



4 Week Period Reporting Pack 08/09

Project Title:

Edinburgh Tram Project

Reporting Period:

Period 02 2008/09

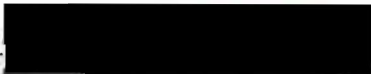
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Progress Meeting Date:

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Date: *30.5.08*

For and on behalf of **tie Limited**

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1 Executive Summary

1.1 Key issues of the moment

Health, safety, quality and environment

- There were no RIDDOR incidents in the period. The AFR for the project is now 0.14;
- There were 19 other incidents reported, of which 18 were of a minor nature and one serious. The serious incident involved the trailer of a Moxi dumper tipping over during shifting of spoil on the archaeological dig site at Gogarburn. No one was hurt in the incident. Operations have been suspended on site pending the outcome of the investigation;
- The investigation report from the RIDDOR accident in Period 1 has been reviewed and commented on by **tie**. These comments are with the contractor for inclusion in a final version of the report. There are ten recommendations in the report;
- The Panel of Inquiry established to investigate the traffic / pedestrian management arrangements in Constitution Street after a near miss in April has begun and the draft report is due to be published during Period 3;
- There were five near misses reported and one environmental report for the period. One audit was begun in the period. Seven NCRs have been raised on the MUDFA contractor in the Period;
- A type 3 survey has identified an area containing asbestos within the Caledonian Ale House. It is very likely additional contamination will be uncovered during the strip down of the building and this will be reflected in the contractors' method of working; and
- Safety tours have been accelerated ahead of programme to reflect the increased level of activity.

Progress – Infraco negotiations

- The Infraco suite of contracts were all signed on 14th May 2008. This included the novation of Tramco and SDS into the Infraco contract and agreement by all parties for CAF joining the Infraco consortium;
- Last period **tie** reported on further discussions with the Infraco bidder in relation to price. Following this, the new cost estimate is £512M (£4m increase on last period), reflecting Contract Award. The increase of £4m is necessary to alleviate the risk of programme delays and will be paid to Infraco in a series of incentivisation bonuses over the duration of the contract on achievement of specified milestones; and
- The agreed payment of initial milestones under the Tramco contract was paid on 15th May. It is planned to pay Infraco for the same in the week commencing 2nd June.

Progress – Design

- 44 Prior Approvals have been submitted to CEC and 25 approved (compared with v31 plan of 47 and 26);
- 57 Technical Approvals have been submitted to CEC and 31 granted (compared with v31 plan of 59 and 31); and
- The task force set up in the previous period to ensure the smooth approval by CEC is working effectively to achieve approvals on time and to address any significant issues arising.

Progress – MUDFA

- Overall, cumulative progress is approximately six weeks behind programme and, prior to mitigation shows a two week impact on the Infraco programme. **tie** are currently agreeing Revision 7.0 of the MUDFA programme which will mitigate any likely impacts with agreement expected in Period 3;

- Progress of the works in the period has shown improvements in Leith Walk and Shandwick Place and efforts have been co-ordinated to produce close-out programmes for these key areas as well as Constitution Street and St Andrews Square;
- Core reasons for the programme slippage include resource levels lower than required to meet programme outputs and higher congestion of utilities than expected in Leith Walk and St Andrews Square. Action plans to improve these productivity levels include additional HR support within Carillion to ensure timely and adequate supply of resource and in particular supervisory level resourcing. Resource smoothing is an integral part of Revision 7.0 of the MUDFA programme to avoid peak resource requirements;
- Final approvals for Haymarket traffic management plans were progressed and will be completed in Period 3 allowing communication of them to stakeholders and the public; and
- During the Period Carillion's new Project Director, Dave Smith, commenced.

Progress – Infraco advanced works

- Approval has been given to netting along boundary of LOD and Gogar drain to discourage new badger sett construction. This will be completed in Period 3;
- Invasive species treatment is ongoing;
- The RBS hoarding was erected and archaeological works have commenced; and
- A significant amount of archaeology has been recorded at the advance works sites and full reports and carbon dating are underway. There is a significant cost associated with the carbon dating and **tie**'s obligations are being investigated. The finds include hut circles, corn drying ovens and pottery. The decision to undertake the works in advance is aimed at minimising the risk of any delay to the main Infraco programme.

Progress – Infraco mobilisation activities

- The fencing in relation to the demolition of the Caledonian Alehouse has been erected and the Building Warrant obtained. Traffic management will be installed from the 2nd June to allow fencing and scaffolding erection in advance of demolition;
- Infraco have been submitting documentation for approval by **tie**, including their project management quality plans;
- Infraco have also commenced confirmation of sub-contractor packages and contracts post Financial Close; and
- Work commenced on 12-week look-ahead plans, the first of which is due to be with **tie** on the 26th May;

Progress – Infraco main works

- An initial Infraco kick-off meeting was held on 21st May. This involved **tie**, BBS and SDS and was used to outline a number of important ground rules regarding the way the teams will work together in the future;
- A series of dates for progress reports and meetings has been proposed by **tie** and provisionally agreed by Infraco;
- A number of instructions have already been issued to Infraco in respect of value engineering;
- A series of workshops to agree final alignment between current SDS design and Infraco construction proposals have been set up and are due to start on the 29th May;
- Infraco have commenced engagement on the design process and this is evident by their presence at a number of design meetings including the Prior and Technical Approvals taskforce; and
- **tie**'s newly appointed Infraco Director, Frank McFadden, spent time with the team in Period 2 and is due to start permanently at the end of June.

Progress – Tramco

- Design of the mock-up is progressing well.

Progress – Other

- Discussions are ongoing with NR and ScotRail in relation to compensation for the Haymarket carpark. **tie** had hoped to conclude this during the period but NR and ScotRail are only just preparing their estimates for **tie** consideration. This is expected to be concluded by Period 4;
- NR / Jarvis contract to design and implement the lift and shift works to relocate the existing lineside point heating equipment which is in the way of tram construction near Balgreen Road Bridge is now complete. However, there is also an outstanding need for Thales to move a fibre communications cable recently discovered. This is expected to have been completed by the end of May 2008;
- The actual resource and detailed technical solution to implement the immunisation works is under discussion with NR;
- Planning for NR possessions is continuing with work site details submitted to NR for a number of sites for site investigation, erection of safety fencing and vegetation clearance. The team is working closely with the Pollution Prevention Team at the Haymarket depot on phasing to ensure there is no adverse impact upon the operation of the depot. Work Package Plans have been submitted by Infraco to **tie** for comment for disruptive possessions tied into bridge construction;
- Progress has been made on the Forth Ports agreement and this is also expected to be concluded by Period 4 subject to final CEC input;
- NR and SRU have all agreed to a value engineering opportunity for the Roseburn viaduct and Infraco have been instructed to make this change in line with their contract. It is expected that the SRU agreement will be concluded by Period 3;
- Tender documents for the relocation of the Murrayfield training pitches have been issued and tenders are due to be returned on the 2nd June allowing a start before the end of June as per the agreement with SRU. Start on site is planned immediately following Planning Approval which was originally due by end May. However, this will not be approved by CEC until 18th June, at earliest, and is then being referred to Scottish Ministers which will take up to a further 28 days for final approval (mid July). This constrains the time available to carry out the physical works which need to be complete before the autumn series in November. Discussions are ongoing with SRU, but delay into July in gaining the planning approval may result in SRU prohibiting the start of works this calendar year. If these works are not completed then two sets of contractors will have to agree methods of working in the following years to ensure site safety. Agreement on the pitch specifications has been reached with the SRU;
- The draft TRO drawings have been through the first review with the TRO design group and will be issued to **tie** on 2nd June. The TRO completion date is now scheduled for December 2009. This is in line with the overall construction programme; and
- The wide area impact modelling assessment covered 52 junctions and this is now complete. Work is underway at six complex junctions to finalise design arrangements and progress is consistent with the TRO programme.

Cost

- The AFC for Phase 1a of the project has increased by £4m and now stands at £512M, including a risk allowance of £30.3M. This change reflects the signing of the Infraco suite of contracts (see progress on Infraco negotiations above);
- Funding available remains at £545M;
- There are no significant changes pending;
- Cumulative expenditure to date (end of P2 0809) on Phase 1a is £147.8M;

- Last period the “Budget” for FY0809 was baselined at £150.9M, including a risk allowance of £10.0M. The FY0809 outturn remains at £150.9M and now includes a risk allowance of £9.3m;
- The TS share of Phase 1a costs in FY0809 at 91.7% (500/545) would be between £130m of Base Costs or £138m of the total costs including Risk Allowance. This is being kept under review in the context of a current cap on FY0809 funding from TS of £120m. The fall back position is that CEC would temporarily “fund” the shortfall of between £10m and £18m until the start of the FY0910, although our view is that at these levels the time lag between certification of work done and payment will ensure that CEC is unlikely to be required to find significant additional cash to meet a shortfall due to the current TS funding cap; and
- A project has been initiated to deliver an updated business plan and financing plan for Phase 1b for presentation to CEC in the autumn of 2008.

Risk

- The QRA has been assessed as adequately reflecting the negotiated Infraco contract suite and other risks during the construction phase of the project; and
- One risk on the MUDFA risk register is expected to be realised and will require a transfer from the Risk Allowance to the base cost estimate when the quantification is finalised: The MUDFA contract team are required to divert a 1,500mm sewer in the Gogar area and this is currently with Carillion for pricing. Any drawdown on the Risk Allowance will be confirmed in the Period 3 report.

Communications

- An additional amendment has been made to the new rules of the Small Business Support Scheme and this now includes streets parallel to work sites within a 100 metre zone, ensuring a further 340 businesses are eligible to apply;
- Press coverage of included: contract signing, project cost increase, Open for Business and Line 1B;
- Preparatory work undertaken for stakeholder engagement for next phase of MUDFA at Haymarket; and
- Next Period media briefings will focus on the Caledonian Ale House, Final Design, Haymarket and other upcoming works. In addition to this, final design presentations will commence which include a mail shot of 60,000 invitations and face to face presentations.

2 Progress

2.1 *General / overall*

Land and Property

- NR – The suite of property agreements were agreed and framework agreement executed by CEC during the period; and
- Forth Ports – BBS have been instructed to prepare a change estimate for Ocean Terminal redesign. The results from this costing exercise are to be presented to FP for agreement.

Network Rail

- The scope and programme for the NR immunisation is being developed with Infraco and these aspects should be complete during May. The initial electrical modelling has been completed and has established the theoretical baseline for the zone of impact between the tram and mainline networks and also a preferred solution for the immunisation works;
- Further NR immunisation verification will be provided by means of a detailed simulation study by Infraco;
- Infraco will be developing the full assurance case for NR acceptance. NR has now assigned their approvals specialist to assist us with their assurance case, which is expected to be completed by July 2008 to permit detailed design of the infrastructure modifications to commence. The initial modelling recommended some verification testing of the key areas of susceptibility identified and these tests will be developed by the Infraco;
- NR / Jarvis contract to design and implement the lift and shift works to relocate the existing lineside point heating equipment which is in the way of tram construction near Balgreen Road Bridge is now complete. However, there is also an outstanding need for Thales to move a fibre communications cable recently discovered. This is expected to have been completed by the end of May 2008; and
- The relocation of the Haymarket First Scotrail depot diesel fuel tanks, part of NR's pollution prevention scheme, remains as per previous programme with completion expected late November 2008. This has been escalated with the NR Director as it does not achieve the original commitment to **tie** by NR.

General

- Relocation of power supply to Haymarket station via Caledonian Ale House is now completed; and
- Heras fencing and Traffic management measures are being put in place w/c 19th May in preparation for demolition of Caledonian Ale House.

OCIP

- A successful presentation was carried out in the period to interested parties from the OCIP consortium.

2.2 *Critical path*

- Now that the Contract Award has been made an analysis of the critical path is underway and will be reported on in future periods;
- Revision 07 of MUDFA construction programme is currently being finalised. This programme revision will take account of the more detailed information available from IFC designs, the traffic management / enabling works requirements and the interface with Infraco;
- MUDFA work on Leith Walk is progressing to meet Infraco programme start dates. Works at The Mound and St. Andrew Square have been re-programmed to commence after the Edinburgh Festival City Centre embargo on 8th September 2008. Works from West Maitland Street to Haymarket has been re-programmed to commence from 14th July 2008. There is a major BT chamber to be constructed in the section between South Gyle

Access and Edinburgh Park Station which will have to be programmed in detail with Infraco construction;

- Infraco areas showing critical are generally those impacted by design availability; and
- There are other areas where some of the track and OHL works are showing as critical but this is due to a constraint on resource availability.

2.3 Procurement consultant

- The Infraco contract suite was signed on 14th May 2008.

2.4 Design

- During the period various alignment meetings continued to ensure that the contract construction programme was supported by the SDS design programme;
- In Period 2 SDS issued v30 and v31 of the design programme which were received on 18th April and 25th April, respectively. Version 31 became novated contract programme;
- An incentivisation has been built into the final SDS novation agreement to encourage timely submission of IFC drawings to ensure the full programme can be met;
- The first SDS Design-Assured package, for route section 1C3 – St. Andrews Square and Princes Street, is due from SDS on 2nd June. The tie-led design review will start on 4th June, with a day of presentations from SDS on how the design meets safety and functional requirements and is “fit for purpose”; and
- tie’s Safety Verification Scheme is currently being updated to reflect recent changes in the organisation structure and the Safety Verification methodology. A key underpinning process is the identification of hazards, the associated risk assessment and the ensuing determination of necessary and effective mitigations.

2.5 Financial / funding / procurement strategy

This phase is now complete.

2.6 Parliamentary process / approvals

This phase is now complete.

2.7 Procurement construction works

This phase is now complete.

2.8 Construction works

MUDFA

Section	Status	Planned progress	Actual progress
1A2 Constitution Street	Ongoing	27.5%	14.8%
1B from McDonald Road to Balfour Street	Ongoing	98.6%	71.1%
1B from Balfour Street to Foot of the Walk	Commenced	81.8%	42.7%
1C from The Mound to St Andrew Street	Ongoing	100.0%	30.1%
1C (RAT-1C-1) St Andrew Square BT Diversions	Ongoing	100.0%	64.4%
1D from South Charlotte Street to Castle Street West	Ongoing	100.0%	86.5%

1D from Lothian Road to Shandwick Place West End	Ongoing	74.2%	38.0%
5C from Edinburgh Park Tram Stop to Gogarburn Tram Stop	Ongoing	20.0%	13.7%

Advanced work

- The SGN gas main has been isolated, capped and purged;
- The repositioning of the BAA fence will now complete on 30th May 2008. This will free up 50,000m³ of earthworks which is now programmed to be excavated during June 2008;
- The 800mm water main diversion was started on the 5th May 2008 and is forecast to be complete by 4th July 2008. The earthworks in way of existing water main (circa 30,000m³) will be excavated by the end of July 2008; and
- Site 1 of the archaeology works was completed on 16th May with post excavation report due by 30th May. Soil strip to site 2A is completed ready for hand cleaning. Programme on target to have all Archaeological Site Works complete by 30 June 2008.

St. Andrew Square streetscape works:

- Integration of CEC streetscape works and MUDFA programmes has been formalised in Revision 06 of the MUDFA programme.

2.9 Testing and commissioning

This phase has not yet commenced

2.10 Hand over and service operations

This phase has not yet commenced

2.11 Network output programme interface (with Transport Scotland)

This phase has not yet commenced

2.12 Interface with other projects

- BAA re-positioning of airport fence line – Integrated with depot earthworks;
- CEC St. Andrew Square Streetscape works – Integrated with MUDFA and enabling works;
- Invasive Species Eradication programme – Integrated with Infraco;
- Airdrie to Bathgate – Integrated with Infraco for disruptive possessions;
- NR PP works – Interfaces with Infraco works at Murrayfield and particularly S21A Roseburn St viaduct; and
- Murrayfield pitches relocation.

3 Headline cost report

3.1 Current financial year

- The budget for FY0809 has been re-profiled to align with the final agreed position with Infraco at Contract Award. Although finalising of the Infraco main contract and the protracted negotiations on 3rd Party land and compensation payments has generated a realignment in the quarterly phasing within the first half of the year, the overall annual outturn remains unchanged; and
- The profiling remains consistent with the contractual programme and milestone payment schedules agreed with the Infraco and Tramco contractors. Payment applications submitted by CEC to TS will be adjusted to reflect the cumulative cash requirements of this updated profile.

Budget and profile for FY0809

£m	P1-3	P4-6	P7-9	P10-13	Total FY0809
Infrastructure and vehicles	10.7	11.4	36.6	30.3	89.0
Utilities diversions	13.6	8.9	5.0	2.7	30.1
Design	1.8	1.5	0.4	0.2	3.9
Land and compensation	0.4	2.5	0.2	0.6	3.7
Resources and insurance	3.9	3.4	3.2	4.2	14.8
Base costs	30.4	27.7	45.4	38.0	141.5
Risk allowance	0.0	0.8	4.6	3.9	9.3
Total Phase 1a	30.4	28.5	50.0	41.9	150.8
Phase 1b	0.0	0.1	0.0	3.7	3.8

- The Phase1b costs are provided for information only and reflect the commencement of Phase 1b utility diversions in late 2008 if there is a resolution to the additional funding requirements for Phase 1b to the satisfaction of CEC and Transport Scotland at that time;
- The profile above will not now materially change except to the extent changes are initiated by **tie**, stakeholders or the contractors or there are changes to the Infraco works by way of significant variations;
- The proportion of the overall risk allowance allocated to the year, proportionate to the level of forecast base costs, is £9.3m, which is considered conservative;
- The TS share of Phase 1a costs in FY0809 at 91.7% (500/545) would be between £130m of Base Costs or £138m of the total costs including Risk Allowance. This is being kept under review in the context of a current cap on FY0809 funding from TS of £120m. The fall back position is that CEC would temporarily “fund” the shortfall of between £10m and £18m until the start of the FY0910, although our view is that at these levels the time lag between certification of work done and payment will ensure that CEC is unlikely to be required to find significant additional cash to meet a shortfall due to the current TS funding cap;
- The implication of the current TS funding cap will be kept under close review as FY0809 progresses in the context of periodic reforecast of outturn expenditure and dialogue with TS officials;
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts, in respect of advance material purchases, will be classified as prepayments. The aggregate amount of these payments for advance material purchases is £24.2m. These prepayments will be reclassified as expenditure against funding in the periods in future years when the related materials are delivered to site and incorporated in the works;

- Initial milestone payments under the Tramco contract were made on the 15th May and it is planned to pay Infraco on the week commencing 2nd June.

3.2 Next financial year

- The forecast COWD for FY0809 is shown in the table at 3.3 below. The sensitivities of this amount are the same as for FY0809 above; changes to the programme, significant variations to the works and the extent to which there will be call on the Risk Allowance profiled to that year of £12.6m. Note that all utility diversions and land compensation costs are anticipated to be spent by the end of FY0809.

3.3 Total project anticipated forecast cost

Phase 1a AFC and profiling

£m	Cum FY0708	FY0809	FY0910	Balance	AFC
Infrastructure and vehicles	30.7	89.0	114.7	70.5	304.9
Utilities diversions	18.4	30.1	0.0	0.0	48.5
Design	21.4	3.9	0.7	0.7	26.8
Land and compensation	16.8	3.7	0.0	0.0	20.6
Resources and insurance	42.7	14.8	10.4	13.1	80.9
Base costs	130.0	141.5	125.8	84.3	481.7
Risk Allowance	-	9.3	12.6	8.4	30.3
Total Phase 1a	130.0	150.8	138.4	92.7	512.0
Phase 1b	3.0	3.8	29.1	51.4	87.3

- Following the final negotiation of the Infraco contract (Bilfinger Berger and Siemens - BBS) and the novation of the SDS (Parsons Brinkerhoff - PB) contract to the Infraco, the estimated capital cost for phase 1a now stand at £512m, an increase of £4m since the last report. However, there is no change to the planned date for commencement of fare paying services in summer 2011;
- BBS and PB introduced additional cost pressures late in the due diligence process. Price increases were agreed which will be paid as a series of incentivisation bonuses over the duration of the contract, on achievement of specified milestones. This approach should minimise the risk of delays to the agreed programme of works to businesses and residents of Edinburgh. The late price pressure has been contained at £4.8m with the risk contingency reduced by £0.8m, the latter reflecting a conservative portion of concessions by BBS and PB in return for the price increases which improve the public sector risk profile:
 - Immediate contract close on preferred terms;
 - Elimination of risk of claims arising from works underway;
 - Capping of road reinstatement cost exposure;
 - Capping of roads related prolongation; and
 - Entry of CAF into the Consortium;
- In addition, part of the package negotiated entitles BBS to an additional payment of £3.2m, should the Council decide not to construct phase 1b of the tram network. This would result in a final estimated capital cost of £515.2m should phase 1b not proceed;
- As previously agreed, cumulative costs incurred to the end of FY0708 also include £3m incurred on Phase 1b design, meaning that total costs to the end of FY0708 were £133m; and
- The estimate for Phase 1b is based upon unit costs in the Infraco and Tramco contracts and is subject to finalisation in accordance with a value engineered and approved / consented design and programme. The finalised price will be valid if an option under the Infraco contract is exercised in sufficient time to allow construction of Phase 1b to

commence in July 2009. A project has been initiated to deliver an updated business plan and financing plan for Phase 1b for presentation to CEC in autumn 2008.

3.4 Change control

- The current change control position is summarised in the table below:

PHASE	1A	1B	TOTAL
BASE ESTIMAT - Final Business Case	498.10	87.30	585.40
APPROVED CHANGES - to Financial Close	13.91	0.00	13.91
CONTROL BUDGET - Baseline	612.02	87.30	699.32
APPROVED CHANGES - post Financial Close	0.00	0.00	0.00
REVISED CONTROL BUDGET	612.02	87.30	699.32
ANTICIPATED CHANGES	0.00	0.00	0.00
CURRENT AFC	612.02	87.30	699.32
PREVIOUS AFC	508.02	87.30	595.32

- Base estimate – The position at Final Business Case (Oct 2007);
- Approved changes to Financial Close – The financial impact of the project control budget having been reset to reflect final Infraco and Tramco Contract Award levels and a consequential reappraisal of the risk allowance. This will be approved at the Tram Project Board on 4th June;
- Control budget baseline (New Project Control Budget) – The baseline within which all future project change control will be reported against;
- Approved Changes post Financial Close – Tram Project Board approved changes from this point on. There are none to report at this point; and
- Anticipated Changes – Future potential changes that are work in progress prior to formal approval. There are none to report at this point.

4 Time schedule report

4.1 Report against key milestones

The agreed baseline programme reference for this project is that at Financial Close.

Key Milestone	Baseline Date	Act / Forecast Date
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
Approval of DFBC by Transport Minister – approval and funding for utility diversions	16 Mar 07A	16 Mar 07A
TRO process commences		
Tramco – complete initial evaluation / negotiation	09 Mar 07A	09 Mar 07A
MUDFA – completion of pre-construction period of MUDFA contract	30 Mar 07A	30 Mar 07A
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
Infraco – return of stage 2 bids	08 May 07A	08 May 07A
Tramco – appointment of Preferred Bidder	21 Sep 07	20 Sep 07A
Infraco – completion of evaluation / negotiation of bid	10 Sep 07	25 Sep 07A
Infraco – appointment of Preferred Bidder.	25 Sep 07	23 Oct 07A
Approval of FBC by TS – approval and funding for Infraco / Tramco	09 Jan 08	Dec 07
Tramco / Infraco – facilitation of novation negotiation complete	22 Oct 07	19 Mar 08A
Infraco – negotiation of Phase 1b complete.	30 Nov 07	19 Mar 08A
Tramco / Infraco – final negotiation and appointment	11 Jan 08	19 Mar 08A
Tramco / Infraco – award following CEC / TS approval and cooling off period.	28 Jan 08	14 Apr 08A
Infraco / Tramco award and SDS novation	14-Apr-08	14-May-08A
Construction commences	14-Apr-08	
Haymarket viaduct commences	08-May-08	
Edinburgh Park viaduct commences	06-Aug-08	
A8 underpass commences	08-Aug-08	
Carricknowe Bridge commences	21-Aug-08	
All demolition work complete	22-Aug-08	
Tram mock-up delivered	October 08	
First track installation commences – on street	03-Nov-08	
MUDFA works complete	November 08	
Haymarket viaduct complete	08-Dec-08	
Roseburn viaduct commences	20-Jan-09	
Design assurance complete	20-Jan-09	
All Issue for Construction drawings delivered	21-Jan-09	
Princes Street closed	03-Feb-09	
Roseburn viaduct complete	20-Apr-10	
Carricknowe Bridge complete	11-May-09	
All consents and approvals granted	18-May-09	
Edinburgh Park viaduct complete	24-May-09	
A8 underpass complete	14-Jul-09	
Princes Street re-opened	01-Aug-09	
NR immunisation complete	November 09	
TRO process complete	01-Dec-09	
1 st OHL installed	11-Dec-09	
Commission Section 2 (Haymarket to Roseburn Junction)	11-Jan-10	
Commission Section 6 (Depot)	25-Mar-10	
1 st Tram delivered	09-Apr-10	
Test track complete	23-Apr-10	
1 st section (other than Depot) complete ready for energisation	25-June-10	

Key Milestone	Baseline Date	Act / Forecast Date
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	
Driver recruitment commences	July 2010	
Commission Section 5 (Roseburn Junction to Gogar)	09-Nov-10	
Driver training commences	November 10	
System testing complete off street	09-Dec-10	
Final tram delivered	17-Jan-11	
Construction Line 1a complete	17-Jan-11	
System testing complete on street	16-Feb-11	
Commission Section 1 (Newhaven to Haymarket) *	11-Mar-11	
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	
Shadow running starts	18-Apr-11	
Shadow running complete	July 2011	
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	
Open for revenue service	July 2011	

*Assumes that there is not a construction embargo in Picardy Place in August 2010.

Guidance for Completion:

Legend for colouring of Act/Fcast date text



Act/Fcast date is ahead or in line with baseline

Slight slippage – readily recoverable with action.

Notable/significant slippage – difficult to recover, even with action.

4.2 Key issues affecting schedule

General

- The BT Openreach programme impact on Infraco construction programme continues to be monitored with the construction of two major BT chambers identified during the period as potentially clashing with Infraco;
- Scope associated with temporary traffic management off the tram route e.g. removal of existing traffic calming measures, lopping of trees, removal of parking etc will increase programme content and associated cost; and
- The designer SDS has now been novated into the Infraco contract and therefore the risk of design impact on construction programme should ease.

MUDFA

- Construction progress at Foot of the Walk is being monitored to ensure that programme remains ahead of required Infraco start; and
- Scope that has been transferred from sections 5B and 5C to Infraco has still to be realised in the Infraco construction programme and any resultant impact agreed.

4.3 12 week look ahead

Will be included as a separate file via CD.

5 Risk and opportunity

5.1 Review project risk register

Top risks

- The top risks in the Primary Risk Register are:
 - **Risk Id 918:** *CEC are unable to honour their funding commitments.*
 - Two of the mitigating actions are complete and one will be ongoing as the project progresses.
 - **Risk Id 139:** *Uncertainty of utilities location and consequent required diversion work / unforeseen utility services within LoD, and*
 - **Risk Id 164:** *Unknown or abandoned assets or unforeseen / contaminated ground conditions affect scope of MUDFA work.*
 - These risks pertain to the MUDFA contract and are being mitigated by trial excavations in order to confirm the location of utilities. This information is then passed to the designer. This process will continue until the design is complete.
 - **Risk Id 173:** *Tramway runs through area of previously unidentified contamination and material requires to be removed and replaced.*
 - There is an environmental review being conducted by **tie** and Heath Lambert (**tie**'s insurance broker) with a view to accurately assessing the potential severity of this risk and also to explore the potential for any additional insurance(s) which may be available for such events.

Risk reviews

- A review of the MUDFA risk register took place in Period 2. This was carried out by the Risk Manager and the MUDFA Construction Director.
- A risk workshop was held at Network Rail's office in Glasgow. There were attendees from both **tie** and Network Rail. The current risk register was reviewed risk-by-risk with Network Rail agreeing to forward on the updated version.
- Two significant risks were closed from the Primary Risk Register. These were:
 - **Risk Id 286:** *Infraco refuses to accept or fully engage in the novation of SDS, and*
 - **Risk Id 987:** *CEC do not agree to final negotiated contract.*Both of these risks were closed at Contract Award.
- The QRA has been assessed as adequately reflecting the negotiated Infraco contract suite and other risks during the construction phase of the project.
- One risk on the MUDFA risk register has been realised and will require funding. This is **Risk Id 342:** *1,500mm sewer requires to be diverted.* The MUDFA contract team are required to divert a 1,500mm sewer in the Gogar area and will, in the coming period, calculate the cost of this additional work. Any drawdown on the risk allocation will be highlighted in the Period 3 report.

5.2 Risk action plan for next period

- All risk mitigations are identified in the Primary Risk Register.

5.3 Schedule quantitative risk analysis

- This will be carried out once the programme has been agreed.

5.4 Review project opportunity register

- On Contract Award, a number of value engineering initiatives were instructed.

6 Health, safety, quality and environment

6.1 H&S accidents and incidents, near misses, other or initiatives

- There were no RIDDOR incidents in the period;
- The AFR for the project is now 0.14;
- There were 19 other incidents reported, of which 18 were of a minor nature and one serious. The serious incident involved the trailer of a Moxi dumper tipping over during shifting of spoil on the archaeological dig site at Gogarburn. No one was hurt in the incident. Operations have been suspended on site pending the outcome of the investigation;
- There were five near misses reported in the Period;
- The investigation report from the RIDDOR accident in Period 1 has been reviewed and commented on by **tie**. These comments are with the contractor for inclusion in a final version of the report. There are ten recommendations in the report; and
- The Panel of Inquiry established to investigate the traffic / pedestrian management arrangements in Constitution Street after an incident in April has begun and the draft report is due to be published during Period 3.

6.2 Environment

- There was one environmental report for the period. A coin was discovered in the Constitution Street area during excavation works. A report has been compiled by the site archaeologists.

6.3 Quality

- One audit was planned and was begun in the period. It is still on-going as part of the Panel of Inquiry mentioned earlier into the Traffic Management arrangements at Constitution Street. The audit report and findings will be issued during Period 3; and
- Seven NCRs have been raised on the MUDFA contractor in the Period. Corrective and preventive actions are being agreed to close these out.

7 Stakeholder and communication

7.1 Stakeholder / communication strategy / plan

The Communications and Stakeholder strategy is part of the Final Business Case, which was finalised at the end of 2007. A review of this strategy will take place by June so it is refreshed for the next stage of the project. This revision will include members of the tie Communications and Stakeholder team and key members of the CEC's communications team.

7.2 Communication and stakeholder matters arising from previous period

- Production and distribution of Updates 5 and 6 – Constitutions Street Phase 2 and Leith Walk Clearance Programme;
- Production and distribution of May Fact Sheet;
- Production of tram ad for West End Shopping Guide and Chamber of Commerce Evening News Supplement;
- Production of updates for Tram Community Boards;
- Press coverage of included: contract signing, project cost increase, Open for Business and Line 1B;
- Management of sponsorship, events and exhibitions: Innovation in Transport Conference, Edinburgh Chamber of Commerce 2,000 Strong event, exhibition stand at City Centre Neighbourhood event and presentations to Institute Highway Engineers SE Scotland, Falkirk Ladies and Falkirk Probus;
- Stakeholder strategy in Constitution St being implemented and working well;
- Continue to work with traders regarding effective marketing of the 'Open for Business' strategy;
- Continued discussions with trade associations and community councils;
- An additional amendment has been made to the new rules of the Small Business Support Scheme. This now includes streets parallel to work sites within 100 metre zone;
- Two information surgeries were held for residents and businesses affected by the London Road works starting 2 June; and
- Preparatory work undertaken for stakeholder engagement for next phase of MUDFA – Haymarket.

7.3 Communication and stakeholder action plan for next period

- Production and distribution of updates for upcoming work sites – London Road;
- Media briefings for Caledonian Ale House, Final Design, Haymarket and other upcoming works;
- Commencement of Final Design presentations. Includes mail shot of 60,000 invitations and face to face presentations;
- Publication of Outlook with tram feature;
- Produce tram fact sheet June / July;
- Open for Business Marketing Group;
- Continuing to work with all stakeholders as agreed in strategy;
- Events: Tram stand at Spokes Breakfast; and
- Next Tram Operations Group (TOG) meeting on Monday, 2 June.

Appendix 'A' Detailed cost report

(Excel Template PSF1 and PSF2 attached as separate spreadsheet)

FY 08/09: Demand on TS 120.000

1: HEADLINE FINANCIAL COMMENTARY

PERIOD RESULTS:

Period is for Phase 1a only

YTD RESULTS:

YTD is for Phase 1a only

FULL YEAR FORECAST:

FY 0809 is for Phase 1a only

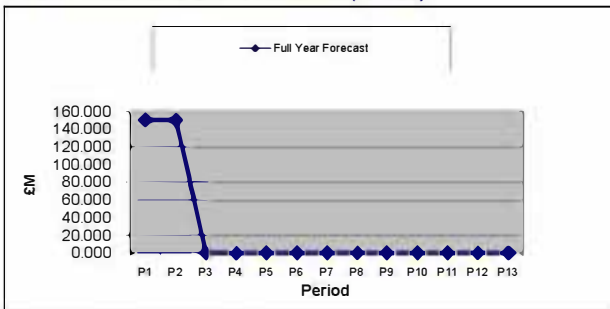
AFC:

AFC is for Phase 1a only

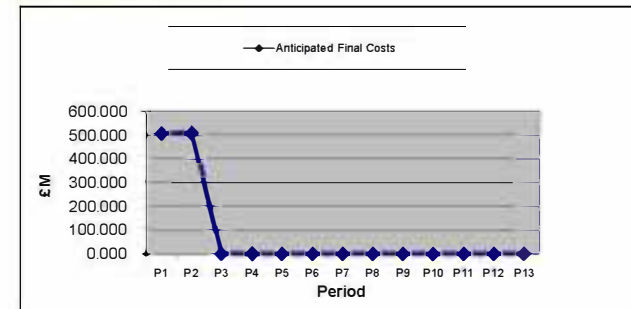
2: SUMMARY

	FY 08/09			FY 08/09			FY 08/09			COWD To Date	Costs To Go Forecast	Total AFC Forecast
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	11.287	13.085	-1.798	17.745	19.543	-1.798	150.851	150.851	-0.000	147.785	364.232	512.017
Other Funding	0.932	1.080	-0.148	0.896	1.045	-0.148	30.852	30.852	-0.000	12.202	30.074	42.276
Demand on TS	10.355	12.005	-1.650	16.848	18.498	-1.650	120.000	120.000	0.000	135.583	334.158	469.741

GRAPH 1 - Period Trend of Full Year Forecast (FY 08/09)



GRAPH 2 - Period Trend of AFC



3: RISK AND OPPORTUNITIES TO:

FULL YEAR FORECAST:

AFC:

4: ACCRUALS COMMENTARY

5: TOTAL PROJECT ELEMENT SPEND BREAKDOWN (TS & 3rd Party Costs)

PLANNED/EMERGING/FORECAST

Allocated in accordance with standard WBS. Values relevant to

business case or other agreed baseline date to be known as original estimate

Relevant Baseline date **FBC 20/12/2007**

	Estimated Cost			Actual Cost/Forecast			Variance
	Original Estimate	Escalated Original Estimate	Escalated Latest Estimate	Cost Of Work Done (COWD)	Forecast to Completion	Anticipated Final Costs (AFC)	
General Overall	28.233	28.233	28.856	21.152	7.705	28.856	0.000
Procurement Consultant	68.126	68.126	69.650	39.012	30.638	69.650	0.000
Design	23.683	23.683	26.828	22.817	4.011	26.828	0.000
Financial Issues/Funding/Procurement Strategy	2.258	2.258	2.632	2.012	0.619	2.632	0.000
Parliamentary Process/Approvals	0.329	0.329	0.319	0.319	0.000	0.319	0.000
Procurement Construction Works	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Construction Works	273.102	273.102	295.251	60.000	235.251	295.251	0.000
Testing & Commissioning	1.984	1.984	0.000	0.000	0.000	0.000	0.000
Handing Over & Service Operations	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOP/Rail Projects Interface (Promoters View)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interfacing Developments	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TRAMS, Vehicles (Edinburgh TRAMS Use Only)	51.370	51.370	58.145	2.474	55.671	58.145	0.000
Risk	48.974	48.974	30.336	0.000	30.336	30.336	0.000
Opportunity (Negative Value)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OB/Contingency	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	498.060	498.060	512.017	147.785	364.232	512.017	0.000

6: Current Year 08/09 - Baseline Budget

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total
1 Total Project COWD - Budget	6.457	13.085	14.265	7.667	8.688	8.763	10.395	15.222	23.863	6.198	13.563	12.195	10.490	150.851
2 Other Funding - Budget	-0.036	1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.852
3 Demand on TS - Budget	6.493	12.005	13.088	7.034	7.971	8.039	9.537	13.965	21.893	5.686	12.443	1.847	0.000	120.000

7: Current Year 08/09 - Actuals (Updated 4 weekly)

4 Total Project COWD + Revised Forecast	6.457	11.287	12.699	10.214	9.378	8.913	10.940	15.170	23.886	6.188	13.231	11.768	10.719	150.851
7 Other Funding + Revised Forecast	-0.036	0.932	1.049	0.843	0.774	0.736	0.903	1.253	1.972	0.511	1.092	10.102	10.719	30.852
10 Total Demand on TS	6.493	10.355	11.651	9.371	8.604	8.177	10.037	13.917	21.914	5.677	12.138	1.666	0.000	120.000

8: Variance tracker

12 Variance Line 1 to Line 4 - Project Actual vs Budget	0.000	-1.798	-1.566	2.547	0.690	0.150	0.545	-0.052	0.023	-0.009	-0.332	-0.427	0.229	-0.000
13 Variance Line 2 to Line 7 - Oth Funding Actual vs Budget	0.000	-0.148	-0.129	0.210	0.057	0.012	0.045	-0.004	0.002	-0.001	-0.027	-0.246	0.229	-0.000
14 Variance Line 3 to Line 10 - Demand on TS vs Budget	0.000	-1.650	-1.437	2.337	0.633	0.138	0.500	-0.048	0.021	-0.009	-0.305	-0.181	0.000	-0.000

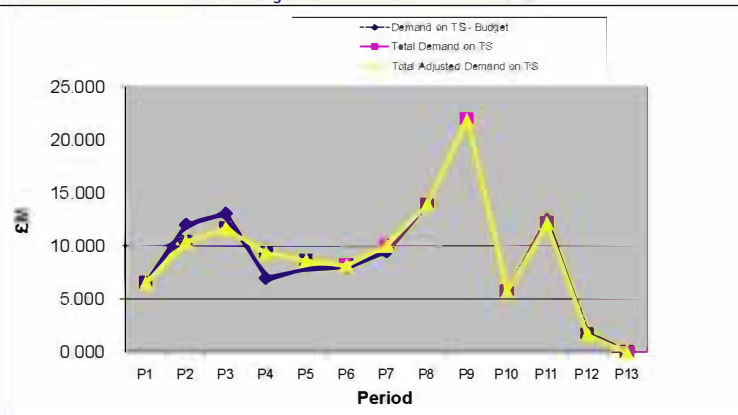
9: Next Year 09/10 - Forecast (Updated 4 weekly)

	Q1	Q2	Q3	Q4	Total	Financial Commentary - FY 09/10 Onwards
16 Total Project COWD	27.472	28.162	38.356	44.440	138.429	All costs are for Phase 1a only
19 Other Funding	-16.696	2.325	3.167	3.669	-7.535	
22 Total Demand on TS	44.169	25.837	35.189	40.770	145.964	

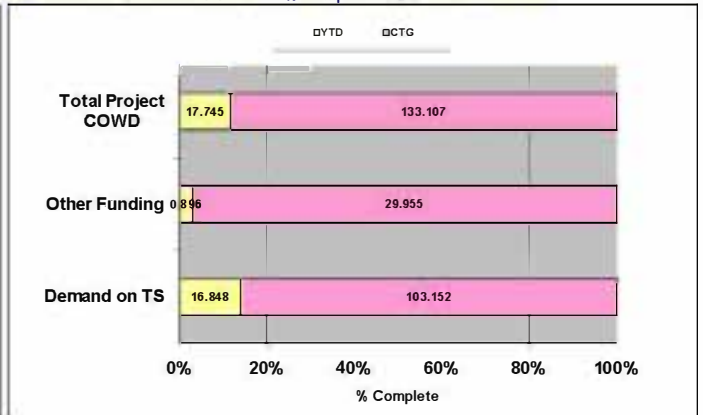
10: All Years (Escalated) (Updated 4 weekly)

	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FUTURE	TOTAL
24 Total Project COWD	0.000	3.093	10.664	30.431	85.852	150.851	138.429	86.443	6.253	0.000	0.000			512.017
27 Other Funding	0.000	0.000	1.000	0.019	10.287	30.852	-7.535	7.138	0.516	0.000	0.000			42.276
30 Total Demand on TS	0.000	3.093	9.664	30.412	75.565	120.000	145.964	79.306	5.736	0.000	0.000	0.000	0.000	469.741

GRAPH 3 - Demand on TS: Actual/Budget Run Rate - Current Year FY 08/09



GRAPH 4 - Year To Date/ Costs To Go - % Complete - Current Year FY 08/09



11: Other Funding

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total
Budget (Current Year 08/09)														
CEC	-0.036	1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.852
Other Funding Stream														0.000
Other Funding Stream														0.000
Other Funding Stream														0.000
Other Funding Stream														0.000
Total Budget Other Funding	-0.036	1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.852
Actual (Current Year 08/09)														
CEC	-0.036	0.932	1.049	0.843	0.774	0.736	0.903	1.253	1.972	0.511	1.092	10.102	10.719	30.852
Other Funding Stream														0.000
Other Funding Stream														0.000
Other Funding Stream														0.000
Other Funding Stream														0.000
Total Actual Other Funding	-0.036	0.932	1.049	0.843	0.774	0.736	0.903	1.253	1.972	0.511	1.092	10.102	10.719	30.852

12: Promoter Full Year Forecast Run Rate

Period Trend of Full Year Forecast (Current Year 08/09)	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
Full Year Forecast	150.851	150.851											

13: Promoter AFC Run Rate

Period Trend of AFC	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
Anticipated Final Cost	508.017	512.017											

Appendix 'B' Change control register

(Register and other information as volunteered or requested from delivery organisation / promoter – There are none to report on at this point)

Appendix 'C' Programme information

To be sent separately by CD:

- **Milestone Schedule Summary (progress against baseline)**
- **Full Detailed Time Schedule (progress against baseline)**
- **Critical Path**
- **12 Week Look Ahead Extract from Schedule**

Appendix 'D' Primary risk register

Period 2 - 2008/09 Full Risk Register

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
916	CEC do not achieve capability to deliver	CEC are unable to honour their funding commitment	Potential showstopper to project if contribution not reached; Line 1B may depend on incremental funding from CEC	S McGarrity	NIL - 0.00	Project	CEC has formed a multi discipline Tram Contributions Group to monitor identified sources of £45m contribution including critically developers contributions. tie are invited to that group. (see add info)	Complete	Complete	28-Sep-07	CEC
							CEC to deliver necessary contributions for 1a	Complete	Complete	28-Aug-07	CEC
							Tram Project Board to monitor progress towards gaining contributions	Ongoing	Ongoing	Ongoing	D Mackay
139	Utilities diversion outline specification only from plans	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services within LoD	Increase in MUDFA costs or delays as a result of carrying out more diversions than estimated	G Barclay	High - 25.00		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	31-May-08	A Hill
164	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; asbestos found in excavation for utilities diversion; unknown cellars and basements intrude into works area; other physical obstructions; other contaminated land	Unknown or abandoned assets or unforeseen/contaminated ground conditions affect scope of MUDFA work.	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	I Clark	High - 25.00		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	31-May-08	A Hill
342	Tram alignment at A8 crossing at Gogar coincides with 1500mm sewer	1500mm sewer required to be diverted	Capex cost to cover BT data nest/cable move; additional design costs; delay while works to undertake move are carried out; additional tunnelling	I Clark	High - 25.00		Confirm if diversion required	On Programme	Complete	8-Mar-08	G Barclay
							Confirmation of BT requirements to tie	Complete	Complete	15-Oct-07	I Clark

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
			costs.								
352	Increase in land values	Higher land compensation claims than anticipated	Additional uplift on compensation claims	A Sim	High (30%)		Close out	On Programme	On Programme	28-Mar-08	A Sim
							Initiate early negotiations between DV and landowners	On Programme	On Programme	Ongoing	A Rintoul
							Liaise with CEC Planning	On Programme	On Programme	Ongoing	R McMaster
173	Uncertainty over extent of contaminated land on route	Tramway runs through area of previously unidentified contamination and material requires to be removed and replaced (dig and dump).	Increase in costs to remove material to special and other tip.	T Glazebrook	High (30%)		Issue containment and georeport to Infracore bidders	Complete	Complete	2-Mar-07	B Dawson
							tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	30-Mar-07	A McGregor
44	SDS contractor does not deliver the required prior approval consents before novation	Late prior approval consents	Delay to programme with additional resource costs and delay to infraco. Impact upon risk balance.	T Glazebrook	High (30%)		Evaluation of prior approval programme	On Programme	On Programme	31-Oct-08	D Sharp
							Hold fortnightly Roads Design Group	On Programme	On Programme	Ongoing	T Glazebrook
							Hold weekly CEC/SDS liaison meetings	On Programme	On Programme	Ongoing	T Glazebrook
							Informal consultation prior to statutory consultation	On Programme	On Programme	31-Jul-08	T Glazebrook
							Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook
							Tram Design Working Group	On Programme	On Programme	Ongoing	G Murray
928	Major single safety incident (including a dangerous occurrence) during construction	Safety incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	S Clark	High (30%)		All Site Staff to get CSCS or equivalent	On Programme	On Programme	Ongoing	C McLauchlan
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	T Condie
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	T Condie
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infraco work	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	T Glazebrook	High - 20.00		GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
							MUDFA trial holes to verify GPR surveys	On Programme	On Programme	31-Jan-09	P Douglas
914	Required approval/acceptance turnaround time does not reflect SUC standard practice; SUCs do not have enough resource or process capability to achieve 20 day turnaround	Statutory Utility Companies unable to meet design approval/acceptance programme turnaround time to meet programme	Additional period required for design approval/acceptance turnaround	T Glazebrook	High - 20.00		SDS to obtain consent for design in accordance with programme requirements - Scottish Water and all Telecoms	On Programme	On Programme	30-Jun-08	I Clark
							SDS to obtain consent for design in accordance with programme requirements - SGN and Scottisk Power	On Programme	On Programme	30-Jun-08	M Blake
271	Inadequate quality of submission of approval. Partial submission of package. Programme compression. Lack of CEC resources.	Failure to process prior approvals applications within 8 weeks	Delay and disruption to Infraco programme	T Glazebrook	High - 19.00		Agree approvals submission arrangements with CEC to align with SDS design programme and procurement programme.	On Programme	On Programme	31-Mar-08	T Glazebrook
							Assure the quality and timing of submissions	On Programme	On Programme	29-Aug-08	T Glazebrook
							Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie	Complete	Complete	28-Feb-07	T Craggs
							Finalise alignments and gain agreement from CEC	Complete	Complete	29-Dec-06	T Craggs
							Where appropriate increase case officer resource to cope with programme compression	On Programme	On Programme	28-Aug-08	D Fraser

Appendix 'E' Resource information

**(Updated Organisation Charts, Notifying Changes of Key Personnel –
N/A)**