

Bilfinger Berger – Siemens – CAF Consortium

**EDINBURGH TRAM NETWORK
INFRACO CONTRACT**

**PERIOD REPORT No 3-12
TO 26 FEBRUARY 2011**

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1 EXECUTIVE SUMMARY

In Period 3-11, 35,322 hours were worked, of which 16,280 were site hours with no reportable accidents.

Progress achieved up to 18 February 2011 has been recorded against the Programme Rev 1 and the Planned Sectional Completion Date for Section D has been delayed from 6 September 11 to 10 February 2014 (Programme Rev 1).

The incorporation of design information from the SDS Provider, revised scope of works, notified and agreed Permitted Variations and known access dates provided by *tie* on 13 February 10 for MUDFA/Utilities completion have been incorporated into the Updated Programme for the Period.

Progress achieved up to 18 February 2011 has been recorded against the Updated Programme for the Period which informs a forecast Planned Sectional Completion Date for Section D of 7 September 2014.

Production of civil and building drawings is largely complete. In general, earthworks, roads, track and structures drawings are available and drawings for the depot, substation and tramstops have been completed and submitted for approval. To finalise and close out the design, a number of issues have to be resolved by *tie*, in particular, instruction of design changes and support of the approvals process.

Civil drawings are largely complete. 98% of the integrated design has gone through the IDC process which will conclude with a final IDC session in February 2011. Infraco issued the relevant Design Assurance Statements (DAS) in draft form to *tie* on 9 August 10; however, the assurance documentation issued to *tie* does not account for the outstanding requirements outlined in this report and can therefore not be finalised.

System engineering design is substantially complete for all disciplines or system lots. Most of the system design re-submittals over the last months are addressing minor comments (vocabulary, additional reference notes etc.) requested or suggested by *tie* in their RoR of the previously submitted versions, or, resulting from fine tuning design as part of the integration process.

Tram manufacturing is progressing well although the manufacturing rate has been modified in order to reduce costs as detailed in Section 4.3.

Tram No 2 was delivered to Edinburgh on 25 April 2010. Tram No 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21 are ready for delivery to Edinburgh, though Factory Acceptance Routine Test Certificates for trams No 19, 20 and 21 have not yet been issued. Tram No 22 is about to finish its testing programme. Factory tests for Tram No 22 will be achieved before mid February 2011.

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A total of 809 Changes have been notified as at 10 February 11. 219 changes have been superseded, withdrawn or have a delay impact only leaving 590 changes requiring Estimates. 537 Estimates have been submitted with an estimated value of £148,057,713. Of the 537 submitted Estimates 210 have been accepted by issue of a *tie* Change Order and with an aggregate value of £25,453,925.

Virtually all construction works are impacted by external issues which require resolution through the change process of the contract.

Dispute Resolution Procedure:

- Dispute A – Princes Street Works – settlement reached in Mediation.
- Dispute B – 17.5% Uplift for Civil Engineering Works – settlement reached in Mediation.
- Dispute 01 – Valuation of EOT1 (INTC No 1) – settlement reached in Mediation.
- Dispute 02 – Hilton Car Park – Adjudicator awarded redress sought by *tie*.
- Dispute 03 – Gogarburn Bridge – Adjudicator rejected redress sought by *tie*.
- Dispute 04 – Carrick Knowe Bridge – Adjudicator rejected redress sought by *tie*.
- Dispute 05 – Russell Road Retaining Wall 4 – Adjudicator awarded redress sought by Infraco.
- Dispute 06 – Delays Arising from MUDFA Programme Rev 8 – Adjudicator accepted the principle arguments put forward by Infraco however felt only able to award part of the redress sought by Infraco due to a perceived requirement for additional information.
- Dispute 07 – Haymarket Viaduct – settlement reached during Internal DRP.
- Dispute 08 – Baird Drive Retaining Wall – settlement reached during Internal DRP.
- Dispute 09 – Balgreen Road Retaining Wall – settlement reached during Internal DRP.
- Dispute 10 – Section 7A Drainage – Adjudicator rejected redress sought by *tie*.
- Dispute 11 – Depot Access Bridge - Adjudicator awarded redress sought by Infraco.
- Dispute 12 – Tower Place Bridge – Adjudicator completed the valuation of the Estimate and ordered that the responsibility for his fees and expenses be shared 50/50.
- Dispute 13 – Clause 80.13 Instruction - Adjudicator awarded redress sought by Infraco.
- Dispute 14 – Liability for Landfill Tax for Contaminated Material - Adjudicator awarded redress sought by Infraco.
- Dispute 15 – Approval of Key Sub-Contractor Sub-Contracts - Adjudicator rejected redress sought by Infraco.
- Dispute 16 – Payment of Preliminaries - referred by Infraco 1 September 10 – Adjudication is ongoing – Adjudication hearing held on

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14 February. Adjudicator's decision currently anticipated on 22 February 2011.

- Dispute 17 – Section 7A Drainage – (Notified Departures 6 & 7) - settlement reached during Internal DRP.
- Dispute 18 – Disputed Payment for Princes Street Works - referred by Infraco 17 September 10 - Adjudication is ongoing – referral and response issued.
- Dispute 19 – Section 5B Drainage – settlement reached during Internal DRP.
- Dispute 20 – Section 5C Drainage – settlement reached during Internal DRP.
- Dispute 21 – Lindsay Road Lowering - referred by *tie* 30 November 10 - Parties agreed to mediation. Mediation took place 11 February 2011.
- Dispute 22 – Bankhead Drive Retaining Wall - referred by *tie* 3 December 10 - Parties agreed to mediation. Mediation took place 10 February 2011 – Settlement agreed.
- Dispute 23 – South Gyle Access Bridge - Referred by *tie* 3 December 10 - Parties agreed to mediation. Mediation took place 10 February 2011 – settlement agreed.
- Dispute 24 – MUDFA 2 - Delays and Additional Costs arising from incomplete Utilities Works – referred by Infraco 18 January 11.
- Dispute 25 – Section 5B – Roads, Street Lighting and Roads Drainage (INTC 204) – referred by *tie* 1 February 2011.
- Dispute 26 – Section 5C – Roads, Street Lighting and Roads Drainage (INTC 205) – referred by *tie* 1 February 2011.
- Dispute 27 – Section 2A – Roads, Street Lighting and Roads Drainage (INTC 212) – referred by *tie* 1 February 2011.
- Dispute 28 – Section 5A – Roads, Street Lighting and Roads Drainage (INTC 528) – referred by *tie* 1 February 2011.
- Dispute 29 – Section 5C – A8 Underpass W28 (INTC 103) – referred by *tie* 14 February 2011.

Remediable Termination Notices (RTN's)

tie has raised 10 RTN's and Infraco has responded to all 10 RTN's and have refuted their validity.

Underperformance Warning Notices (UWN's)

tie has raised 3 UWN's and Infraco has responded to all 3 UWN's and have refuted their validity.

2 HSQE

2.1 Health & Safety

The next Workforce Consultation meeting will take place on the 24 February 11.

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OHS meeting took place on 25 January 11. The next meeting is scheduled for 22 February 11.

Monthly HSE inspections and weekly SHE inspections continue to be carried out. Daily checks are being undertaken around all BSC worksites.

A meeting was held with the Fire Co-ordinator and Fire Wardens at the Consortium Office on 7 February 11. Another session is required to catch up with those Fire Wardens who could not attend. Additional Fire Wardens are now required to replace those staff members who have left.

2.1.2 Accidents, Incidents and Near Misses/Unsafe Conditions:

Period 3-11 records up to 29 January 2011 is as follows:

2No incidents recorded in Period 3-11.

The AFRs at the end of Period 3-11:

Project AFR:	0.14
KPI AFR for 2010/2011:	0.24

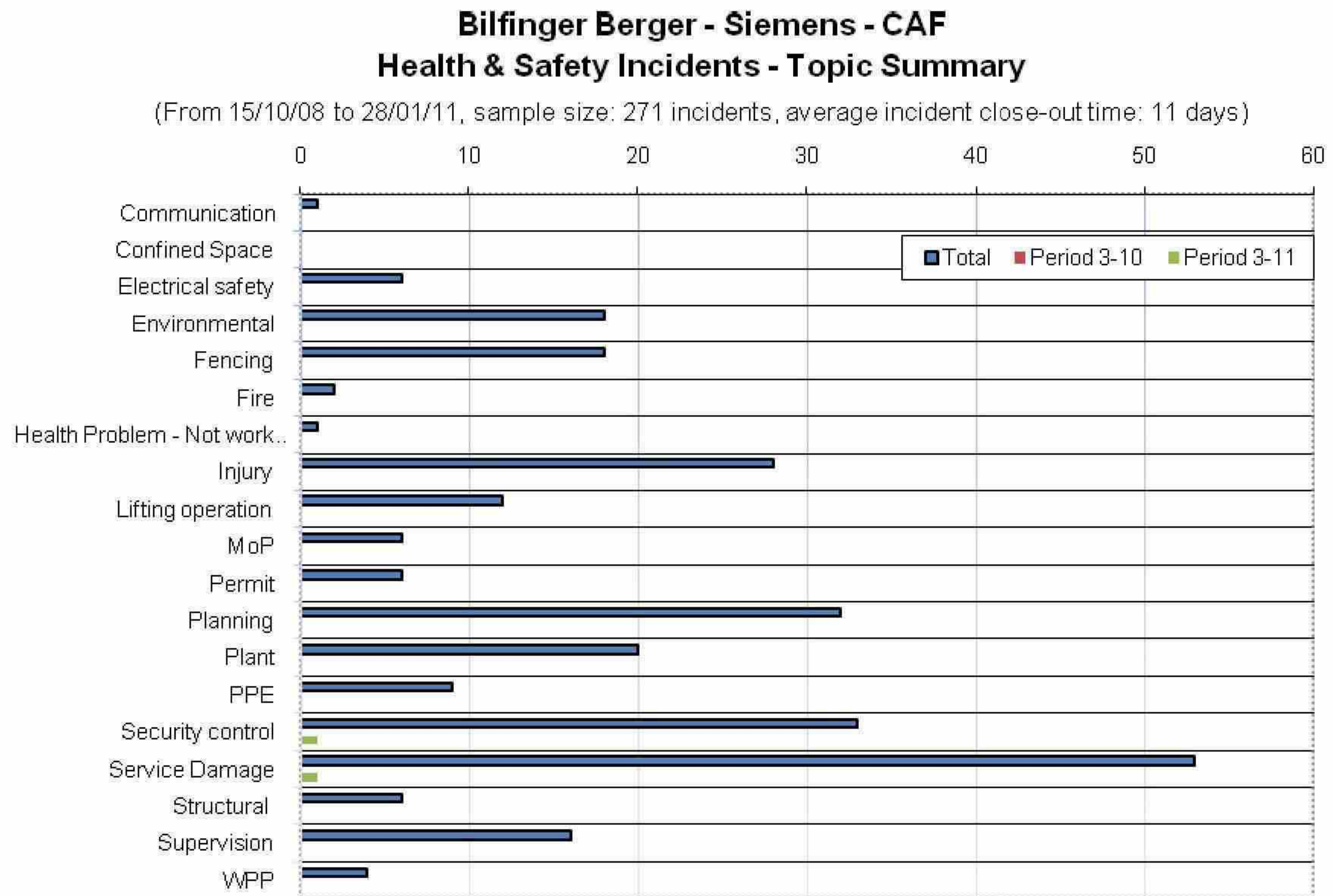
Total Hours worked in Period 3-11:

Total:	35,322
Non site hours =	19,042
Site Hours =	16,280

Contractor Period HS&E Return for Period 3-11 is attached at Appendix 10.1.

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2.1.3 Rolling Trend Analysis for Period 3-11 up to 29 January 2011 on safety and environmental related activities.



2.2 Environment

2.2.1 BSC applied for a CAR licence technical variation of the W14 & W15 retaining wall works. The variation now requires a complex licence rather than the previously granted simple licence. SEPA is currently reviewing this CAR application.

2.2.2 The Otter Disturbance Licence is also due for SNH/SG renegotiation due to the W14 & W15 works. BSC met with *tie* on site to discuss the complexity of the licence amendment, which now involves replacing *before* destroying the original holt. BSC is simultaneously consulting with BAA and SNH for the future holt location and licence conditions, respectively.

2.3 Any Other Business
Nil.

2.4 Quality

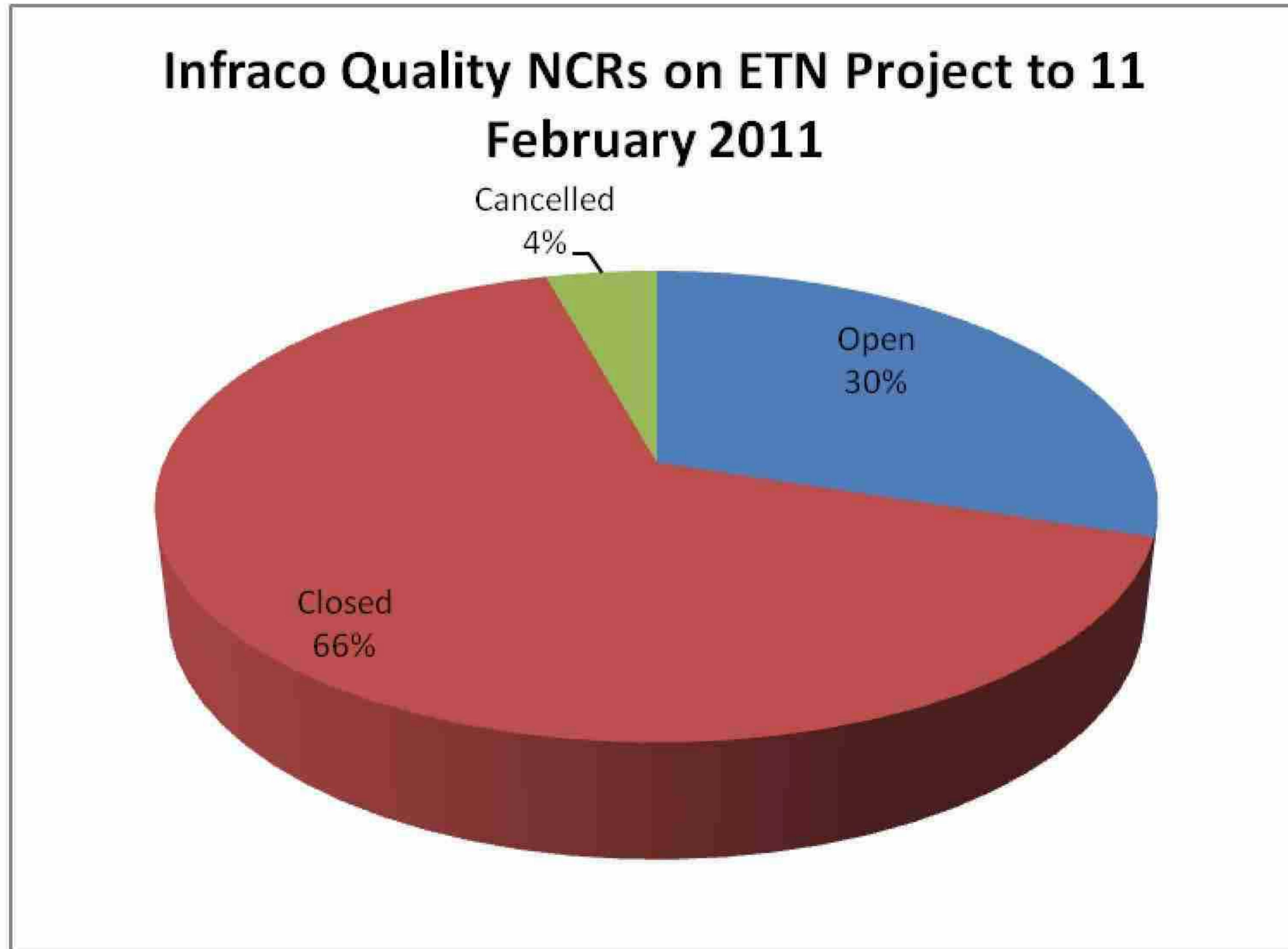
2.4.1 Quality Management System

40 Infraco ITPs have been submitted to *tie*. 35 are 'Level A – No Objection', 1 at Level B and 2 at Level C. A further 2 E&M related ITPs have been submitted for information. 2 civils ITPs for Road Restraint Barrier and Lighting

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Columns/CCTV masts etc have been submitted for review and acceptance. Response is awaited from *tie*.

2.4.2 NCRs



NCRs in Period 3-11

Raised in Current Period	5
Closed in Current Period	1
Cancelled in Current Period	0

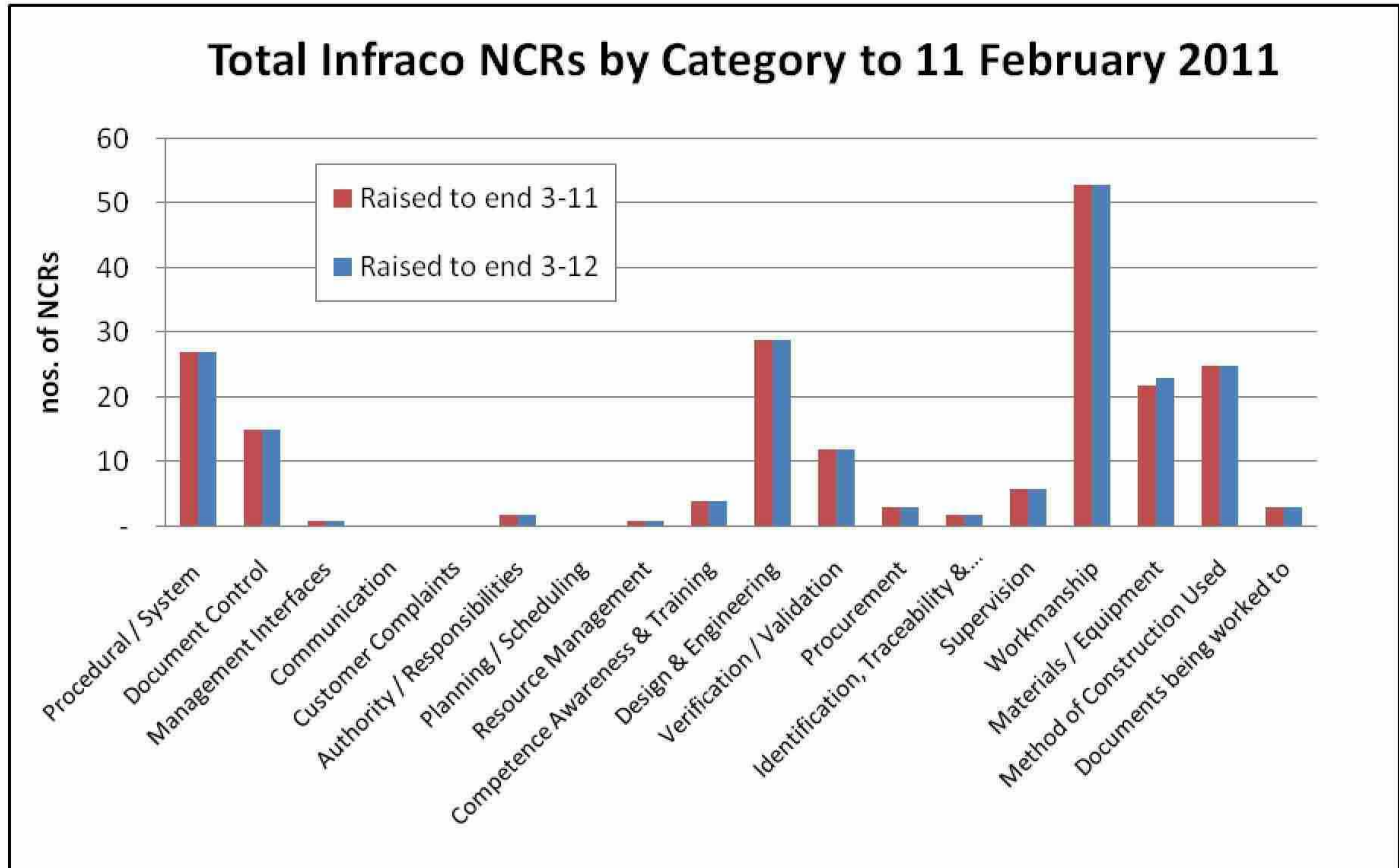
NCRs in Period 3-12 to 11 February 11

Raised in Current Period	1
Closed in Current Period	0
Cancelled in Current Period	0

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The latest trending histogram for Quality NCRs is shown below.



2.4.3 Audits

During the reporting period:

No audits were carried out to date in period 3-12.

3. PROGRAMME

3.1. Programme

In order to allow continued monitoring of the Accepted Programme Revision 1, the Programme has been progressed and included at Appendix 10.2.1 of this report. Progress achieved up to 18 February 11 has been recorded against this baseline including the addition of the latest IFC dates received from SDS (V67).

The Period 3-2 Progress report confirmed that the Programme Revision 1 Section D completion date of 6 September 11 was reported to have slipped to 28 May 13. Programme Revision 1 was generally regarded by then to be overdue for replacement being up to 20 months adrift from the Infraco projected completion date. This made realistic monitoring of progress difficult, especially as there has been considerable change to scope and constraints over the life of Programme Revision 1. The Section D Completion Date for Programme Revision 1 now stands at 11 February 14.

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The Programme identifies completion of MUDFA works in each Intermediate Section and uses these dates as a start milestone for the Infraco work. Infraco have progressed (“progress to date”) the Programme in accordance with the Contract and the MUDFA completion dates have been extracted from the latest information received from *tie* by cover of *tie* Access Maps (latest - *tie* letter 6361). Where access dates have passed and the MUDFA works are incomplete the access dates are defaulting to the programme data date of 18 February 11. It should be noted that Infraco responses, accompanied by maps, dispute the availability of the site as notified by *tie*.

It should be recognised that the Programme has only been progressed where noted in this report and does not include for all changes that we are aware of or have been notified to date for example dealing with abandoned services, misalignment issues, growth in work scope etc.

The soil nailing activity in the Programme represents soil retention alongside the A8 road adjacent to the depot. In the current IFC design these works are no longer required and the works are therefore shown to be completed.

At a number of locations the construction sequence has been changed, from that originally considered, to suit current constraints. Presently the logic of the Programme remains unaltered from that envisaged at Contract Award. Therefore some inaccuracies occur when “progress to date” has been entered into the Programme. The relative early commencement of track laying in the depot has distorted the logic between Sections 5 and 6, and impacts the Section completion dates. This sequence has now been updated to suit current constraints. The Section A completion date in Report 3.09 indicated an earlier completion date than the Depot Substation. This was due to the preferential sequence and resource used for substation construction when creating the Programme. This sequence has now been changed to allow the depot dates to align.

The attached Programme considers progress achieved against the agreed Programme Revision 1 which was based on the base date design information (BDDI) and other Programme Assumptions. Hence the analysis to provide the predicted Section Completion Date does not take into account the increased scope of works which is now apparent post BDDI. These predicted dates are thus significantly earlier than would be expected if all factors governing the construction of the works are taken into account.

The links between the third party consents and the related activities present in the Programme have been deleted to enable a true analysis to be provided of the current situation.

The Update Programme for the Period is included at Appendix 10.2.2 of this report has been progressed with the same information as above and the projected Section Completion Dates are included in the report table below. It should be noted that the Update Programme has only been progressed where the included scope allows and does not include for all changes that we are aware of or have been notified to date. A further update will address these issues in due course.

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Assumed dates for Agreement of Change which have been surpassed are, unless Change has been fully agreed, or works have been re-scheduled, now defaulting to the current data date.

The above results in the following changes to Section Completion Dates:

Section	Update Programme Progress to 18 Feb 2011	Programme Revision 1 Progress to 18 Feb 2011	Programme Revision 1 Progress to 21 Jan 2010	Programme Revision 1
A	26 October 2011	26 August 2011	21 September 2011	1 June 2010
B	27 June 2012	03 December 2012	05 November 2012	1 July 2010
C	11 March 2014	14 August 2013	26 June 2013	10 March 2011
D	07 September 2014	10 February 2014	23 December 2013	6 September 2011

The Critical Path driving the Section C completion date in the Update Programme is as follows:

The Critical Path driving the Section C completion date in the Update Programme is as follows:

Roseburn Viaduct / Murrayfield Retaining Walls / Section 5A Additional Drainage & Trackwork / Track Finishes.

3.2 Look Ahead Programme

This programme is provided for information and coordination purposes only; and without prejudice to the rights of the Infraco under the Agreement.

This programme constitutes a target programme and as such, contains durations that are based on a risk profile not consistent with the Accepted Programme.

The Look-Ahead programme in Appendix 10.3 is an extract from the current Infraco Construction Programme.

This Look-Ahead programme is extended to cover the period 19 February to 13 May 11 and is an extract from the current Construction Programme with IFC dates from the SDS V67 Programme and also updated with progress of The Works recorded and assessed to 18 February 11.

This programme includes a number of activities for agreement of Change from BDDI to IFC. These milestones are having an impact on progress in all sections as shown in the appended programmes. Unless Change has been fully agreed, or works have been re-scheduled to a later date, these milestones default to the current data date,

MUDFA/Utility activities remain scheduled in accordance with the site wide programme information provided by cover of *tie* Access Maps (latest - *tie* letter 6361) indicating available Works areas and/or planned possession dates which are the subject of ongoing correspondence. Infraco responses,

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accompanied by maps, dispute the availability of the site as notified therefore where appropriate the Infraco information may have been used in order to provide an accurate plan of the intended Works. This information remains critical to the accurate planning of the Works. Where MUDFA/Utility Works are ongoing, the Completion Milestones will continue to default to the report date unless planned completion dates are later.

Section 1A

(Ref. Section 4.1.3.1)

MUDFA/Utility diversion works on Lindsay Road were started by *tie* (Clancy Docwra) on 16 November 09. The current utilities information (*tie* letter 6361) indicates that Lindsay Road is available to the Infraco but as the agreement of Change is still outstanding, the Permit to Commence has not been issued and the carriageway has not been handed over to the Infraco as stated. The Traffic Management Scheme was initially approved by the TMRP on 22 June 09, and revised/approved on 08 March 10. The scheme was updated and approved again on 10 June 10 in consultation with the *tie* site management (BSC letter 7743). Infraco Permits to Commence BSC-PCW-0119 and 0122 were submitted on 2 and 19 March 10 respectively. Further to the instruction to proceed pursuant to clause 80.15, Permit to Commence BSC-PCW-0144 was submitted on 21 December 10 with a view to commencing Works on 7 February 11. The detailed construction programme was revised, but is now slipping as no permit has been issued to date.

Piling works for Wall 1A re-commenced on 31 May 10 but obstructions considered to be an old sea wall have been investigated and construction of Panels A3 to A6 will now be resolved during Phase 5B on Lindsay Road. MUDFA/Utility works re-commenced on 8 September 10 for construction of a manhole undermining the footprint of RW1A panel A3. The area was returned to the Infraco on 15 Oct 10. Construction of the remainder of Wall W1A Phase 2 was completed during the period, but the restricted area available to the Infraco only allowed partial possession of the merged TTM Phases 6 & 7 to enable construction of Wall 1A, 1C and 1D only.

MUDFA/Utility works re-commenced on 8 September 10 to construct 3No manholes at Ocean Terminal. The Infraco was also advised that construction of 1nr manhole in TTM Phase 9 was planned. At the time of writing the Infraco await notification of MUDFA/Utility completion and handover dates to allow programming of the works.

MUDFA/Utility works from Victoria Bridge to Ocean Terminal started w/c 16 November 09 and are ongoing. The *tie* Access Maps indicate availability of half carriageway width which is neither compliant with the Accepted Programme, the Update Programme, or the Approved Traffic Management Scheme. Utility works for the construction of side-entry manholes between Tower Place and the Mint Casino are complete although Casino roundabout remains unavailable to the Infraco. At the time of writing the Infraco await notification of MUDFA/Utility completion and handover dates to allow programming of the works.

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Section 1A is planned as a continuous series of road closures over 18 phases in order to accommodate traffic and access requirements. Alterations to Tower Place Bridge have been suspended due to the expiry of the Forth Ports licence on 19 November 2010. A programme of works was carried out to allow re-opening of the bridge to traffic on 19 November 10. *tie* confirmed that works could re-commence on 10 January 10, but as at 11 February 11 a Forth Ports licence was not in place and the programme of works is delayed. Tower Bridge access ramp is now under review with FPA/*tie*. These items continue to have an impact on the Programme.

Infraco Works on Constitution Street continue to be delayed awaiting completion of MUDFA/Utility Works in this area (construction of Side-Entry Manholes / gas abandonment works / integrity of cemetery wall). *tie* indicate (*tie* letter 6361) partial site availability with Ch.1,800 to 2,350 not available until 30 November 10. The remaining area has not been handed over to the Infraco and Traffic Management issues preclude use of the restricted area currently available.

Agreement of Change, Forth Ports Licence issues at Casino Access Road (Port/Border Control), and proposed addition of utility works to the Infraco scope, are impacting Programme. In summary, there are a number of issues in Section 1A which are causing delay to the Programme.

Section 1B/C – Foot of the Walk to Annandale Street

(Ref. Section 4.1.3.2/3)

A re-start meeting was held on 19 October 09.

MUDFA/Utility Works were expected to be clear by 30 November 09. Utility Works (BT) are ongoing at this time. *tie* indicate (*tie* letter 6361) partial site availability to the Infraco with the remainder notified as Jane Street to McDonald Road Northbound earliest possession date of 3 December 10 but not yet handed over to the Infraco. Traffic Management issues preclude use of the fragmented/restricted areas currently available. The delay in Section 1B is having an impact on the Programme, the full affect of which will be unclear until actual Infraco possession dates are achieved.

Proposed addition of utility works to the Infraco scope, and outstanding roads design issues will also impact Programme.

The Infraco continues to seek resolution to issues delaying the Permits to Commence BSC-PCW-125 and BSC-PCW-126 which were submitted on 15 April 10. At the time of writing the Infraco await notification of MUDFA/Utility completion and handover dates to allow programming of the works.

Section 1C - Annandale Street to St Andrew Square

(Ref. Section 4.1.3.3)

A detailed programme is being developed at this time but will remain in draft form until design at Picardy Place is resolved and TTM phasing is finalised. *tie* Access Maps (*tie* letter 6361) indicate partial availability of the site (Picardy Place + 3x100m Lengths of half carriageway) but these areas are

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individually encompassed by MUDFA/Utility works which show Infraco possession dates of 03 December 10. Traffic Management issues preclude use of the fragmented/restricted areas currently available. Proposed addition of utility works to the Infraco scope also impact Programme.

The Infraco continues to seek resolution to issues delaying the Permit to Commence BSC-PCW-126 which was submitted on 15 April 10. At the time of writing the Infraco await notification of MUDFA/Utility completion and handover dates to allow programming of the works.

Section 1C – St Andrew Square to Princes Street (Waverley Bridge Junction)

(Ref. Section 4.1.3.3)

Ongoing MUDFA/Utility (BT) works are now expected to continue until earliest possession dates of 15 November 10 for St Andrew Square and South St Andrew St. *tie* letter 6361 indicates the East end of Princes St is available to the Infraco, but construction of the rail curve and associated traffic management issues require the extended area to be available.

Proposed addition of utility works to the Infraco scope also impact Programme.

The delays on Section 1C are having an impact on the Programme, the full affect of which will be unclear until actual Infraco possession dates are achieved.

Section 1C/D - Princes Street

(Ref. Section 4.1.3.3/4)

Princes Street was re-opened to traffic on 29 November 09. Remedial and outstanding works including works associated with Scottish Water are complete at this stage – some works remain. Currently, as agreed with *tie*, Infraco are monitoring items considered to be Safety Critical.

Safety critical works continue to be programmed when required.

Section 1D - Haymarket Junction to Shandwick Place

(Ref. Section 4.1.3.4)

Shandwick Place is notified available to the Infraco (*tie* letter 6361) and the section “Atholl Crescent West to Grosvenor Street” is notified earliest possession of the site due to ongoing MUDFA/Utility works 25 October 10.

Proposed addition of utility works to the Infraco scope will also impact Programme

The Infraco updated Permit to Commence BSC-PCW-103 at Haymarket Phase H1 for Works to commence on 6 April 10, and Enabling Works at Shandwick Place (BSC-PCW-123) to start on 13 April 10 with a view to commencing Works (BSC-PCW-124) on 4 May 10. The Infraco continues to seek resolution to issues delaying the Permits to Commence BSC-PCW-103 which was initially submitted on 5 January 10, and BSC-PCW-123 and BSC-PCW-124 which were initially submitted on 1 April 10. At the time of writing

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the Infraco await notification of MUDFA/Utility completion and handover dates to allow programming of the works.

Section 2

(Ref. Section 4.1.3.5)

Haymarket Corridor

Awaiting agreement of Change for BDDI to IFC, and additional works are having a significant impact on Programme.

Section 5A

(Ref. Section 4.1.3.6)

Awaiting agreement of Change (BDDI to IFC)(piling works), viaduct design, and additional utility works to the Infraco scope are all issues which are affecting progress and impact Programme.

Russell Road Bridge

Awaiting agreement of Change for BDDI to IFC / additional works / design / and utility works. This continues to impact Programme.

Russell Road Retaining Walls W3/4

Agreement of Change / contaminated ground / agreement of re-design / and access issues are all having a significant effect on the Programme.

Section 5B

(Ref. Section 4.1.3.7)

Agreement of Change (BDDI to IFC), contaminated ground, existing utilities, and addition of utility works to the Infraco scope are all issues which are affecting progress and impact Programme.

Carrick Knowe Bridge

Design issues geometry at abutments / track slab may cause delay to the Programme.

South Gyle Access Bridge

Completion of the MUDFA/Utility work (sewer diversion) is recorded notified as 4 November 10.

Section 5C

(Ref. Section 4.1.3.8)

Construction continued on the Depot Access Bridge during the period, but delay elsewhere with existing utilities, agreement of Change (BDDI to IFC), and addition of utility works to the Infraco scope are all issues which are affecting progress and impact Programme.

Section 6

(Ref. Section 4.1.3.9)

Although construction continued during the period on the building and tracklaying, agreement of Change (BDDI to IFC), design changes, and delay with the additional water main are affecting progress and impact Programme.

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Impact of proposed Gogar Interchange with Network Rail has yet to be assessed.

Section 7

(Ref. Section 4.1.3.10)

Agreement of Change (BDDI to IFC), the extended period for settlement of the surcharge area, track containment specification issues, agreement of Change for NEL future proofing, re-design of wall W14C and CEC/BAA approvals are all impacting Programme in this section.

3.3 Tramco Programme Status

Updated tram design, procurement, manufacturing, delivery and commissioning programme is attached as Appendix 10.4.

4 PROGRESS

4.1 CIVIL & BUILDING WORKS

4.1.1 Civil & Building Design

Programme update attached as Appendix 10.2.

4.1.1.1 Production IFC Design

Programme

Version 67 of the SDS Design Programme was issued to *tie* on 10 February 2011.

Approvals

SDS is closing in on obtaining the final planning and technical approvals required.

CEC Roads Approval for Section 1C2 remains on hold until Picardy Place redesign is complete. Infraco still awaits Section 3 Approvals from CEC and Scottish Water.

SDS report progress as follows:

The statistic issued with the progress for Periods 3-10 and 3-11 contained a counting error. The statistic below is correct for Periods 3-10 and 3.11.

From a total of 269 planning and technical approvals:

219 are approved
26 are pending approval
24 are to be submitted

The following table shows the design status for Period 3-12.

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From a total of 269 planning and technical approvals:

226 are approved
24 are pending approval
19 are to be submitted

As of 14 January 2010 the status of approved design is 87% for Phase 1a and 67% for Phase 1b. Under consideration of IDC the design is 98% complete.

These submissions are recorded in the Approvals Look Ahead which is issued to *tie* in advance of the Approvals Taskforce.

4.1.1.2 Issues and Concerns

Design Assurance Statements (DAS)

Infraco have issued draft Design Assurance Statements (DAS) to *tie*; however, the assurance documentation issued to *tie* does not account for the outstanding requirements outlined below. We request *tie* to resolve, or to assist Infraco in resolving, the outstanding issues described below as a matter of urgency to allow the design to be completed.

Section Systemwide – Issues

tie to resolve OLE base conflict issues with Scottish Water

- Action: *tie*

Close out of Tram Stop design issues

- Action: *tie*/CEC

Closeout of System Wide Traffic Modelling Reports

- Action: CEC

Infraco has not been instructed on design of floating or shallow trackform

- Action: *tie*

Development Workshops – outstanding design misalignment changes

- Action: *tie* to instruct

Infraco has not been instructed on any designs for "Special" OLE Foundations

- Action: *tie*

No changes due to Infraco componentry are assumed required for Section 3 closeout

- Action: *tie* to confirm

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MUDFA utility conflicts – provision of complete and accurate as built and appropriate **tie** instructions to address conflicts

- Action: **tie**

All outstanding design changes across all Sections to be instructed

- Action: **tie**

tie to confirm close out of all Informatives owned by **tie**

- Action: **tie**

tie to confirm extent of reinstatement works by MUDFA in advance of Infraco works across all Sections.

- Action: **tie**

tie to provide as-built and survey information in conjunction with the appropriate instruction to allow connections workshops with SW to progress.

- Action: **tie**

CEC to approve revised OLE Design and impacts to Roads and OLE Foundations

- Action: **tie** / CEC

Planning Variations to align with Technical Approvals

- Action: Infraco/CEC

Closeout of Technical Informatives by CEC

- Action: CEC/ Infraco

tie to assist in obtaining outstanding Scottish Water approvals

- Action: **tie** /SW

Non-Standard Signs Closeout by CEC

- Action: CEC

tie to instruct testing works to close out Roads Design (revised App 7/1)

- Action: **tie**

Section 1A – Outstanding Issues

Confirmation of made TRO Order so no further changes to design

- Action: CEC/**tie**

Finalise interface with Constitution Street Graveyard Wall (CEC project)

- Action: CEC/**tie**

Closeout of Traffic Modelling by CEC

- Action: CEC/**tie**

Closeout of Technical Informatives by CEC

- Action: CEC/Infraco

tie to confirm close out of Informatives owned by **tie**

- Action: **tie**

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

Closeout of all Forth Ports issues

- Action: **tie**/CEC

Tower Place Bridge – ramp issue

- Action: **tie**/Forth Ports

Close out of Lindsay Road cycle path issues

- Action: **tie**

tie to confirm Scottish Government Gates relocation issue resolved

- Action: **tie**

Technical Approval and IFC of Tower Place Bridge (revised)

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- Action: CEC / Infraco

Technical Approval and IFC of Victoria Docks Entrance Bridge (revised)

- Action: CEC / Infraco

Drainage design update approval by Forth Ports

- Action: **tie**

Drainage design update approval by CEC/SW

- Action: CEC/SW

-

Section 1B – Outstanding Issues

Confirmation of made TRO Order so no further changes to design

- Action: CEC/**tie**

Closeout of Traffic Modelling by CEC

- Action: CEC/**tie**

Drainage design update approval by CEC/SW

- Action: CEC/SW

Closeout of Technical Informatives by CEC

- Action: CEC / Infraco

tie to confirm close out of Informatives owned by **tie**

- Action: **tie**

Closeout of Planning Informatives by CEC

- Action: CEC / Infraco

Section 1C – Outstanding Issues

CEC Approval required for Section 1C2. “Not to exceed” Change order issued by **tie** for Picardy Place. Instruction for Elder Street redesign required.

- Action: CEC/**tie** / Infraco

Closeout of Traffic Modelling by CEC

- Action: CEC/**tie**

Listed Building Consent for 4 Dublin Street

- Action: **tie** to instruct

Confirmation of made TRO Order so no further changes to design.

- Action: CEC/**tie**

Closeout of Technical Informatives by CEC

- Action: CEC/Infraco

tie to confirm close out of Informatives owned by **tie**

- Action: **tie**

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

tie to confirm which Cathedral Lane Substation design is to progress

- Action: **tie**

Drainage design update approval by CEC/SW

- Action: CEC/SW

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Section 1D – Outstanding Issues

Grosvenor Street Design Change due to TRO

- Action: **tie** to instruct

Confirmation of made TRO Order so no further changes to design

- Action: CEC/**tie**

Closeout of Technical Informatives by CEC

- Action: CEC/Infraco

tie to confirm close out of Informatives owned by **tie**

- Action: **tie**

Clarification on CEC's Conservation Statement for Shandwick Place

- Action: CEC/**tie**

Drainage design update approval by CEC/SW

- Action: CEC/SW

Section 2A – Outstanding Issues

Awaiting CEC Closeout of Roads Design

- Action: CEC/**tie**

Confirmation of made TRO Order so no further changes to design.

- Action: CEC/**tie**

Closeout of Technical Informatives by CEC

- Action: CEC/Infraco

tie to confirm close out of Informatives owned by **tie**.

- Action: **tie**

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

Phase 1a/1b Interface – SW to approve Section 3A.

- Action: **tie**/SW

Drainage design update approval by CEC/SW

- Action: CEC/SW

Section 2A Close out Report – CEC to issue

- Action: CEC

Junction 91 – resolution of tram operation / traffic interface

- Action: **tie**

Section 3 – Outstanding Issues

CEC Approval of Roads Design

- Action: CEC/**tie**

Need CEC to promote TRO

- Action: CEC/**tie**

Non-Standard Signs Closeout

- Action: CEC/**tie**

Completion of Utilities design

- Action: **tie**

SW Approvals

- Action: **tie** / SW

tie to confirm close out or otherwise of Informatives

- Action: **tie**

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Section 5A – Outstanding Issues

Need CEC to promote TRO

- Action CEC/*tie*

Closeout of Roseburn, Viaduct VE issues and outstanding approvals (Structures, Roads, Planning)

- Action *tie*

TAA and IFC of Russell Road Bridge and Retaining Wall (revised).

- Action CEC

Murrayfield Tram Stop design changes

- Action *tie* to instruct changes

Closeout of Technical Informatives by CEC

- Action CEC / Infraco

tie to confirm close out of Informatives owned by *tie*

- Action *tie*

Closeout of Planning Informatives by CEC

- Action CEC / Infraco

Drainage design update approval by CEC/SW

- Action: CEC/SW

Section 5B – Outstanding Issues

Need CEC to promote TRO

- Action: CEC/*tie*

Closeout of Technical Informatives by CEC

- Action: CEC/Infraco

tie to confirm close out of Informatives owned by *tie*

- Action: *tie*

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

Section 5C – Outstanding Issues

Need CEC to promote TRO

- Action: CEC/*tie*

Closeout of Technical Informatives by CEC

- Action: CEC/Infraco

tie to confirm close out of Informatives owned by *tie*.

- Action: *tie*

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

Building Warrant for Edinburgh Gateway

- Action: CEC

Technical Approval for Edinburgh Gateway Retaining Walls

- Action: *tie*/Infraco

250mm Water Main redesign at Depot / Section 5C

- Action: *tie* to complete works diversion works

A8 drainage design (part of Edinburgh Gateway Project)

- Action: *tie* to provide as built and CCTV survey

Drainage design update approval by CEC/SW

- Action: CEC/SW

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Section 6 – Outstanding Issues

CEC acceptance of revised roads drawings for Depot Access Road

- Action: CEC/*tie*

Need CEC to promote TRO

- Action: CEC/*tie*

Technical Approval and IFC of Depot Access Bridge (revised)

- Action: CEC/*tie*

Closeout of Technical Informatives by CEC

- Action: CEC / Infraco

tie to confirm close out of Informatives owned by *tie*

- Action: *tie*

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

Depot Access Road Turning Head

- Action: *tie*

Water Supply Connection at Depot

- Action: *tie* to resolve 250 mm main issue with SW

250mm Water Main redesign at Depot / Section 5C

- Action: *tie* to complete works diversion works

Section 7A – Outstanding Issues

Technical Approval for NIL Change

- Action: *tie* to close out Planning Informatives and confirm how CEC Planning requirement for TAA will be addressed

Planning Approval for Airport Changes

- Action: *tie* to confirm BAA Interface proposals and issue outstanding change instructions

Building Warrant for Airport Changes

- Action: *tie* to discuss scope issues with CEC / TEL / BAA to allow design to be finalised

Revised Flood Modelling and close out of Flood Risk issues in Section 7A

- Action: CEC/*tie*/BAA/NIL

Closeout of Technical Informatives by CEC

- Action: CEC/ Infraco

tie to confirm close out of Informatives owned by *tie*

- Action: *tie*

Closeout of Planning Informatives by CEC

- Action: CEC/Infraco

In addition, there are a number of long outstanding design changes / issues that also need to be resolved (instructed or closed), before the final design (and DAS) can be completed. The key issues requiring resolution are described below.

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Outstanding Design Issues

The issues described below are either requiring urgent attention or Infraco have been awaiting instruction or clarification from *tie* for a significant period of time:

- Section 7A Flood Risk Issue - The flood model issue is with *tie* to resolve with BAA and NIL. Infraco await instruction from *tie* for previously completed flood modelling works and any further design works required to resolve the flood model issue. *tie* stated at BAA Interface meeting on 08 Feb 2011 that they anticipated this being resolved by 11 Feb 2011 with BAA and NIL.
- Infraco await completion of necessary diversion works by *tie* for the 250mm water main in Section 5C / 6. This is impacting on Infraco's ability to secure the SW approval for the water connection at the Depot.
- Roseburn Viaduct – Infraco have issued a letter to *tie* identifying the scope of works outwith the VE design. Infraco require instruction from *tie* for the additional works. This is holding up completion of the design. Meeting held 11 November 2010 between *tie* and BSC. *tie* agreed to issue TNC for the additional design by 12 November 2010. BSC await instruction from *tie*.
- MUDFA/Utilities Conflicts – Infraco note their concern in regard to the number and potential consequences of the utility conflicts identified to date. *tie* have issued a number of MUDFA as built and Infraco have concerns over the completeness, quality and accuracy of the as built provided by *tie* to date. Infraco provided examples of quality and accuracy issues to *tie* on 13 October 2010. *tie's* response within Progress Meeting on 25 Jan 2011 is not accepted by Infraco and Infraco reiterate their concern in regard to the number and extent of conflicts that *tie* need to address.
- Tram Stop Informatives – Infraco await instruction and clarification from *tie* for tram stop changes (Branding and TVMs) as well as the close out of *tie's* Informatives related to Tram Stops.
- Tower Place Bridge – Infraco await resolution in regards to resolution of the “ramp” issue by *tie* and *tie's* instruction for the design of the required special shallow trackform interface.
- Phase 1a/1b Interface – this design package requires Scottish Water to provide approval of all or part of at least the related Section 3A. *tie* need to resolve utility issues with Scottish Water to allow Scottish Water to approve Section 3A as detailed above.
- TRO - IFC conflict at Grosvenor Street – Infraco submitted design only estimate to *tie* for changes required to the CEC Approved design to align with TRO drawings and await *tie* instruction.

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- Cathedral Lane Substation – Infraco await *tie*'s instruction on which option to proceed with.
- Section 1C2 Technical Approval (Current Design) – This was due to be resolved and approval granted by CEC on or before 07 July 2009 but is still outstanding. *tie* has been requested through Approvals Taskforce and Design Changes Meeting to assist in resolving this issue with CEC. It is noted that the TROs promoted by CEC are based on the “unapproved” SDS design for Section 1C2.
- Section 1C1 and 1C2 Scottish Water (SW) Approval – The Approval is more onerous on the Project than previous approvals. Infraco have requested *tie* to raise this with SW. This was first raised to *tie* in October 2010. *tie* advised in February 2011 that *tie* accepted this six month approval constraint. This has potential risks for the project for future resubmissions to SW for approval.
- Section 3 CEC Roads Approvals – this has been raised to *tie* at the Approvals Taskforce meeting. Infraco have concerns regarding the lack of resources within CEC to complete outstanding Section 3 Approvals and the close out of comments and Informatives for other sections.
- Section 3 Scottish Water (SW) Approvals – *tie* have not advised Infraco on the utilities design issues within Section 3. Infraco await SW approvals for Section 3. This is impacting on completion of the Phase 1a/1b Interface design. Infraco await response from *tie*.
- Picardy Place Redesign (Section 1C2) – *tie* has issued “Not to exceed” change order in advance of agreeing estimate. SDS finalising design only Estimate following scope clarification meeting with CEC on 07 February 2011.
- Elder Street redesign – Infraco await instruction from *tie*.
- Depot Access Road – turning head – *tie* proposed to restrict HGV access. Infraco require formal instruction of this from *tie*. This has been with *tie* since September 2009.
- Murrayfield Wanderers Clubhouse design changes – Infraco require instruction from *tie* in regard to late changes required by SRU and their tenant. Infraco has issued revised IFC design in advance of instruction from *tie* to allow the works to progress.
- Forth Ports – additional gate requirements (INTC 573) – Infraco await instruction from *tie* for the changes requested by Forth Ports. This has been with *tie* since March 2010.
- Lindsay Road Cycle path – *tie* issued TNC for Infraco to incorporate new cycle path into design. Infraco await design only Estimate from SDS and corresponding TCO to carry out the relevant design works.

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- Additional Footpath at Ocean Drive – *tie* to confirm scope and instruct design change.

4.1.1.3 Extended Construction Support and Design Support

Infraco have appended the proposed org charts for the period 26 February 2011 26 March 2011.

Extended Construction Support and Design Support have yet to be acknowledged in full by *tie*.

4.1.1.4 Development Workshops

Status of Development workshops is shown in Appendix 10.9.

Infraco await change orders from *tie* for a number of misalignments including OLE, Tram Stops, Substations, and Earthing and Bonding where the misalignments have been agreed with *tie* and submitted Estimates have been with *tie* for at least six months.

4.1.1.5 Edinburgh Gateway (Design)

Infraco attended three design meetings in this period with *tie*, Network Rail (NWR) and / or Scottish Water.

The Retaining Walls AIP documentation has been submitted to CEC; however Infraco await closure of outstanding issues by *tie* alongside resolution of retaining wall design issues to allow retaining wall “IFEA” design to be finalised.

Infraco has highlighted to *tie* a delay in the completion of the retaining walls design due to interface issues with Scottish Water and the Network Rail design and the impact on the SDS design. SDS reviewing the retaining wall design. Infraco will arrange meeting to discuss design issues with *tie* week ending 18 February 2011.

Infraco has concerns that NWR has not provided formal minutes of previous design meetings that covered critical design issues and ongoing design assumptions. Infraco raised this to *tie* in November 2009 and Infraco await close out of this issue by *tie*.

Infraco await formal issue by *tie* of design documentation from NWR on which the SDS design is based. Infraco has concerns over the EMC design proposed by NWR and has requested clarification meeting with *tie*. Infraco understand *tie* is addressing EMC issues with NWR.

Infraco continue to support *tie* in attending construction staging meetings as required.

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4.1.1.6 Request for Information (RFI)

RFI issues have been transferred to the Design Change Issues meeting.

On status date 11 February 2011 – RFI (Civil) summarise as follows:

RFI's open:	5 total
RFI's open and unanswered:	4
RFI's responded to but require further clarification:	1
RFI's issued in January 2011:	2
RFI's responded in January 2011:	0
RFI's closed in January 2011:	1

4.1.1.7 Informatives

Weekly workshops have been set up with CEC and *tie* to work through outstanding Infraco Informatives and comments. This process is ongoing.

Infraco request *tie* to provide outstanding instructions for design changes to allow closeout of corresponding informatives.

Infraco formally requested a clear written statement explaining the three CEC “Closure” terminologies from *tie* on 25 November 2010. *tie* responded on 02 February 2011. Infraco will respond to *tie* regarding *tie*'s response.

4.1.2 Civil & Building Procurement

4.1.2.1 Sub-Contractors

A Sub-Contract Procurement Schedule is attached as Appendix 10.6.

Section 1A

Section 1A has been split into three areas, Newhaven to Ocean Terminal (1A1), Ocean Terminal to Port of Leith (1A2) and Port of Leith to Foot of the Walk (1A3).

BBUK have sublet Lindsay Road Retaining Wall and associated works together with Tower Place Bridge to McKean and Company (Glasgow) Ltd and are now concluding the terms and conditions of the McKean subcontract order.

They were issued with a Letter of Intent on 4 August 09 which was revised on the 8 March 10 to include Tower Place Bridge and Lindsay Road Retaining Wall and further updated on the 22 September 2010

The method of delivery for the remaining areas (Sections 1A1 and 1A2) is currently under review.

BBUK intend to extend Crummock's involvement down from Foot of the Walk to Port of Leith (1A3).

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Section 1B

BBUK are concluding terms and conditions with Crummock Ltd over Section 1B.

Section 1C

Crummock have submitted their price for 1C1 (MacDonald Road - London Road) and Infraco are currently reviewing this.

BBUK are concluding terms and conditions with Mackenzie Construction Ltd over section 1C3 (Castle Street - Waverley Bridge).

Crummock carried out a smaller section of works under the PSSA between the Mound and Waverley Bridge up to the underside of the new surfacing.

The surfacing works were carried out by Mackenzie.

Section 1D

Final negotiations are proceeding with MacKenzie to conclude a Sub-Contractor order.

Section 2A and 5A (Part)

Final negotiations have concluded with Grahams over the terms of their subcontract.

Section 5A (Part), 5B and 5C (Part)

BBUK intend to sublet the remaining structures on Sections 5A, B and C to Expanded Ltd. Discussions continue over finalising programme and terms and conditions.

BBUK have subcontracted the lining of the sewer at Water of Leith to McAllister Bros Ltd.

BBUK have subcontracted the drainage and ducting between Balgreen Tramstop and Carricknowe Bridge to Land & Building Services Ltd.

BBUK have subcontracted the construction of the OLE foundations between Balgreen Tramstop and Carricknowe Bridge to Border Rail Ltd.

Section 6

BBUK have concluded the procurement process for Section 6.

Section 7A

BBUK have concluded the procurement process for Section 7A.

General

The Sections above identified by BBUK represent sections which have been developed for the purposes of procurement only and do not necessarily represent any reference to sections within the Infraco Contract.

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Procurement of relevant key Sub-Contractors (Major Civil Works Contractors, Piling Contractors, Ground Stabilisation Specialists) includes the requirement for provision of a Collateral Warranty, in accordance with Clause 28.7 of the Infraco Contract.

All current Key subcontractors have agreed to provide a Collateral Warranty in advance of executing their subcontracts.

Infraco may need to offer *tie*, in some instances, alternative wording for their Collateral Warranty agreement, as Infraco have not as yet been able to agree with our Key Sub-Contractors using the template in Schedule 8 Part F.

We have requested adjustments to the Collateral Warranty for Barr and Grahams and we are working to conclude this with *tie*.

The length of time it has taken to either procure, negotiate and conclude any Sub-Contract has been affected by the complexity of the main contract negotiations and how Infraco and *tie* require step down into the subcontract, the necessity to operate a complex milestone schedule which can be adversely affected by progress and change on site and the overall uncertainty on an approved realistic Programme.

There are a number of ongoing issues raised by *tie* (and not agreed by Infraco) relating to Key subcontractors and the requirement to achieve approval pursuant to Clause 28.4 of the form of subcontract which is preventing BBUK from executing any key subcontract. This issue has been raised to Dispute and a decision has been reached. Infraco is currently considering that decision.

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4.1.3 Civil & Building Construction

Progress on site to 18 February 11
 Reported against - Update Programme for Period 3.12
 Referenced against - Accepted Revision 1 Programme
 Duration % Complete (Work Days)

Section	Completion Dates - Update Programme Data Date 31-10-09 Scope to 31-03-10	Planned Progress Update Programme to 18-02-2011	Previous Progress to 21-01-2011	Actual Progress to 18-02-2011	Anticipated Completion Dates - Update Programme Progressed to 18-02-2011. Resource Levelled	Completion Dates - Accepted Programme Revision 1 Data Date 28-09-07	Planned Progress Programme Revision 1 to 18-02-2011	Anticipated Completion Dates - Accepted Programme Revision 1 to 18-02-2011
1A	04/06/2013	32.69%	10.00%	10.00%	04/12/2013	07/03/2011	98.16%	14/08/2013
1B	10/05/2013	39.78%	3.00%	3.00%	03/02/2014	05/11/2010	100.00%	30/04/2013
1C	17/05/2013	30.07%	1.00%	1.00%	18/02/2014	11/03/2011	97.73%	24/07/2013
1D	02/04/2013	75.49%	48.00%	48.00%	16/10/2013	17/09/2010	100.00%	28/02/2013
2A	31/08/2012	50.27%	33.00%	33.00%	04/06/2013	03/03/2010	100.00%	08/08/2012
5A	24/05/2013	31.72%	7.00%	7.00%	23/10/2013	20/12/2010	100.00%	11/06/2013
5B	11/10/2012	65.04%	39.00%	39.00%	20/05/2013	31/08/2010	100.00%	12/02/2013
5C	21/05/2012	43.32%	29.00%	30.67%	06/12/2012	20/09/2010	100.00%	12/03/2013
6	05/07/2013	43.54%	73.00%	79.94%	25/10/2011	01/06/2010	100.00%	03/07/2012
7	23/04/2012	63.62%	57.00%	57.00%	16/10/2012	05/10/2010	100.00%	19/03/2013
Constn	Section C 24/05/2013	47.55%	30.00%	30.86%	Section C 11/03/2014	Section C 10/03/2011	99.59%	Section C 14/08/2013
	Section D 20/11/2013				Section D 07/09/2014	Section D 06/09/2011		Section D 10/02/2014

Percentages shown are for all Infraco Works.
 Programme Revision 1 has fixed logic.
 The Update Programme is resource levelled.

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**4.1.3.1 Section 1A Newhaven Road to Foot of the Walk
Lindsay Road Retaining Wall**

Progress

Erection of formwork, fixing of reinforcement and placing of concrete to available cope sections has been completed in the period. Parapet rails have been erected on completed areas.

Issues and Concerns

Completion of structure is dependent on partial completion of Lindsay Road Realignment and agreement to the revised construction sequence on panels A3 – A6.

IFC scope of works anticipated completion date is now 20 June 11, 105 weeks later than indicated on Programme Rev 1.

Lindsay Road Realignment

Progress

No activities carried out during the period.

Issues and Concerns

An approved permit to commence has not been issued by *tie*.

IFC scope of works anticipated completion date is 12 January 12, 151 weeks later than indicated on Programme Rev 1.

Trackwork - Newhaven to Ocean Terminal

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

Commencement date is dependent on completion of utility diversions by *tie*.

IFC scope of works completion date is 27 March 13, 144 weeks later than indicated on Programme Rev 1.

Newhaven Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 3 May 12, 84 weeks later than indicated on Programme Rev 1.

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Leith Sands Sub Station

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 21 June 11, 39 weeks later than indicated on Programme Rev 1.

Ocean Terminal Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 25 January 13, 151 weeks later than indicated on Programme Rev 1.

Trackwork - Ocean Terminal to Port of Leith

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

Commencement date is dependent on completion of utility diversions by *tie*.

Completion date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on agreement of change from BDDI to IFC.

Change estimates on utility transferred by *tie* have not been agreed.

IFC scope of works completion date is 22 March 13, 122 weeks later than indicated on Programme Rev 1.

Victoria Bridge

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on agreement of change from BDDI to IFC.

Completion date is dependent on completion of utility diversions by *tie*.

IFC scope of works completion date is 7 March 13, 127 weeks later than indicated on Programme Rev 1.

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Tower Place Bridge

North Widening

No activities carried out during the period.

Issues and Concerns

An approved permit to commence has not been issued by *tie*.

Licence application to Forth Ports has not been submitted by *tie*.

IFC scope of works completion date is 27 May 11, 58 weeks later than indicated on Programme Rev 1.

Acceptance of design of east run on slab/step/ramp detail unresolved

Trackwork – Port of Leith to Bernard Street

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

Track work & carriageway changes from BDDI to IFC have yet to be agreed.

Change estimates on utility transferred by *tie* have not been agreed.

Commencement date is dependent on completion of utility diversions by *tie*.

IFC scope of works anticipated completion date is 13 November 13, 199 weeks later than indicated on Programme Rev 1.

Port of Leith Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 27 August 12, 126 weeks later than indicated on Programme Rev 1.

Trackwork – Bernard Street to Foot of the Walk

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

Change estimates on utility transferred by *tie* have not been agreed.

Commencement date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on completion of archaeological works by *tie*.

IFC scope of works anticipated completion date is 21 August 13, 155 weeks later than indicated on Programme Rev 1.

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Bernard St Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 28 October 13, 160 weeks later than indicated on Programme Rev 1.

Section 1B Foot of Leith to McDonald Road

Foot of the Walk to Balfour Street

Progress

No activities carried out during period.

Issues and concerns

IFC scope of works anticipated completion date is 19 November 13, 197 weeks later than indicated on Programme Rev 1.

Commencement date is dependent on agreement of change from BDDI to IFC.

Balfour Street to McDonald Road

Ch 110630 - 110920

Progress

No activities carried out during the period.

Issues and Concerns

Change estimates on utility transferred by *tie* have not been agreed.

Commencement date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works anticipated completion date is 3 February 14, 171 weeks later than indicated on Programme Rev 1.

Leith Walk Sub Station

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 18 October 11, 83 weeks later than indicated on Programme Rev 1.

Foot of the Walk Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

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IFC scope of works completion date is 12 April 13, 161 weeks later than indicated on Programme Rev 1.

Balfour St Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 20 June 12, 110 weeks later than indicated on Programme Rev 1.

4.1.3.3 Section 1C McDonald Road to Princes St Trackwork McDonald Road to Picardy Place

Progress

No activities carried out during the period.

Issues and Concerns

Change estimates on utility transferred by *tie* have not been agreed.

Commencement date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works anticipated completion date is 19 August 13, 149 weeks later than indicated on Programme Rev 1.

McDonald Rd Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 3 August 12, 113 weeks later than indicated on Programme Rev 1.

Picardy Place Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 11 April 13, 134 weeks later than indicated on Programme Rev 1.

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Trackwork Picardy Place to St Andrew Square

Progress

No activities carried out during the period.

Issues and Concerns

Change estimates on utility transferred by *tie* have not been agreed.

Commencement date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works anticipated completion date is 13 September 13, 131 weeks later than indicated on Programme Rev 1.

Cathedral Lane Sub Station

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 10 January 12, 69 weeks later than indicated on Programme Rev 1.

St Andrew Square Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 20 October 11, 92 weeks later than indicated on Programme Rev 1.

Trackwork St Andrew Square to Princes St West

Progress

No activities carried out during the period.

Issues and Concerns

Change estimates on utility transferred by *tie* have not been agreed.

Commencement date is dependent on completion of utility diversions by *tie*.

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works anticipated completion date is 14 February 13, 153 weeks later than indicated on Programme Rev 1.

Bilfinger Berger – Siemens – CAF Consortium

Trackwork Waverly Bridge to Castle Street

Progress

Safety critical remedial works have been carried out during the period.

Issues and Concerns

Numerous elements of construction have yet to be completed.

Princes St Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Completion date is dependent on agreement of change from BDDI to IFC.
IFC scope of works completion date is 11 December 11, 64 weeks later than indicated on Programme Rev 1.

4.1.3.4 Section 1D Princes Street to Haymarket

Trackwork Castle Street to Lothian Road

Progress

Safety critical remedial works have been carried out during the period.

Issues and Concerns

Numerous elements of construction have yet to be completed.

Trackwork Lothian Road to Haymarket

Progress

No activities carried out during the period.

Issues and Concerns

Change estimates on utility transferred by *tie* have not been agreed.
Commencement date is dependent on agreement of change from BDDI to IFC.
IFC scope of works anticipated completion date is 10 September 12, 105 weeks later than indicated on Programme Rev 1.

Shandwick Place Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement is dependent on agreement of change from BDDI to IFC.
IFC scope of works completion date is 9 February 12, 108 weeks later than indicated on Programme Rev 1.

4.1.3.5 Section 2A Haymarket to Roseburn Junction

Haymarket Tram Stop

Progress

No activities carried out during the period.

Bilfinger Berger – Siemens – CAF Consortium

Issues and Concerns

Commencement is dependent on agreement of change from BDDI to IFC.
IFC scope of works completion date is 31 August 11, 123 weeks later than indicated on Programme Rev 1.

Haymarket Station Viaduct

Progress

No activities carried out during the period.

Issues and Concerns

IFC scope of works anticipated completion date is 23 September 11, 132 weeks later than indicated on Programme Rev 1.

Completion is dependent on agreement of change to trackwork/roadworks on Haymarket Yards

Haymarket Sub Station

Progress

No activities carried out during the period.

Issues and Concerns

Commencement is dependent on agreement of change from BDDI to IFC.
IFC scope of works completion date is 30 September 11, 119 weeks later than indicated on Programme Rev 1.

Trackwork Haymarket to Russell Road

Progress

No activities carried out during the period.

Issues and Concerns

Completion is dependent on agreement of change BDDI to IFC
IFC scope of works anticipated completion date is 20 July 12, 143 weeks later than indicated on Programme Rev 1.

4.1.3.6 Section 5A Roseburn Junction to Balgreen Road

Russell Road Bridge

Progress

No activities carried out during the period.

Issues and Concerns

Commencement is also dependent on agreement of change for protection measures to existing gas main.

Commencement date is dependent on agreement of change to revised temporary works, soil nailing

Commencement is dependent on agreement of additional requirements required by Network Rail for inclusion within the track monitoring plan.

Commencement is dependent on agreement of change to revised pile cap and pile construction

IFC scope of works anticipated completion date is 7 December 11, 141 weeks later than indicated on Programme Rev 1.

Bilfinger Berger – Siemens – CAF Consortium

Russell Road Retaining Walls W3 & W4

Progress

No activities carried out during the period.

Issues and Concerns

Commencement of panels 1 - 9 is dependent on resolution of additional Scotrail requirements regarding specification of car park barrier system.

Commencement of panels 19 - 28 is dependent on agreement of change to Plot 97.

Commencement of panels 1 – 9 and 19 - 28 is dependent on agreement of change for alternative piling and pile cap construction.

Commencement is dependent on agreement of change for dealing with contaminated ground.

IFC scope of works anticipated completion date is 21 January 13, 168 weeks later than indicated on Programme Rev 1

Murrayfield Tram Stop Retaining Wall

Progress

No activities carried out during the period.

Issues and Concerns

Commencement is dependent on resolution of plot 101 issue.

Commencement is dependent on agreement of change for dealing with contaminated ground.

SW revised connection requirements may delay commencement of drainage

IFC scope of works anticipated completion date is 23 November 12, 186 weeks later than indicated on Programme Rev 1.

Murrayfield Tram Stop

Progress

No activities carried out during the period.

Issues and Concerns

Commencement is dependent on agreement of change from BDDI to IFC.

IFC scope of works completion date is 14 August 13, 161 weeks later than indicated on Programme Rev 1.

Track work Russell Road to Murrayfield Stadium

Progress

No activities carried out during the period.

Issues and Concerns

Commencement date is dependent on agreement of change from BDDI to IFC.

IFC scope of works anticipated completion date is 29 May 13, 156 weeks later than indicated on Programme Rev 1.