Drawings	0	18-Aug-08*	18-Aug-08*																																																
167	Gogarburn Retaining Wall (W14)	80	16-Sep-08	20-Jan-09																																																
Gogarburn Culvert No2 (S31)		95	15-Jul-08	26-Nov-08																																																
13090	Issue Construction Drawings	0	15-Jul-08*	15-Jul-08*																																																
165	Divert Flows-Bulk Excavation	7	10-Sep-08	16-Sep-08																																																
309	Precast Culvert Units	5	19-Sep-08	25-Sep-08																																																
319	Reinforced Concrete Apron and Wingwalls	20	15-Oct-08	11-Nov-08																																																
329	Backfill and Finishes	11	12-Nov-08	26-Nov-08																																																
Gogarburn Culvert No3 (S34)		143	13-Jun-08	08-Jan-09																																																
13100	Issue Construction Drawings	0	13-Jun-08*	13-Jun-08*																																																
195	Divert Flows-Bulk Excavation	6	19-Sep-08	26-Sep-08																																																
279	Precast Culvert Units	5	29-Sep-08	03-Oct-08																																																
289	Reinforced Concrete Apron and Wingwalls	20	12-Nov-08	10-Dec-08																																																

APPENDIX B4

Tom Hickman

From: STEPHEN SHARP [ssharp@programmingsolutions.co.uk]
Sent: 13 December 2007 16:59
To: Tom Hickman; Scott.McFadzen@bilfinger.co.uk; UK MB INFRACO
Cc: Susan Clark; Geoff Gilbert; Bob Dawson; Steven Bell
Subject: RE: INFRACO Programme with finish dates

Tom

Our response using your enumeration is as follows:

1. I can confirm that the programme is based on V22 of the SDS design programme (however please also see the notes in the "Programme Assumptions" document that was forwarded with the submission).
2. If the Tower Place / Victoria Dock Access Bridge restraints are removed the completion date for 1A (and 1a) will come sooner. To be able to achieve a March 2011 completion section 1A will need reprogramming to accelerate these works (because of the late release of construction issue drawings) and some simplification of the design (which we believe will occur) over that which the current drawings show. The alternative programme (1A assumptions) forwarded to you at the beginning of last week attempted to illustrate what could be achieved.
3. Confirmed.
4. The programme assumes the embargo to be lifted for Catenary works in Picardy Place in August 2010 to achieve an end of February 2011 completion for sub section 1C. If the embargo is not lifted this date then becomes the end of March 2011.
5. I am sorry, but I do not understand this point.
6. This programme is our latest revision and supersedes previous issues. As you are aware this programme is driven by SDS issue for construction dates, MUDFA and some remaining junction constraints. If the combination of these constraints were not as severe, as was the case in our previous submissions, earlier completion dates would be achieved.

I hope the above is clear and adequately answers the points you have raised.

Best Regards, Steve

From: Tom Hickman [mailto:Tom.Hickman@tie.ltd.uk]
Sent: Thu 13/12/2007 14:51
To: STEPHEN SHARP; Scott.McFadzen@bilfinger.co.uk; UK MB INFRACO
Cc: Susan Clark; Geoff Gilbert; Bob Dawson; Steven Bell
Subject: INFRACO Programme with finish dates

Steve,

Thanks for the quick response.

Can I ask you or Scott to urgently confirm that the programme submitted 12th December that shows an Open for Revenue Service date of 8th August 2011 for line 1a is based on the following:

-----Original Message-----

From: STEPHEN SHARP [mailto:ssharp@programmingsolutions.co.uk]
Sent: 13 December 2007 12:13
To: Tom Hickman
Cc: Scott.Mcfadzen@bilfinger.de
Subject: INFRACO Programme with finish dates

Tom

Please find new PDF of this weeks submission as requested. Sorry I did not notice that the finish dates run off the edge of the PDF. I have added a finish date column to make it easy.

Best Regards, Steve Sharp.

Construction Programming Solutions Ltd.

Tel: [REDACTED]

Mobile: [REDACTED]

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APPENDIX B5

Geoff Gilbert

From: AMANDA FLYNN [amanda.flynn2@[REDACTED]]
Sent: 12 December 2007 21:19
To: Geoff Gilbert
Cc: Flynn, Michael (Siemens TS)
Subject: the joys of computers....message from michael flynn

Geoff,
Below are the various comments/words we discussed on the phone.

Third Party agreements: I will provide some simple words for discussion - Proposed words

'BBS will deliver the scope in accordance with the agreed employer requirements and the obligations under the third party agreements set out in schedule 13. BBS will take the necessary steps in the construction of the scope so that CEC will not be put in breach of their obligations under the third party agreements to the extent such obligations are identified in schedule 13. In the event that the employer requirements and the third party agreements are in conflict, the employer requirements and schedule 13 will take precedence in regards BBS obligations...'

or

Infraco will carry out and complete the Infraco Works in accordance with the Agreement and will at all times use reasonable endeavours to avoid causing tie and/or CEC to become in breach of their obligations under any Third Party Agreements in so far as such 3rd Party obligation was disclosed to Infraco prior to the Effective Date.

In the event that the carrying out and completing the Infraco Works is rendered more expensive and/or time consuming in order that Infraco do not cause tie and/or CEC to be in breach of their obligations under any Third Party Agreements then the additional expense and/or time shall be treated as a tie Change under Clause 80, provided that Infraco shall take all reasonable steps to mitigate such additional expense and/or time.

Collateral warranties: - in the circumstances where our Subcontractor offers a CW which does not match tie's required wording tie would relax their requirement in this respect to allow the use of the CW provided by the Subcontractor is already covered in Clause 28. The issue remaining is the requirement for the Infraco to provide a collateral warranty in respect of the subcontract works element, where the subcontract is unable/unwilling to provide one. This requirement seems superfluous in the context that Infraco have already provided CW's for the whole of the works. It also needs to be made clear that any indemnities within the CW's form and are part of the Infraco Liability CAP.

Operator change (clause 17.6): Suzanne has sent drafting to DLA on 10th December. They need to respond with a mark-up reflecting tie's position that they do not have to notify Infraco of every change. This is acceptable subject to the protection that any change which subsequently affects Infraco will be compensated for by tie

20/12/2007

CEC02085660_0119

APPENDIX A

APPENDIX B1

Geoff Gilbert

From: Geoff Gilbert
Sent: 12 December 2007 21:00
To: flynn.michael@siemens.com
Cc: Tom.Murray@bilfinger.co.uk; 'Scott.McFadzen@bilfinger.co.uk';
Richard.Walker@bilfinger.co.uk; Bob Dawson; Valerie Clementson
Subject: Draft Consents Paper GG 121207
Attachments: Draft Consents Paper GG 121207.doc

Michael

Simplified proposal from us on consents enclosed. Can we discuss tomorrow morning.

Regards

Geoff Gilbert - Project Commercial Director

TRAM Project

tie Limited

Citypoint

65 Haymarket Terrace

Edinburgh EH12 5HD

tel [REDACTED]

mob [REDACTED]

20/12/2007

CEC02085660_0125

**Edinburgh TRAM Project
(Commercial In Confidence)**

Subject : Infraco Contract Terms Clarifications
Review area : Consents
Date : 12th December 2007

1.0 Principles

2.1 The allocation of responsibility for consents in the contract will be as follows:-

- The following consents will be the responsibility of tie to obtain
 - TROs for the permanent scheme
 - TTROs to enable the scheme to be constructed, with BBS support (tie have already applied for blanket TTRO's)
 - Network Rail possessions – tie book these based on BBS programme dates (note these are already booked now wrong dates – need to be re-booked to comply with revised Infraco Contract)

BBS provides relevant support to tie to obtain these consents.

- SDS obtain other consents required to fulfil their contract obligations. Agreed consents being obtained by SDS will be clarified in the novation agreement with a list of consents stating the status of consents at Novation. The list of consents being obtained by SDS is set out in Appendix A.
- BBS obtain all other consents, those required for construction activities and also those required to commission the system and enable it to open for passenger carrying operation. Support is provided by SDS where relevant.
- Tie will provide support to BBS to assist them in obtaining consents from third parties where they are not co-operating, provided BBS has provided the requisite information to obtain the consent and comply with the consent authorities timescales.
- Where consents are not put in place by SDS to meet the BBS programme in the Infraco Proposals then the impact on programme will be a CE, subject to certain provisos as set out later in this paper.

Tie will consider a CE where BBS are unable to obtain consents. To enable tie to assess whether it is prepared to do this SDS is to advise tie of the specific consents that it is concerned about. Tie will not agree to a blanket CE for all consents to be obtained by Infraco. Where tie agrees to a CE where BBS are unable to obtain consents this will be subject to the provisos listed below in 9 below.

2.0 Traffic Regulation Orders [TROs]

2.1 The TROs are to be obtained by tie with relevant technical support and programme information being provided by BBS.

2.2 If BBS action or inaction delays this process and to the extent that this delays completion of the scheme will not be a CE.

3.0 Temporary Traffic Regulation Orders [TTROs]

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3.1 The TTROs are to be obtained by tie but based on the programme and technical information being provided by BBS, including traffic management proposals. This will in essence be the implementation of the On Street Construction Works Methodology which is to contain all the details necessary for tie to draw down a TTRO, including traffic management arrangements proposed by BBS.

3.2 If BBS action or inaction delays this process and to the extent that this delays completion of the scheme will not be a CE.

4.0 Network Rail

4.1 Possessions have already been booked by tie in accordance with BBS's requirements. Possessions need to be re-booked to suit revised Infracore Contract.

4.2 BBS (including providing design and technical information where necessary) will prepare and provide to tie all necessary paperwork to enable tie to make an application for possessions to Network Rail.

4.3 The responsibility for payment for these possessions will rest with tie but any changes to possessions as a result of BBS being in culpable delay will then rest with BBS.

4.4 Any changes to possessions as a result of Network Rail will, subject to usual tests, lead to a Compensation Event for BBS.

5.0 Discharge Consents (water)

5.1 There are two situations here, namely:

- Temporary Discharge Consents
- Permanent Discharge Consents

5.2 Clearly BBS has to be responsible for temporary discharge consents as these will relate to their method of working or other preliminaries items such as their site set up.

5.3 With regard to the permanent discharge consents BBS want these to be in place prior to novation of SDS. If this can be achieved then it would be the preferred position. BBS to check SDS programme to determine whether these are in place.

5.4 It is logical that BBS are responsible for obtaining the permanent discharge consents as SDS will be their consultant not tie's for this element of the work. Permanent discharge consents are required prior to commencement of the relevant drainage works. If these are refused due to SDS errors it will be a matter for BBS to resolve with SDS (subject to the SDS having obtained a permanent discharge consent and designed an agreed outfall arrangement for the Depot?). However if refused or made conditional upon works being

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undertaken e.g. betterment, upgrading, new or renewal requirements for other reasons outside of BBS/SDS control then it is suggested that this becomes a tie change.

6.0 Building Warrants

6.1 The Building Warrants relate to compliance with technical standards and thus it is appropriate that this rests with BBS (SDS providing this to BBS other than where BBS have or are to undertake the design).

7.0 Building Fixing Agreements (for overhead line)

7.1 SDS have a responsibility to obtain Building Fixing Agreement and thus under the novation arrangement this will rest with BBS.

7.2 However tie has already acknowledged that obtaining a Building Fixing Agreement is not necessarily guaranteed. Heritable Proprietors (owners) have the right to object and quite probably most will. Thereafter CEC/tie determines whether to take the matter to the Sheriff Court.

7.3 Although Building Fixings Agreements remain as the preferred solution, SDS is also progressing the approval of poles to support the overhead line.

7.4 If Building Fixing Agreement is not obtained in a particular location, then within limits of being technically feasible and programme constraints for a new request, alternative locations for a Building Fixing are to be sought.

7.5 Where it is not technically feasible to use an alternative location for a Building Fixing or the programme constraints are insufficient for a new request, then the 'fall-back position' of the use of a pole becomes a tie Change.

7.6 Where there is uncertainty of likely outcome, consideration will be given to a dual approach of seeking Building Fixings and also installing foundations for a pole (as a tie Change).

8.0 Other consents related to design

10.1 All other consents related to design will rest with BBS.

9.0 Compensation Event where consents are not obtained or are delayed by SDS

11.1 BBS will be entitled to a CE where a consent is not provided by the authority providing the consent by the date that it is shown as required on the programme included in the Infraco Proposals provided that:

- It relates to a consent that SDS are due to obtain in accordance with their contract (excluding any additional consents that Infraco may have instructed SDS to obtain after novation)
- Infraco explains the reasons given by the consenting authority as to why they will not or have not provided consent within the agreed period (with supporting documentation)

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- Infraco advises tie immediately that it becomes aware that a consent may not be obtained by the due date. In such circumstances Infraco will afford tie the opportunity to meet with the authority providing the consent with a view to resolving the situation and Infraco attends the meeting with tie and supports tie in this respect.
- Infraco demonstrates that:-
 - Not receiving the consent has had or will have a material impact on the progress of the works
 - Infraco have taken all reasonable steps to obtain the consent
 - Infraco has provided all information necessary to obtain the consent within the timescales agreed with the authority providing the consent
 - the failure by the authority required to provide the consent has not been brought about by Infraco reprogramming the works or reprogramming or reprioritising the design programme such that a timescale agreed with the authority providing the consent cannot now be achieved
 - the authority providing the consent has not responded within the agreed timescales
 - Infraco has undertaken or plans to undertake mitigation actions in a timely manner to avoid or mitigate the impact of any delay in obtaining consent.
 - The failure in obtaining a consent is not due to a failure on the part of SDS to deliver the obligations of their contract.

**CONSENTS
(Commercial In Confidence)**

Railways and Aviation	HMRI	HMRI	Ongoing process with HMRI
	Network Rail	Network Rail	Ongoing negotiations with NR
	BAA/Aviation Consents	BAACAA/NATS	Ongoing negotiations with BAA
Planning	Listed Building Consent	CEC Planning Authority	
	Prior Approval	CEC Planning Authority	
	Planning Permission	CEC Planning Authority	
	Conservation Area Consent	CEC Planning Authority	Not applicable within LoD
	Scheduled Monument Consent	Scottish Executive & Historic Scotland	
	Advertisement Consent	CEC Planning Authority	Information signs "deemed consent"
Traffic Management	Road Construction Consent	CEC Roads Authority	
Environment Ecological	Badger Licence	Scottish Natural Heritage	Environmental Team
	Otter holt/disturbance licence	Scottish Natural Heritage	
	Bat Licence	Scottish Natural Heritage	
	Appropriate Assessment	Competent Authority	
Drainage CAR	CAR General Binding Rules	SEPA	
	CAR Registration	SEPA	
	CAR License	SEPA	
	Water/ Wastewater Connection	Scottish Water	
Construction	Technical Approval	CEC Bridges/ CEC Roads	
	Building Warrant	CEC Building Standards	
Radio	OFCOM license	OFCOM	
Design Consultation	Third Party Design Consultation		
Undertakings	Undertakings to Parliament	n/a	Undertakings and Agreements to Parliament and with 3rd parties that must be met
Agreements	Agreements with 3rd Parties	n/a	
Letter of Comfort	Letter of comfort	n/a	
Letter of Closure	Letter of Closure	n/a	

APPENDIX B2

Geoff Gilbert

From: Alastair Richards - TEL
Sent: 20 December 2007 18:27
To: Geoff Gilbert
Subject: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section
Attachments: ERs - Maintenance - Draft 3 03 for Informal Issue ONLY_rev20071211.pdf

From: Brauns, Bernhard [mailto:bernhard.brauns@siemens.com]
Sent: Wed 12/12/2007 7:23 PM
To: Alastair Richards - TEL
Cc: scott.mcfadzen@bilfinger.de; Brueckmann, Roland
Subject: AW: Employer's Requirements - 3.03 (draft) - Maintenance Section

Hello Alastair,

please find attached the ER with my comments (directly in the pdf document).

In case you can't see the comments, please give me a ring - I'd then have to convert the pdf into a Word document.

With best regards,
Bernhard Brauns

Siemens AG
Transportation Systems
Integrated Services
TS IS S12
Sieboldstr. 16
91052 Erlangen, Germany
Tel.: +
Fax: +
Mobile
<mailto:bernhard.brauns@siemens.com>

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Von: Alastair Richards - TEL [mailto:Alastair.Richards@tie.ltd.uk]
Gesendet: Freitag, 7. Dezember 2007 18:52
An: Brauns, Bernhard
Betreff: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section
Wichtigkeit: Hoch

Bernhard,

following our meeting, I have updated the Maintenance section and attached it for your informal review. We are finalising the reissue of the consolidated ER's early next week and any feedback would be helpful.

Regards,

20/12/2007

CEC02085660_0139

Alastair

From: Glen Aitken
Sent: Fri 12/7/2007 4:51 PM
To: Alastair Richards - TEL
Subject: Employer's Requirements - 3.03 (draft) - Maintenance Section

Alastair,

As requested, Please find attached the prospective (draft) 3.03 version of the Maintenance Section of the Employer's Requirements.

Have a great weekend.
With kind regards,

Glen

Glen Aitken
Engineering Project Administrator

tie limited
Citypoint
65 Haymarket Terrace
Edinburgh EH12 5HD

tel. +44 XXXXXXXXXX

email. Glen.Aitken@tie.ltd.uk
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20/12/2007

CEC02085660_0141

Geoff Gilbert

From: Alastair Richards - TEL
Sent: 20 December 2007 18:23
To: Geoff Gilbert
Subject: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section

As requested

From: Alastair Richards - TEL
Sent: Wed 12/12/2007 7:52 PM
To: Brauns, Bernhard
Cc: scott.mcfadzen@bilfinger.de; Brueckmann, Roland
Subject: RE: Employer's Requirements - 3.03 (draft) - Maintenance Section

Berhard,

thanks for this, I can see the comments, they seem to be mainly clustered in Table 92 Fault Corrective Requirements. Probably best if we discuss these specifically on the telephone tomorrow one by one to find a resolution. How would 10:30 your time suit you?

Regards,

Alastair

From: Brauns, Bernhard [mailto:bernhard.brauns@siemens.com]
Sent: Wed 12/12/2007 7:23 PM
To: Alastair Richards - TEL
Cc: scott.mcfadzen@bilfinger.de; Brueckmann, Roland
Subject: AW: Employer's Requirements - 3.03 (draft) - Maintenance Section

Hello Alastair,

please find attached the ER with my comments (directly in the pdf document).

In case you can't see the comments, please give me a ring - I'd then have to convert the pdf into a Word document.

With best regards,
Bernhard Brauns

Siemens AG
Transportation Systems
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TS IS S12
Sieboldstr. 16
91052 Erlangen, Germany
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20/12/2007

CEC02085660_0143

Von: Alastair Richards - TEL [mailto:Alastair.Richards@tie.ltd.uk]
Gesendet: Freitag, 7. Dezember 2007 18:52
An: Brauns, Bernhard
Betreff: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section
Wichtigkeit: Hoch

Bernhard,

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Regards,

Alastair

From: Glen Aitken
Sent: Fri 12/7/2007 4:51 PM
To: Alastair Richards - TEL
Subject: Employer's Requirements - 3.03 (draft) - Maintenance Section

Alastair,

As requested, Please find attached the prospective (draft) 3.03 version of the Maintenance Section of the Employer's Requirements.

Have a great weekend.
With kind regards,

Glen

Glen Aitken
Engineering Project Administrator

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65 Haymarket Terrace
Edinburgh EH12 5HD

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email. Glen.Aitken@tie.ltd.uk
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20/12/2007

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tie Limited registered in Scotland No. SC230949. Registered office - City Chambers, High Street, Edinburgh, EH1 1YT.

APPENDIX B3

Edinburgh Tram Tender (updated 11 December 2007)			EDINBURGH TRAM			Bilfinger Berger Siemens Joint Venture																																
Activity ID	Activity Name	Original Duration	Start	Finish	2008 2009 2010 2011																																	
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
Edinburgh Tram Tender (updated 11 December 2007)			1077	28-Sep-07	19-Dec-11																																	
Advanced Works Contract			104	01-Oct-07	28-Feb-08	28-Feb-08, Advanced Works Contract																																
161	Award Advanced Works/Mobilisation Contract	0	01-Oct-07*		Award Advanced Works/Mobilisation Contract,																																	
161.1	Advanced Works Design and Planning	150	01-Oct-07*	28-Feb-08	Advanced Works Design and Planning																																	
161.2	Advanced Works Procurement of Long Lead Items	150	01-Oct-07*	28-Feb-08	Advanced Works Procurement of Long Lead Items																																	
Key Dates			992	01-Feb-08	19-Dec-11																																	
170	AWARD CONTRACT	0	01-Feb-08*		AWARD CONTRACT,																																	
270	Mobilisation	20	01-Feb-08	28-Feb-08	Mobilisation,																																	
280	Commence Phase 1a	0	01-Feb-08		Commence Phase 1a,																																	
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0		30-Aug-10	Construction Completion Phase 1a Edinburgh																																	
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0		27-Feb-11	Commencement of Revenue																																	
311	Construction Completion Phase 1a Haymarket to Newhaven	0		09-Feb-11	Construction Completion Ph																																	
312.8	Commencement of Revenue Service Phase 1a Haymarket to Newhaven	0		08-Aug-11	Commence																																	
320	Commence Phase 1b	0	08-Jul-09*		Commence Phase 1b,																																	
330	Construction Completion Phase 1b	0		22-Jun-11	Construction C																																	
350	Commencement of Revenue Service Phase 1b	0		19-Dec-11																																		
Commissioning Phase 1a Edinburgh Airport to Haymarket			167	01-Jul-10	27-Feb-11	27-Feb-11, Commissioning																																
295	Latest date for first tram on site available for commissioning	0		01-Jul-10	Latest date for first tram on site available for comm																																	
300	System Integration Test; Phase 1a Edinburgh Airport to Haymarket	30	31-Aug-10	29-Sep-10	System Integration Test; Phase 1a Edinb																																	
301	Test Running and Driver Familiarisation; Phase 1a Edinburgh Airport to Haymarket	30	30-Sep-10	29-Oct-10	Test Running and Driver Familiarisatio																																	
302	T1 Post Commissioning Test completed; Phase 1a Edinburgh Airport to Haymarket	0		29-Oct-10	T1 Post Commissioning Test complete																																	
302.1	Test Running and Driver familiarisation performance ramp up 1a Airport to Hayma	30	30-Oct-10	28-Nov-10	Test Running and Driver familiarisa																																	
302.2	T2 Performance Test completed; Phase 1a Edinburgh Airport to Haymarket	0		28-Nov-10	T2 Performance Test completed; P																																	
302.3	Approval of HMRI; Phase 1a Edinburgh Airport to Haymarket	0		28-Nov-10	Approval of HMRI; Phase 1a Edinb																																	
302.4	Shadow running; Phase 1a Edinburgh Airport to Haymarket	90	29-Nov-10	27-Feb-11	Shadow running; Phase 1a																																	
302.5	T3 Pre-Operations Test Completed; Phase 1a Edinburgh Airport to Haymarket	0		27-Feb-11	T3 Pre-Operations Test C																																	
Commissioning Phase 1a Haymarket to Newhaven			128	10-Feb-11	08-Aug-11	08-Aug-11																																
312	System Integration Test; Phase 1a Haymarket to Newhaven	30	10-Feb-11	11-Mar-11	System Integration Test;																																	
312.1	Test Running and Driver Familiarisation; Phase 1a Haymarket to Newhaven	30	12-Mar-11	10-Apr-11	Test Running and Driv																																	
312.2	T1 Post Commissioning Test completed; Phase 1a Haymarket to Newhaven	0		10-Apr-11	T1 Post Commissionin																																	
312.3	Test Running and Driver familiarisation performance ramp up 1a Haymarket to Ne	30	11-Apr-11	10-May-11	Test Running and D																																	
312.4	T2 Performance Test completed; Phase 1a Haymarket to Newhaven	0		10-May-11	T2 Performance Te																																	
312.5	Approval of HMRI; Phase 1a Haymarket to Newhaven	0		10-May-11	Approval of HMRI;																																	
312.6	Shadow running; Phase 1a Haymarket to Newhaven	90	11-May-11	08-Aug-11	Shadow ru																																	
312.7	T3 Pre-Operations Test Completed; Phase 1a Haymarket to Newhaven	0		08-Aug-11	T3 Pre-Op																																	
Commissioning Phase 1b			128	23-Jun-11	19-Dec-11																																	
340	System Integration Test; Phase 1b	30	23-Jun-11	22-Jul-11	System Intex																																	
340.1	Test Running and Driver Familiarisation; Phase 1b	30	23-Jul-11	21-Aug-11	Test Runn																																	
340.2	T1 Post Commissioning Test completed; Phase 1b	0		21-Aug-11	T1 Post C																																	
340.3	Test Running and Driver familiarisation performance ramp up	30	22-Aug-11	20-Sep-11	Test R																																	
340.4	T2 Performance Test completed; Phase 1b	0		20-Sep-11	T2 Per																																	
340.5	Approval of HMRI; Phase 1b	0		20-Sep-11	Approv																																	
340.6	Shadow running; Phase 1b	90	21-Sep-11	19-Dec-11																																		
340.7	T3 Pre-Operations Test Completed; Phase 1b	0		19-Dec-11																																		
M & E Design			146	01-Feb-08	29-Aug-08	29-Aug-08, M & E Design																																
740	M & E Requirement Definition Phase Complete	0		01-Feb-08*	M & E Requirement Definition Phase Complete; 01-Feb-08*																																	
750	M & E Preliminary Design Phase	60	01-Feb-08	01-Apr-08	M & E Preliminary Design Phase;																																	
760	M & E Review of Preliminary Design	30	01-Apr-08	01-May-08	M & E Review of Preliminary Design																																	
770	M & E Detail Design Phase	90	01-May-08	30-Jul-08	M & E Detail Design Phase;																																	
780	M & E Review of Detailed Design	30	30-Jul-08	29-Aug-08	M & E Review of Detailed Design																																	

Activity ID	Activity Name	Original Duration	Start	Finish	2006												2009												2010												2011											
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D									
A1200	CH 1705 to 1850	95	25-Mar-10	11-Aug-10	CH 1705 to 1850																																															
A1210	CH 1850 to 1870 (JNC 10)	45	22-Jan-10	25-Mar-10	CH 1850 to 1870 (JNC 10)																																															
A1220	CH 1870 to 1975 (JNC 11)	45	05-Nov-09	21-Jan-10	CH 1870 to 1975 (JNC 11)																																															
A1230	CH 1975 to 2030	30	24-Sep-09	04-Nov-09	CH 1975 to 2030																																															
A1240	CH 2030 to 2070	30	13-Aug-09	23-Sep-09	CH 2030 to 2070																																															
A1250	CH 2070 to 2100	30	01-Jul-09	12-Aug-09	CH 2070 to 2100																																															
Roadworks					15-Jun-10, Roadworks																																															
12070	Issue Construction Drawings	0		03-Oct-09*	Issue Construction Drawings, 03-Oct-09*																																															
A1260	CH 1850 to 1870	100	22-Jan-10	15-Jun-10	CH 1850 to 1870																																															
A1270	CH 1870 to 2100	75	01-Jul-09	14-Oct-09	CH 1870 to 2100																																															
Ocean Drive Tram Stop					29-Sep-10, Ocean Drive Tram Stop																																															
12080	Issue Construction Drawings	0		25-Feb-08*	Issue Construction Drawings, 25-Feb-08*																																															
17	Civil Engineering and Building Works	65	26-Mar-10	29-Jun-10	Civil Engineering and Building Works																																															
188	Order REC Supply	0	18-May-10		Order REC Supply																																															
A1800	Deliver and Install Shelter	10	30-Jun-10	13-Jul-10	Deliver and Install Shelter																																															
A4358	Access for visual inspection for E&M Tram Stop installation (01A Ocean Drive)	0	14-Jun-10		Access for visual inspection for E&M Tram Stop installation (01A Ocean Drive)																																															
A4359	Access for E&M Tram Stop installation (01A Ocean Drive)	0	14-Jul-10		Access for E&M Tram Stop installation (01A Ocean Drive)																																															
A4360	Install LV Power Supply and LV Power Equipment	25	14-Jul-10	18-Aug-10	Install LV Power Supply and LV Power Equipment																																															
A4370	Install Telecon Equipment	20	19-Aug-10	15-Sep-10	Install Telecon Equipment																																															
A4380	Install Station Control Equipment + AFC Equipment	25	19-Aug-10	22-Sep-10	Install Station Control Equipment + AFC Equipment																																															
A4390	Package Test Tramstop	5	23-Sep-10	29-Sep-10	Package Test Tramstop																																															
Constitution Street (inc.) to Foot of the Walk (exc.)					01-Mar-10, Constitution Street (inc.) to Foot of the Walk (exc.)																																															
Constitution Street Tram Stop					01-Mar-10, Constitution Street Tram Stop																																															
12090	Issue Construction Drawings	0		25-Feb-08*	Issue Construction Drawings, 25-Feb-08*																																															
198	Order REC Supply	0	02-Oct-09		Order REC Supply																																															
20	Civil Engineering and Building Works	65	13-Apr-09	14-Jul-09	Civil Engineering and Building Works																																															
A1850	Deliver and Install Shelter	10	13-Nov-09	27-Nov-09	Deliver and Install Shelter																																															
A4398	Access for visual inspection for E&M Tram Stop installation (01A Constitution Street)	0	28-Oct-09		Access for visual inspection for E&M Tram Stop installation (01A Constitution Street)																																															
A4399	Access for E&M Tram Stop installation (01A Constitution Street)	0	27-Nov-09		Access for E&M Tram Stop installation (01A Constitution Street)																																															
A4400	Install LV Power Supply and LV Power Equipment	25	27-Nov-09	18-Jan-10	Install LV Power Supply and LV Power Equipment																																															
A4410	Install Telecon Equipment	20	18-Jan-10	15-Feb-10	Install Telecon Equipment																																															
A4420	Install Station Control Equipment + AFC Equipment	25	18-Jan-10	22-Feb-10	Install Station Control Equipment + AFC Equipment																																															
A4430	Package Test Tramstop	5	22-Feb-10	01-Mar-10	Package Test Tramstop																																															
Trackworks					23-Jun-09, Trackworks																																															
12100	Issue Construction Drawings	0		03-Oct-08*	Issue Construction Drawings, 03-Oct-08*																																															
Baltic to Queen Charlotte Ch 2110-2340					23-Jun-09, Baltic to Queen Charlotte Ch 2110-2340																																															
A13720	Dummy	50	13-Apr-09	23-Jun-09	Dummy																																															
Queen Charlotte to Foot/Walk Ch 2340-2730					02-Apr-09, Queen Charlotte to Foot/Walk Ch 2340-2730																																															
A13730	Dummy	50	23-Jan-09	02-Apr-09	Dummy																																															
Roadworks					30-Jun-09, Roadworks																																															
12110	Issue Construction Drawings	0		03-Oct-08*	Issue Construction Drawings, 03-Oct-08*																																															
Baltic to Queen Charlotte Ch 2110-2340					30-Jun-09, Baltic to Queen Charlotte Ch 2110-2340																																															
A13740	Dummy	55	13-Apr-09	30-Jun-09	Dummy																																															
Queen Charlotte to Foot/Walk Ch 2340-2730					09-Apr-09, Queen Charlotte to Foot/Walk Ch 2340-2730																																															
A13750	Dummy	55	23-Jan-09	09-Apr-09	Dummy																																															
01B Foot of the Walk (inc.) to McDonald Road (exc.)					06-Apr-10, 01B Foot of the Walk (inc.) to McDonald Road																																															
E & M Installation					28-Dec-09, E & M Installation																																															
A3763	Access for visual inspection for E&M wayside installation (01B)	0	24-Oct-09		Access for visual inspection for E&M wayside installation (01B)																																															
A3764	Access for E&M wayside installation (01B)	0	15-Nov-09		Access for E&M wayside installation (01B)																																															
A3765	Installation of poles and building fixings	10	15-Nov-09	24-Nov-09	Installation of poles and building fixings																																															
A3770	Overhead Catenary Line	23	25-Nov-09	17-Dec-09	Overhead/Catenary Line																																															
A3778	Access for visual inspection to cable pits for cable laying (01B)	0	13-Nov-09		Access for visual inspection to cable pits for cable laying (01B)																																															
A3779	Access to cable pits for cable laying (01B)	0	05-Dec-09		Access to cable pits for cable laying (01B)																																															
A3780	Install Electrical Cables	12	05-Dec-09	16-Dec-09	Install Electrical Cables																																															
A3790	Install Fibre Optic Cables	12	05-Dec-09	16-Dec-09	Install Fibre Optic Cables																																															

Activity ID	Activity Name	Original Duration	Start	Finish	2008												2009												2010												2011														
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
McDonald / Brunswick Road Ch 950-1250					41	14-Sep-09	06-Nov-09	<div style="display: flex; justify-content: space-between;"> 09-Nov-09; McDonald / Brunswick Road Ch 950-1250 12-Oct-09; 1st half </div>																																															
1st half					21	14-Sep-09	12-Oct-09																																																
A13010	Establish Traffic Management & Temp. Fencing	2	14-Sep-09	15-Sep-09	Establish Traffic Management & Temp. Fencing																																																		
A13020	Excavate box	2	16-Sep-09	17-Sep-09	Excavate box																																																		
A13030	Excavate, lay and concrete ducts	3	18-Sep-09	22-Sep-09	Excavate, lay and concrete ducts																																																		
A13040	Excavate and construct OLE bases	3	18-Sep-09	22-Sep-09	Excavate and construct OLE bases																																																		
A13050	Place Lower concrete and cure	3	23-Sep-09	25-Sep-09	Place Lower concrete and cure																																																		
A13060	Set Track (300m)	3	28-Sep-09	30-Sep-09	Set Track (300m)																																																		
A13070	Place upper concrete and cure	5	01-Oct-09	07-Oct-09	Place upper concrete and cure																																																		
A13080	Street Surface finishes	3	08-Oct-09	12-Oct-09	Street Surface finishes																																																		
2nd half					20	13-Oct-09	09-Nov-09	<div style="display: flex; justify-content: space-between;"> 09-Nov-09; 2nd half </div>																																															
A13410	Excavate box	2	13-Oct-09	14-Oct-09	Excavate box																																																		
A13420	Excavate, lay and concrete ducts	3	15-Oct-09	19-Oct-09	Excavate, lay and concrete ducts																																																		
A13430	Excavate and construct OLE bases	3	15-Oct-09	19-Oct-09	Excavate and construct OLE bases																																																		
A13440	Place Lower concrete and cure	3	20-Oct-09	22-Oct-09	Place Lower concrete and cure																																																		
A13450	Set Track	3	23-Oct-09	27-Oct-09	Set Track																																																		
A13460	Place upper concrete and cure	5	28-Oct-09	03-Nov-09	Place upper concrete and cure																																																		
A13470	Street Surface finishes	3	04-Nov-09	06-Nov-09	Street Surface finishes																																																		
A13480	Remove fencing and Traffic Management	1	09-Nov-09	09-Nov-09	Remove fencing and Traffic Management																																																		
Leith Walk Railway Bridge (S18)					0	16-Jul-09	16-Jul-09	<div style="display: flex; justify-content: space-between;"> 16-Jul-09; Leith Walk Railway Bridge (S18) </div>																																															
26	Existing Structure	0	16-Jul-09	16-Jul-09	◆ Existing Structure, 16-Jul-09																																																		
Roadworks					287	28-Mar-08	14-May-09	<div style="display: flex; justify-content: space-between;"> 14-May-09; Roadworks </div>																																															
12160	Issue Construction Drawings	0	28-Mar-08*	28-Mar-08*	◆ Issue Construction Drawings, 28-Mar-08*																																																		
Balfour Street Ch 600-850					39	12-Dec-08	06-Feb-09	<div style="display: flex; justify-content: space-between;"> 06-Feb-09; Balfour Street Ch 600-850 </div>																																															
A12130	Establish Traffic Management & Temp. Fencing	2	12-Dec-08	15-Dec-08	Establish Traffic Management & Temp. Fencing																																																		
A12140	Excavate for new channel and kerb line / remove existing kerbs	10	16-Dec-08	12-Jan-09	Excavate for new channel and kerb line / remove existing kerbs																																																		
A12150	Construct Kerb lines	13	19-Dec-08	20-Jan-09	Construct Kerb lines																																																		
A12160	Reset Gullies	13	09-Jan-09	27-Jan-09	Reset Gullies																																																		
A12170	Surface new channel	6	28-Jan-09	04-Feb-09	Surface new channel																																																		
A12180	Pavement Works	12	21-Jan-09	05-Feb-09	Pavement Works																																																		
A12190	Street Lighting / Traffic Signals / Road Signs	7	21-Jan-09	29-Jan-09	Street Lighting / Traffic Signals / Road Signs																																																		
A12200	Remove fencing and Traffic Management	1	06-Feb-09	06-Feb-09	Remove fencing and Traffic Management																																																		
Piling / Iona Street Ch 850-950					31	09-Feb-09	23-Mar-09	<div style="display: flex; justify-content: space-between;"> 23-Mar-09; Piling / Iona Street Ch 850-950 </div>																																															
A12210	Establish Traffic Management & Temp. Fencing	2	09-Feb-09	10-Feb-09	Establish Traffic Management & Temp. Fencing																																																		
A12220	Excavate for new channel and kerb line / remove existing kerbs	10	11-Feb-09	24-Feb-09	Excavate for new channel and kerb line / remove existing kerbs																																																		
A12230	Construct Kerb lines	13	16-Feb-09	04-Mar-09	Construct Kerb lines																																																		
A12240	Reset Gullies	13	23-Feb-09	11-Mar-09	Reset Gullies																																																		
A12250	Surface new channel	6	12-Mar-09	19-Mar-09	Surface new channel																																																		
A12260	Pavement Works	12	05-Mar-09	20-Mar-09	Pavement Works																																																		
A12270	Street Lighting / Traffic Signals / Road Signs	7	05-Mar-09	13-Mar-09	Street Lighting / Traffic Signals / Road Signs																																																		
A12280	Remove fencing and Traffic Management	1	23-Mar-09	23-Mar-09	Remove fencing and Traffic Management																																																		
McDonald / Brunswick Road Ch 950-1250					38	24-Mar-09	14-May-09	<div style="display: flex; justify-content: space-between;"> 14-May-09; McDonald / Brunswick Road Ch 950-1250 </div>																																															
A12290	Establish Traffic Management & Temp. Fencing	2	24-Mar-09	25-Mar-09	Establish Traffic Management & Temp. Fencing																																																		
A12300	Excavate for new channel and kerb line / remove existing kerbs	12	26-Mar-09	13-Apr-09	Excavate for new channel and kerb line / remove existing kerbs																																																		
A12310	Construct Kerb lines	15	31-Mar-09	21-Apr-09	Construct Kerb lines																																																		
A12320	Reset Gullies	15	07-Apr-09	28-Apr-09	Reset Gullies																																																		
A12330	Surface new channel	9	29-Apr-09	12-May-09	Surface new channel																																																		
A12340	Pavement Works	15	22-Apr-09	13-May-09	Pavement Works																																																		
A12350	Street Lighting / Traffic Signals / Road Signs	7	22-Apr-09	30-Apr-09	Street Lighting / Traffic Signals / Road Signs																																																		
A12360	Remove fencing and Traffic Management	1	14-May-09	14-May-09	Remove fencing and Traffic Management																																																		
Balfour Street Tram Stop					556	28-Jan-08	05-Apr-10	<div style="display: flex; justify-content: space-between;"> 05-Apr-10; Balfour Street Tram Stop </div>																																															
12170	Issue Construction Drawings	0	28-Jan-08*	28-Jan-08*	◆ Issue Construction Drawings, 28-Jan-08*																																																		
538	Order REC Supply	0	06-Nov-09	06-Nov-09	◆ Order REC Supply																																																		
Construction					223	19-May-09	06-Apr-10	<div style="display: flex; justify-content: space-between;"> 06-Apr-10; Construction </div>																																															
590	Civil Engineering And Building Works	65	19-May-09	19-Aug-09	Civil Engineering And Building Works																																																		

Activity ID	Activity Name	Original Duration	Start	Finish	2008												2009												2010												2011											
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
12220	Issue Construction Drawings	0		14-Mar-08*	◆ Issue Construction Drawings: 14-Mar-08*																																															
558	Order REC Supply	0	13-Apr-10		◆ Order REC Supply:																																															
610	Civil Engineering And Building Works	65	29-Mar-10	30-Jun-10	Civil Engineering And Building Works																																															
A2720	Deliver and Install Shelter	10	26-May-10	09-Jun-10	Deliver and Install Shelter																																															
A4518	Access for visual inspection for E&M Tram Stop installation (01C Picardy Place)	0	11-May-10		◆ Access for visual inspection for E&M Tram Stop installation (01C Picardy Place)																																															
A4519	Access for E&M Tram Stop installation (01C Picardy Place)	0	10-Jun-10		◆ Access for E&M Tram Stop installation (01C Picardy Place)																																															
A4520	Install LV Power Supply and LV Power Equipment	25	10-Jun-10	14-Jul-10	Install LV Power Supply and LV Power Equipment																																															
A4530	Install Telecom Equipment	20	15-Jul-10	12-Aug-10	Install Telecom Equipment																																															
A4540	Install Station Control Equipment + AFC Equipment	25	15-Jul-10	19-Aug-10	Install Station Control Equipment + AFC Equipment																																															
A4550	Package Test Tramstop	5	20-Aug-10	26-Aug-10	Package Test Tramstop																																															
Roadworks					26-Jan-11, Roadworks																																															
12230	Issue Construction Drawings	0		28-Apr-08*	◆ Issue Construction Drawings: 28-Apr-08*																																															
Picardy Place Ch 450-700					26-Jan-11, Picardy Place Ch																																															
Phase 1					29-Jan-10, Phase 1																																															
A13580	Dummy	20	04-Jan-10	29-Jan-10	Dummy																																															
Phase 2					26-Mar-10, Phase 2																																															
A13590	Dummy	40	01-Feb-10	28-Mar-10	Dummy																																															
Phase 3					25-May-10, Phase 3																																															
A13600	Dummy	42	29-Mar-10	25-May-10	Dummy																																															
Phase 4					21-Jul-10, Phase 4																																															
A13610	Dummy	39	26-May-10	21-Jul-10	Dummy																																															
Phase 5					29-Oct-10, Phase 5																																															
A13620	Dummy	64	22-Jul-10	20-Oct-10	Dummy																																															
Phase 6					26-Jan-11, Phase 6																																															
A13630	Dummy	40	21-Oct-10	26-Jan-11	Dummy																																															
York Place Ch 700-850					12-Apr-10, York Place Ch 700-850																																															
Phase 1					12-Mar-10, Phase 1																																															
A13680	Dummy	50	04-Jan-10	12-Mar-10	Dummy																																															
Phase 2					12-Apr-10, Phase 2																																															
A13690	Dummy	21	15-Mar-10	12-Apr-10	Dummy																																															
York Place Ch 850-1000					21-Jul-10, York Place Ch 850-1000																																															
Phase 1					28-Jun-10, Phase 1																																															
A13700	Dummy	51	13-Apr-10	23-Jun-10	Dummy																																															
Phase 2					21-Jul-10, Phase 2																																															
A13710	Dummy	19	24-Jun-10	21-Jul-10	Dummy																																															
Cathedral SubStation					03-Sep-10, Cathedral SubStation																																															
346	Order REC supply from Scottish Power	0	08-Feb-10		◆ Order REC supply from Scottish Power:																																															
356	Civil Engineering and Building Works	65	01-Mar-10	02-Jun-10	Civil Engineering and Building Works																																															
A2838	Access for visual inspection for E&M substation installation (01C Cathedral)	0	04-May-10		◆ Access for visual inspection for E&M substation installation (01C Cathedral)																																															
A2839	Access for E&M substation installation (01C Cathedral)	0	03-Jun-10		◆ Access for E&M substation installation (01C Cathedral)																																															
A5560	Power Infeed from Public Net available inc HV cable	0	03-Jun-10		◆ Power Infeed from Public Net available inc HV cable																																															
A5590	Install LV Power Supply and LV Power Equipment	15	03-Jun-10	23-Jun-10	Install LV Power Supply and LV Power Equipment																																															
A5600	Installation of TPS Equipment	30	17-Jun-10	28-Jul-10	Installation of TPS Equipment																																															
A5610	Install Telecom and Scada	15	08-Jul-10	28-Jul-10	Install Telecom and Scada																																															
A5620	Testing and Commissioning	14	29-Jul-10	18-Aug-10	Testing and Commissioning																																															
A5120	Installation of SIG-interlocking cubicle	10	17-Jun-10	30-Jun-10	Installation of SIG-interlocking cubicle																																															
A5130	Commissioning of SIG -interlocking cubicle	5	30-Aug-10	03-Sep-10	Commissioning of SIG -interlocking cubicle																																															
St. Andrews Square (inc.) to Princes Street West (exc.)					03-Sep-10, St. Andrews Square (inc.) to Pr																																															
Trackworks					27-Nov-09, Trackworks																																															
12240	Issue Construction Drawings	0		28-Apr-08*	◆ Issue Construction Drawings: 28-Apr-08*																																															
Waverley Bridge Ch 1310-1460					30-Oct-09, Waverley Bridge Ch 1310-1460																																															
Phase 2					30-Oct-09, Phase 2																																															
A11650	Establish Traffic Management & Temp. Fencing	2	06-Oct-09	07-Oct-09	Establish Traffic Management & Temp. Fencing																																															
A11660	Excavate box	2	08-Oct-09	09-Oct-09	Excavate box																																															
A11670	Excavate, lay and concrete ducts	3	12-Oct-09	14-Oct-09	Excavate, lay and concrete ducts																																															

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Activity ID	Activity Name	Original Duration	Start	Finish	2008												2009												2010												2011											
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
12310	Issue Construction Drawings	0		31-Mar-08*	◆ Issue Construction Drawings, 31-Mar-08*																																															
	Haymarket Ch 1250-1125	237	05-Jan-09	23-Oct-09	▼ 23-Oct-09, Haymarket Ch 1250-1125																																															
	Phase 1				▼ 27-Jan-09, Phase 1																																															
A6390	Establish Traffic Management & Temp. Fencing	2	05-Jan-09	06-Jan-09	I Establish Traffic Management & Temp. Fencing																																															
A6400	Remove island surfacing and exc. to formation	4	07-Jan-09	12-Jan-09	II Remove island surfacing and exc. to formation																																															
A6410	Construct Kerb lines	2	13-Jan-09	14-Jan-09	I Construct Kerb lines																																															
A6420	Move Gullies	2	15-Jan-09	16-Jan-09	I Move Gullies																																															
A6430	Sub base	2	18-Jan-09	20-Jan-09	I Sub base																																															
A6440	Roadbase/base course/wearing course/temp ramps	3	21-Jan-09	23-Jan-09	I Roadbase/base course/wearing course/temp ramps																																															
A6450	Pavement Works	5	15-Jan-09	21-Jan-09	II Pavement Works																																															
A6460	White Lines	1	26-Jan-09	26-Jan-09	I White Lines																																															
A6470	Street Lighting / Traffic Signals / Road Signs	5	15-Jan-09	21-Jan-09	II Street Lighting / Traffic Signals / Road Signs																																															
A6475	Remove fencing and Traffic Management	1	27-Jan-09	27-Jan-09	I Remove fencing and Traffic Management																																															
	Phase 2	21	28-Jan-09	25-Feb-09	▼ 25-Feb-09, Phase 2																																															
A6480	Establish Traffic Management & Temp. Fencing	2	28-Jan-09	29-Jan-09	I Establish Traffic Management & Temp. Fencing																																															
A6490	Excavate for new channel and kerb line / remove existing kerbs	2	30-Jan-09	02-Feb-09	I Excavate for new channel and kerb line / remove existing kerbs																																															
A6500	Construct Kerb lines	2	03-Feb-09	04-Feb-09	I Construct Kerb lines																																															
A6510	Reset Gullies	1	05-Feb-09	05-Feb-09	I Reset Gullies																																															
A6520	Surface new channel	1	05-Feb-09	06-Feb-09	I Surface new channel																																															
A6540	Pavement Works	15	05-Feb-09	25-Feb-09	II Pavement Works																																															
A6550	White Lines	1	09-Feb-09	09-Feb-09	I White Lines																																															
A6560	Street Lighting / Traffic Signals / Road Signs	3	05-Feb-09	09-Feb-09	II Street Lighting / Traffic Signals / Road Signs																																															
A6565	Remove fencing and Traffic Management	1	12-Feb-09	12-Feb-09	I Remove fencing and Traffic Management																																															
	Phase 4a	23	30-Mar-09	29-Apr-09	▼ 29-Apr-09, Phase 4a																																															
A6730	Establish Traffic Management & Temp. Fencing	2	30-Mar-09	31-Mar-09	I Establish Traffic Management & Temp. Fencing																																															
A6740	Remove island surfacing and exc. to formation	5	01-Apr-09	07-Apr-09	II Remove island surfacing and exc. to formation																																															
A6750	Construct Kerb lines	4	06-Apr-09	14-Apr-09	II Construct Kerb lines																																															
A6760	Move Gullies	2	15-Apr-09	16-Apr-09	I Move Gullies																																															
A6770	Sub base	3	17-Apr-09	21-Apr-09	I Sub base																																															
A6775	Plane off wearing course	1	22-Apr-09	22-Apr-09	I Plane off wearing course																																															
A6780	Roadbase/base course/wearing course/temp ramps	3	23-Apr-09	27-Apr-09	I Roadbase/base course/wearing course/temp ramps																																															
A6790	Pavement Works	8	15-Apr-09	22-Apr-09	II Pavement Works																																															
A6800	White Lines	1	28-Apr-09	28-Apr-09	I White Lines																																															
A6810	Street Lighting / Traffic Signals / Road Signs	7	15-Apr-09	23-Apr-09	II Street Lighting / Traffic Signals / Road Signs																																															
A6815	Remove fencing and Traffic Management	1	29-Apr-09	29-Apr-09	I Remove fencing and Traffic Management																																															
	Phase 4b	20	30-Apr-09	28-May-09	▼ 28-May-09, Phase 4b																																															
A6820	Establish Traffic Management & Temp. Fencing	2	30-Apr-09	01-May-09	I Establish Traffic Management & Temp. Fencing																																															
A6830	Remove island surfacing and exc. to formation	1	05-May-09	05-May-09	I Remove island surfacing and exc. to formation																																															
A6840	Construct Kerb lines	4	06-May-09	11-May-09	II Construct Kerb lines																																															
A6850	Move Gullies	2	12-May-09	13-May-09	I Move Gullies																																															
A6860	Sub base	3	14-May-09	18-May-09	I Sub base																																															
A6870	Plane off wearing course	1	19-May-09	19-May-09	I Plane off wearing course																																															
A6880	Roadbase/base course/wearing course/temp ramps	3	20-May-09	22-May-09	I Roadbase/base course/wearing course/temp ramps																																															
A6890	Pavement Works	12	12-May-09	28-May-09	II Pavement Works																																															
A6900	White Lines	1	26-May-09	26-May-09	I White Lines																																															
A6910	Street Lighting / Traffic Signals / Road Signs	7	12-May-09	20-May-09	II Street Lighting / Traffic Signals / Road Signs																																															
A6915	Remove fencing and Traffic Management	1	27-May-09	27-May-09	I Remove fencing and Traffic Management																																															
	Phase 6b	49	17-Jul-09	24-Sep-09	▼ 24-Sep-09, Phase 6b																																															
A7240	Establish Traffic Management & Temp. Fencing	2	17-Jul-09	20-Jul-09	I Establish Traffic Management & Temp. Fencing																																															
A7250	Excavate for new channel and kerb line / remove existing kerbs	2	21-Jul-09	22-Jul-09	I Excavate for new channel and kerb line / remove existing kerbs																																															
A7260	Construct Kerb lines	5	23-Jul-09	29-Jul-09	II Construct Kerb lines																																															
A7270	Reset Gullies	5	24-Jul-09	30-Jul-09	II Reset Gullies																																															
A7280	Surface new channel	2	31-Jul-09	07-Sep-09	I Surface new channel																																															
A7290	Pavement Works	15	30-Jul-09	23-Sep-09	II Pavement Works																																															
A7310	Street Lighting / Traffic Signals / Road Signs	7	30-Jul-09	11-Sep-09	II Street Lighting / Traffic Signals / Road Signs																																															

Activity ID	Activity Name	Original Duration	Start	Finish	2008												2009												2010												2011														
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
12380	Issue Construction Drawings	0		06-May-08*	◆ Issue Construction Drawings; 06-May-08*																																																		
1379	CBM - Ducts	9	15-Jan-10	27-Jan-10	■ CBM - Ducts																																																		
1389	Track laying	6	28-Jan-10	04-Feb-10	■ Track laying																																																		
1399	Track Finishes	14	05-Feb-10	24-Feb-10	■ Track Finishes																																																		
1419	Fencing	6	25-Feb-10	04-Mar-10	■ Fencing																																																		
313	OLE Foundations - Drainage	10	18-Dec-09	14-Jan-10	■ OLE Foundations - Drainage																																																		
690	Bulk Excavation - Subbase	10	04-Dec-09	17-Dec-09	■ Bulk Excavation - Subbase																																																		
Roseburn (exc.) to Ravelston Dykes (inc.)		843	28-Sep-07	25-Jan-11	→ 25-Jan-11, Roseburn (exc.) to Ravelston Dykes (inc.)																																																		
Ravelston Dykes Tram Stop		751	11-Feb-08	25-Jan-11	→ 25-Jan-11, Ravelston Dykes Tram Stop																																																		
12390	Issue Construction Drawings	0		11-Feb-08*	◆ Issue Construction Drawings; 11-Feb-08*																																																		
225	Civil Engineering and Building Works	65	17-Aug-10	15-Nov-10	■ Civil Engineering and Building Works																																																		
648	Order REC Supply	0	31-Aug-10		◆ Order REC Supply																																																		
A3100	Deliver and Install Shelter	10	12-Oct-10	25-Oct-10	■ Deliver and Install Shelter																																																		
A4758	Access for visual inspection for E&M Tram installation (03A Ravelston Dykes)	0	24-Sep-10		◆ Access for visual inspection for E&M Tram installation																																																		
A4759	Access for E&M Tram installation (03A Ravelston Dykes)	0	26-Oct-10		◆ Access for E&M Tram installation																																																		
A4760	Install LV Power Supply and LV Power Equipment	25	26-Oct-10	30-Nov-10	■ Install LV Power Supply and LV Power Equipment																																																		
A4770	Install Telecom Equipment	20	01-Dec-10	11-Jan-11	■ Install Telecom Equipment																																																		
A4780	Install Station Control Equipment + AFC Equipment	25	01-Dec-10	18-Jan-11	■ Install Station Control Equipment																																																		
A4790	Package Test Transloop	5	19-Jan-11	25-Jan-11	■ Package Test Transloop																																																		
St Georges Bridges (S3 & S4)		541	11-Feb-08	29-Mar-10	→ 29-Mar-10, St Georges Bridges (S3 & S4)																																																		
12400	Issue Construction Drawings	0		11-Feb-08*	◆ Issue Construction Drawings; 11-Feb-08*																																																		
82	St. Georges Bridges (S3 & S4)	76	27-Nov-09	29-Mar-10	■ St. Georges Bridges (S3 & S4)																																																		
Trackwork (600m)		766	28-Sep-07	05-Oct-10	→ 05-Oct-10, Trackwork (600m)																																																		
12410	Issue Construction Drawings	0		28-Sep-07*	◆ Issue Construction Drawings; 28-Sep-07*																																																		
1409	CBM - Ducts	20	01-Jul-10	28-Jul-10	■ CBM - Ducts																																																		
1429	Track laying	12	29-Jul-10	16-Aug-10	■ Track laying																																																		
1439	Track Finishes	24	17-Aug-10	17-Sep-10	■ Track Finishes																																																		
1449	Fencing	12	20-Sep-10	05-Oct-10	■ Fencing																																																		
323	OLE Foundations - Drainage	24	27-May-10	30-Jun-10	■ OLE Foundations - Drainage																																																		
700	Bulk Excavation - Subbase inc. Retaining Walls	40	30-Mar-10	26-May-10	■ Bulk Excavation - Subbase inc. Retaining Walls																																																		
Colbridge Viaduct (S2)		457	11-Feb-08	26-Nov-09	→ 26-Nov-09, Colbridge Viaduct (S2)																																																		
12420	Issue Construction Drawings	0		11-Feb-08*	◆ Issue Construction Drawings; 11-Feb-08*																																																		
61	Colbridge Viaduct (S2)	103	06-Jul-09	26-Nov-09	■ Colbridge Viaduct (S2)																																																		
Ravelston Dykes (exc.) to Craigleith (inc.)		917	28-Sep-07	09-May-11	→ 09-May-11, Ravelston Dykes (exc.) to Craigleith (inc.)																																																		
Ravelston Dykes Bridge (S5)		401	11-Feb-08	08-Sep-09	→ 08-Sep-09, Ravelston Dykes Bridge (S5)																																																		
12430	Issue Construction Drawings	0		11-Feb-08*	◆ Issue Construction Drawings; 11-Feb-08*																																																		
76	Ravelston Dykes Bridge (S5)	46	06-Jul-09	08-Sep-09	■ Ravelston Dykes Bridge (S5)																																																		
Trackwork (990m)		724	06-May-08	11-Mar-11	→ 11-Mar-11, Trackwork (990m)																																																		
12440	Issue Construction Drawings	0		06-May-08*	◆ Issue Construction Drawings; 06-May-08*																																																		
1459	CBM - Ducts	33	27-Sep-10	10-Nov-10	■ CBM - Ducts																																																		
1469	Track laying	20	11-Nov-10	09-Dec-10	■ Track laying																																																		
1479	Track Finishes	35	10-Dec-10	11-Feb-11	■ Track Finishes																																																		
1489	Fencing	20	14-Feb-11	11-Mar-11	■ Fencing																																																		
333	OLE Foundations - Drainage	27	19-Aug-10	24-Sep-10	■ OLE Foundations - Drainage																																																		
710	Bulk Excavation - Subbase inc. Retaining Walls	66	17-May-10	18-Aug-10	■ Bulk Excavation - Subbase inc. Retaining Walls																																																		
Craigleith Tram Stop		825	11-Feb-08	09-May-11	→ 09-May-11, Craigleith Tram Stop																																																		
12450	Issue Construction Drawings	0		11-Feb-08*	◆ Issue Construction Drawings; 11-Feb-08*																																																		
235	Civil Engineering and Building Works	65	25-Nov-10	10-Mar-11	■ Civil Engineering and Building Works																																																		
658	Order REC Supply	0	10-Dec-10		◆ Order REC Supply																																																		
A3140	Deliver and Install Shelter	10	04-Feb-11	17-Feb-11	■ Deliver and Install Shelter																																																		
A4798	Access for visual inspection for E&M Tram installation (03A Craigleith)	0	19-Jan-11		◆ Access for visual inspection for E&M Tram installation																																																		
A4799	Access for E&M Tram installation (03A Craigleith)	0	18-Feb-11		◆ Access for E&M Tram installation																																																		
A4800	Install LV Power Supply and LV Power Equipment	25	18-Feb-11	24-Mar-11	■ Install LV Power Supply and LV Power Equipment																																																		
A4810	Install Telecom Equipment	20	25-Mar-11	22-Apr-11	■ Install Telecom Equipment																																																		
A4820	Install Station Control Equipment + AFC Equipment	25	25-Mar-11	29-Apr-11	■ Install Station Control Equipment																																																		

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Activity ID	Activity Name	Original Duration	Start	Finish	2008												2009												2010												2011											
					O N D J F M A M J J A S O N D												O N D J F M A M J J A S O N D												O N D J F M A M J J A S O N D												O N D J F M A M J J A S O N D											
10751	Remove Scoolrail Oil Tanks	0		29-Aug-08*	◆ Remove Scoolrail Oil Tanks; 29-Aug-08*																																															
109	Bankseat at Grid line A	25	25-Nov-08	13-Jan-09	■ Bankseat at Grid line A																																															
172	Pier B	45	25-Nov-08	07-Apr-09	■ Pier B																																															
207	Pier C	45	10-Dec-08	22-Apr-09	■ Pier C																																															
398	Pier D	45	07-Jan-09	07-May-09	■ Pier D																																															
408	Pier E	45	21-Jan-09	21-May-09	■ Pier E																																															
420	Bankseat at Gridline F	25	16-Apr-09	21-May-09	■ Bankseat at Gridline F																																															
430	Structural steelwok	30	30-Apr-09	12-Jun-09	■ Structural steelwok																																															
729	Deck Concrete	65	15-Jun-09	14-Sep-09	■ Deck Concrete																																															
739	Finishes	75	15-Sep-09	12-Jan-10	■ Finishes																																															
Murrayfield Retaining Walls (S21B)					▼ 13-Jan-09; Murrayfield; Retaining Walls (S21B)																																															
10700	Issue Construction Drawings	0		31-Mar-08*	◆ Issue Construction Drawings; 31-Mar-08*																																															
10760	Murrayfield Stadium Accomodation Works	60	02-Jun-08*	25-Aug-08	■ Murrayfield Stadium Accomodation Works																																															
110	Site Clearance	20	02-Jun-08*	27-Jun-08	■ Site Clearance																																															
197	Demolition	10	16-Jun-08	27-Jun-08	■ Demolition																																															
378	Foundations	15	30-Jun-08	18-Jul-08	■ Foundations																																															
389	Reinforced Earth Wall	95	14-Jul-08	24-Nov-08	■ Reinforced Earth Wall																																															
400	Coping	15	25-Nov-08	16-Dec-08	■ Coping																																															
410	Handrail	10	17-Dec-08	13-Jan-09	■ Handrail																																															
Murrayfield Stadium Underpass (S21C)					▼ 19-Nov-08; Murrayfield Stadium Underpass (S21C)																																															
10720	Issue Construction Drawings	0		19-May-08*	◆ Issue Construction Drawings; 19-May-08*																																															
112	Site Clearance	10	18-Jun-08	01-Jul-08	■ Site Clearance																																															
187	Temporary Works - Demolition	20	02-Jul-08	29-Jul-08	■ Temporary Works - Demolition																																															
358	Earthworks	10	30-Jul-08	13-Aug-08	■ Earthworks																																															
368	Base	10	14-Aug-08	27-Aug-08	■ Base																																															
380	Walls	20	28-Aug-08	24-Sep-08	■ Walls																																															
390	Roof	20	25-Sep-08	22-Oct-08	■ Roof																																															
709	Parapet Walls	15	18-Oct-08	05-Nov-08	■ Parapet Walls																																															
719	Finishes	10	06-Nov-08	19-Nov-08	■ Finishes																																															
Murrayfield Retaining Walls (S21D)					▼ 23-Jun-08; Murrayfield Retaining Walls (S21D)																																															
10730	Issue Construction Drawings	0		25-Jul-08*	◆ Issue Construction Drawings; 25-Jul-08*																																															
111	Site Clearance	10	06-Nov-08	19-Nov-08	■ Site Clearance																																															
438	Foundations	15	20-Nov-08	11-Dec-08	■ Foundations																																															
448	Reinforced Earth Wall	65	05-Dec-08	18-May-09	■ Reinforced Earth Wall																																															
450	Coping	15	19-May-09	09-Jun-09	■ Coping																																															
460	Handrail	10	10-Jun-09	23-Jun-09	■ Handrail																																															
Water of Leith Bridge (S21E)					▼ 15-Jan-10; Water of Leith Bridge (S21E)																																															
10770	Issue Construction Drawings	0		19-May-08*	◆ Issue Construction Drawings; 19-May-08*																																															
113	Leaf Pier	84	19-May-09	15-Sep-09	■ Leaf Pier																																															
639	End Supports	18	16-Sep-09	09-Oct-09	■ End Supports																																															
649	Superstructure	59	12-Oct-09	15-Jan-10	■ Superstructure																																															
Baird Drive Retaining Walls (W8)					▼ 07-Jan-09; Baird Drive Retaining Walls (W8)																																															
10690	Issue Construction Drawings	0		21-Jul-08*	◆ Issue Construction Drawings; 21-Jul-08*																																															
114	Site Clearance	10	20-Aug-08	02-Sep-08	■ Site Clearance																																															
458	Foundations	15	03-Sep-08	23-Sep-08	■ Foundations																																															
468	Reinforced Earth Wall	45	17-Sep-08	19-Nov-08	■ Reinforced Earth Wall																																															
470	Coping	15	19-Nov-08	10-Dec-08	■ Coping																																															
480	Handrail	10	11-Dec-08	07-Jan-09	■ Handrail																																															
Balgreen Road Bridge (S22) and Retaining Walls (W9)					▼ 25-Jan-10; Balgreen Road Bridge (S22) and Retaining Walls (W9)																																															
10710	Issue Construction Drawings	0		18-Aug-08*	◆ Issue Construction Drawings; 18-Aug-08*																																															
115	New Structure (Preliminary Details Only) (dummy)	215	10-Mar-09	25-Jan-10	■ New Structure (Preliminary Details Only) (dummy)																																															
Trackwork (1008m)					▼ 08-Jul-10; Trackwork (1008m)																																															
10080	Issue Construction Drawings	0		03-Apr-08*	◆ Issue Construction Drawings; 03-Apr-08*																																															
1009	Bulk Excavation - Sub Base	18	26-Jan-10	18-Feb-10	■ Bulk Excavation - Sub Base																																															
1019	OLE Foundations - Drainage	40	19-Feb-10	18-Apr-10	■ OLE Foundations - Drainage																																															

APPENDIX B4

Tom Hickman

From: STEPHEN SHARP [ssharp@programmingsolutions.co.uk]
Sent: 13 December 2007 16:59
To: Tom Hickman; Scott.McFadzen@bilfinger.co.uk; UK MB INFRACO
Cc: Susan Clark; Geoff Gilbert; Bob Dawson; Steven Bell
Subject: RE: INFRACO Programme with finish dates

Tom

Our response using your enumeration is as follows:

1. I can confirm that the programme is based on V22 of the SDS design programme (however please also see the notes in the "Programme Assumptions" document that was forwarded with the submission).
2. If the Tower Place / Victoria Dock Access Bridge restraints are removed the completion date for 1A (and 1a) will come sooner. To be able to achieve a March 2011 completion section 1A will need reprogramming to accelerate these works (because of the late release of construction issue drawings) and some simplification of the design (which we believe will occur) over that which the current drawings show. The alternative programme (1A assumptions) forwarded to you at the beginning of last week attempted to illustrate what could be achieved.
3. Confirmed.
4. The programme assumes the embargo to be lifted for Catenary works in Picardy Place in August 2010 to achieve an end of February 2011 completion for sub section 1C. If the embargo is not lifted this date then becomes the end of March 2011.
5. I am sorry, but I do not understand this point.
6. This programme is our latest revision and supersedes previous issues. As you are aware this programme is driven by SDS issue for construction dates, MUDFA and some remaining junction constraints. If the combination of these constraints were not as severe, as was the case in our previous submissions, earlier completion dates would be achieved.

I hope the above is clear and adequately answers the points you have raised.

Best Regards, Steve

From: Tom Hickman [mailto:Tom.Hickman@tie.ltd.uk]
Sent: Thu 13/12/2007 14:51
To: STEPHEN SHARP; Scott.McFadzen@bilfinger.co.uk; UK MB INFRACO
Cc: Susan Clark; Geoff Gilbert; Bob Dawson; Steven Bell
Subject: INFRACO Programme with finish dates

Steve,

Thanks for the quick response.

Can I ask you or Scott to urgently confirm that the programme submitted 12th December that shows an Open for Revenue Service date of 8th August 2011 for line 1a is based on the following:

- 1) The programme is based on V22 of the SDS design programme
 - 2) Confirmation that if we remove the constraints of the tower and Victoria Bridge utility diversions, the open for revenue service date moves back to March 2011
 - 3) The programme includes the relaxation of constraints discussed with CEC, TEL and Lothian and Borders Police during the past few weeks at programme meetings, covering construction methodologies and sequencing and including multiple junction working as reviewed on the hand-drawn gantt chart (see attached) as agreed at the meeting of 4th December 2007.
 - 4) BBS to confirm the positive impact to programme of relaxation of the embargo at Picardy Place
 - 5) All assumptions to be clear including the assumptions on TRO's
 - 6) BBS to confirm that this programme then supersedes what was stated in the letter dated 12th December from BBS items
- * 3a "SDS Design is delivered in line with our programme submitted as part of our August 7th Submission"
- * 3b "Relaxation on multiple junction working in Edinburgh City Centre is achieved"

Regards,

Tom Hickman

Programme Manager

tie Limited

Citypoint

65 Haymarket Terrace

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Tel:

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-----Original Message-----

From: STEPHEN SHARP [mailto:ssharp@programmingsolutions.co.uk]
Sent: 13 December 2007 12:13
To: Tom Hickman
Cc: Scott.Mcfadzen@bilfinger.de
Subject: INFRACO Programme with finish dates

Tom

Please find new PDF of this weeks submission as requested. Sorry I did not notice that the finish dates run off the edge of the PDF. I have added a finish date column to make it easy.

Best Regards, Steve Sharp.

Construction Programming Solutions Ltd.

Tel: [REDACTED]

Mobile: [REDACTED]

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APPENDIX B5

Geoff Gilbert

From: AMANDA FLYNN [amanda.flynn2@[REDACTED]]
Sent: 12 December 2007 21:19
To: Geoff Gilbert
Cc: Flynn, Michael (Siemens TS)
Subject: the joys of computers....message from michael flynn

Geoff,
Below are the various comments/words we discussed on the phone.

Third Party agreements: I will provide some simple words for discussion - Proposed words

'BBS will deliver the scope in accordance with the agreed employer requirements and the obligations under the third party agreements set out in schedule 13. BBS will take the necessary steps in the construction of the scope so that CEC will not be put in breach of their obligations under the third party agreements to the extent such obligations are identified in schedule 13. In the event that the employer requirements and the third party agreements are in conflict, the employer requirements and schedule 13 will take precedence in regards BBS obligations...'

or

Infraco will carry out and complete the Infraco Works in accordance with the Agreement and will at all times use reasonable endeavours to avoid causing tie and/or CEC to become in breach of their obligations under any Third Party Agreements in so far as such 3rd Party obligation was disclosed to Infraco prior to the Effective Date.

In the event that the carrying out and completing the Infraco Works is rendered more expensive and/or time consuming in order that Infraco do not cause tie and/or CEC to be in breach of their obligations under any Third Party Agreements then the additional expense and/or time shall be treated as a tie Change under Clause 80, provided that Infraco shall take all reasonable steps to mitigate such additional expense and/or time.

Collateral warranties: - in the circumstances where our Subcontractor offers a CW which does not match tie's required wording tie would relax their requirement in this respect to allow the use of the CW provided by the Subcontractor is already covered in Clause 28. The issue remaining is the requirement for the Infraco to provide a collateral warranty in respect of the subcontract works element, where the subcontract is unable/unwilling to provide one. This requirement seems superfluous in the context that Infraco have already provided CW's for the whole of the works. It also needs to be made clear that any indemnities within the CW's form and are part of the Infraco Liability CAP.

Operator change (clause 17.6): Suzanne has sent drafting to DLA on 10th December. They need to respond with a mark-up reflecting tie's position that they do not have to notify Infraco of every change. This is acceptable subject to the protection that any change which subsequently affects Infraco will be compensated for by tie

20/12/2007

