Edinburgh Tram Network

SDS Progress Report -Period 2

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Revision History

Ver No	Date	Description	Prepared By
11	08 May 09	Monthly Update	S. Ney

Distribution

Ver No	Date	Name	Role	Company
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1 TOP ISSUES

- 1. May October Extended Construction and Design Support payment
- Construction Programme
- 3. Revised Forth Ports Agreement
- 4. Instructions for Mandatory Project Changes
- Resolution to Outstanding SDS Changes
- 6. TRO Strategy Change by tie
- 7. Office Move Instruction

2 COMMERCIAL

2.1 General

This report covers Period 25TH April 09 to 23rd May 09. The progress is detailed for the time period of 25TH April 09 to 05rd May 09, during which actual events occurred. There are several critical issues outstanding on the project. These are presented per the drawings in Appendix A.

The Instruction for this period, for Extended Construction and Design support is outstanding, nearly 2 weeks into the period. This is not conducive to reasonable and effective working or resource planning. SDS request that this instruction and next month's instruction are issued imminently.

2.1.1 Applications for Payment

SDS had a tripartite meeting with BSC and tie to discuss the back log of Extended Construction and Design Support issues on 26th March 09. tie are due to consider the outcome of this meeting, and certify the works as appropriate including the hours booked for Administrative support. SDS have not received formal feedback from tie/ BSC from this meeting, and request a confirmation of the resolution.

2.1.2 Change Control

Approximately £1.5 million worth of Change Instruction has been instructed to SDS to date. This is a progression in terms of the change process, and SDS is keen to work on this success to 'unlock' other outstanding changes, and to make the process more efficient for further changes. There remains circa £1.7million change yet to be instructed, which has been estimated as per BSC Change Notices.

2.1.3 ATR's

The ATR process appears to be working now. It could be more efficient if the request and response times from BSC were quicker, in Order to allow SDS to plan work more effectively.



2.2 Summary of Changes

- Changes Identified; 182
- Change Notification Received; 118
- Change Estimates Submitted; 94
- Changes Withdrawn/Closed; 27
- · Change Instructions Received; 32

The OLE Bases changes for Section 1 have been outstanding an Order for some time. SDS request that BSC confirm exactly how they require the Proforma to change (since the value is agreed as per BSC letter), to enable the Change Orders to be issued.

2.3 Programme

Version 44 of the SDS programme was provided to BSC at the beginning of Period 2. Next update will be at Period 3.

3 APPROVALS

3.1 General

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

From a total of 220 planning and technical approvals:

- 85% are approved (187).
- 13% are pending approval (28).
- 2% are to be submitted (5).

Current status (today) is:

92% Planning Approvals granted.

79% Technical Approvals granted.

The remaining outstanding approvals are either to be approved immanently, or have been subject to re-prioritisation and long standing changes, which has caused the original dates to slide significantly.

To get to 100%, we need to unblock/overcome key obstacles:

- Commercial BSC to issue change orders on Murrayfield Turnstiles and accommodation Works, West Pilton tram stop and Gogarburn tram stop Prior Approvals.
- Roads Approvals and Prioritisation Sections 1C2, 6A, and 3 need to be reviewed and approved by CEC. SDS understand that this is being completed in line with a prioritisation list.



The CEC/tie/BSC/SDS Approvals Task Force continues to meet every other week and is proving to be a productive catalyst for troubleshooting any Approval issues and clearly identifying actions for the group to resolve.

Additionally, various changes being instructed as part of the approvals process will also require updates to the planning approvals. These items will be included in this report upon receipt of the formal instructions.

The Approvals Look Ahead and Approvals Trackers are emailed to BSC (Stefan Rotthaus) on a weekly basis.

3.2 Systemwide

Scottish Water Approval/Consents. Vital that approval and consent of SDS design is
obtained from Scottish Water. SW Technical Approval Engineer now visiting PB offices
with view to working through drainage drawings with SDS Roads/Drainage Design
Teams. Formal process now agreed and SDS has re-submitted to Business Stream
and SW all technically accepted designs available for formal approval.

Interfaces between SDS and BSC to formalise and complete designs for the following:

Earthing & Bonding - PB are concerned that the proposal issued in the Design
Amendment Sheet for Haymarket Viaduct earthing & bonding differs from that shown
in the earthing & bonding presentation from BSC on the 19th Sep 08, PB requested a
copy of the presentation for comparison. BSC to supply. Information received during
meetings also indicates that the earthing and bonding related to stray current may be
changing from that presented in the trackwork presentation.

3.3 Section 1

3.3.1 Outstanding - Planning

Planning Approvals:

Bypass Road batch (1/02) being held by CEC due to issues with Forth Ports (not SDS design). Notification of change issued to SDS and estimate being generated.

Building Warrants:

Cathedral Lane substation. Package submitted. Awaiting CEC final approval.

3.3.2 Outstanding - Technical

- 1C2, Roads with CEC.
- 1A3 Roads in design development. Bypass (Road 8) Road on hold per tie instruction to BSC (see tie email – D. Sharp on 02 April 09). Notification of change issued to SDS and estimate being generated.
- 1A1, 2, 4 SW Approvals. Information with Business Stream and SW for formal approval.
- 1A3 SW Approvals dependent upon resolution of change highlighted above for Road
 8.



- 3.3.3 Subsection 1A1 Dock Gates to Foot of the Walk
 - a) Roads, Street Lighting, Landscaping, Drainage 1A1
 - Revised IFC's issued.
 - · Change due to new demarcation request by CEC required.
 - Design with Business Stream and Scottish Water for formal approval.
 - · Closeout Report issued to CEC.
 - b) Tram Stop Bernard Street (Ch 102+240)
 - IFC issued.
 - c) Tram Stop Foot of the Walk (Ch102+700)
 - IFC issued.
- 3.3.4 Subsection 1A2 Victoria Docks Entrance Bridge to Dock Gates
 - a) Roads, Street Lighting, Landscaping, and Drainage
 - · Revised IFC's issued.
 - · Change due to new demarcation request by CEC required.
 - · Design with Business Stream and Scottish Water for formal approval.
 - Closeout Report issued to CEC.
 - b) Tram Stop Port of Leith (Ch 101+780)
 - · IFC already issued.
 - c) Victoria Dock Entrance Bridge S16 (Ch 101+370)
 - IFC already Issued.
 - d) Tower Place Bridge S17 (Ch101+470)
 - IFC already Issued.
- 3.3.5 Subsection 1A3– Ocean Terminal to Victoria Docks Entrance Bridge
 - a) Roads, Track, Street Lighting and Landscaping
 - Forth Ports Final agreement between CEC and Forth Ports on the proposed bypass road (Road 8) pending.
 - SDS has requested copy of agreement with Scottish Government and designs for the
 movement of the access gate to the Scottish Government complex with Forth Port has
 indicated is being completed.
 - Section 1A3 Batch 1/02 has received Prior Approval.



- Batch 1/02A (Bypass Road) Planning Approval is being held by CEC for issues relating to Forth Ports agreement. This has continued to delay Planning Approval, technical approval, and IFC.
- SDS received copy of email from tie (D. Sharp) on 02 April 09 notifying that a change will be issued to relocated Road 8. SDS work on hold (at tie request) until instruction issued.
- b) Drainage Subsection 1A3 Ocean Terminal to Port of Leith
 - Under development with Roads design. Affected by pending change above.
- c) Tram Stop Ocean Terminal (Ch 100+950)
 - Under development in accordance with approved Prior Approval and emerging roads design.

3.3.6 Subsection 1A4

- a) Roads, Track, Street Lightning and Landscaping Subsection 1A4 Newhaven to Ocean Terminal
 - IFC Issued (without pending changes noted below).
 - Change due to new demarcation request by CEC required.
 - New change due to new cycleway connection outside LOD requested by CEC.
 - New change due to traffic signal modification outside LOD requested by CEC.
 - New change due to CEC comment as part of the Roads approval to provide connection from high level to lower level.
 - New change due to tie request for feasibility study for new access road. Instruction received and work underway.
 - Closeout report issued to CEC (not including new changes noted above).
- b) Drainage Subsection 1A4 Newhaven to Ocean Terminal
 - · Prior Approval granted.
 - Forth Ports have completed construction of a new substation and access drive through this area. No as-built information available. SDS has requested change (DCR0111) to cover revised design requirements (ref. letter ULE90130-01-LET-00880).
 - Design with Business Stream and Scottish Water for formal approval.
- c) Tram Stop Newhaven (Ch 100+080)
 - IFC issued.
- d) Lindsay Road Retaining Wall W1 (Ch 100+170)
 - IFC issued.
 - New change due to CEC comment as part of the Roads approval to provide connection from high level to lower level (see 3.3.6a above). CEC has previously approved this structure as part of the agreed review process (CEC structures).



- e) Substation Leith Sands SS16 (Ch 100+570
 - New change due to Forth Ports having completed construction of a new substation and access drive through this area. No as-built information available. SDS has requested change (DCR0111) to cover revised design requirements (ref. letter ULE90130-01-LET-00880).

3.3.7 Subsection 1B

- a) Roads, Track, Drainage, Street Lighting, Landscaping, and Drainage Subsection 1B
 - IFC Issued.
 - Change due to new demarcation request by CEC required
 - · SW approved drainage.
 - Closeout Report Issued to CEC. Acceptance and comments received. SDS reviewing.
- b) Tram Stop Balfour Street (Ch 110+670)
 - IFC already issued.
- c) Substation Leith Walk SS11 (Ch110+380)
 - IFC already issued.
- 3.3.8 Subsection 1C1 Section 1B to north of Annadale Street
 - Roads, Track, Street Lightning, Landscaping, and Drainage Subsection 1C1 London Road
 - IFC already issued.
 - SW approved drainage via email. Design with Business Stream and Scottish Water for formal approval.
 - Closeout Report issued to CEC.
 - b) Tram Stop McDonald Road (Ch110+670)
 - IFC already issued.
- 3.3.9 Subsection 1C2 North of Annadale Street to Broughton Street
 - Roads, Track, Street Lighting and Landscaping Subsection 1C2 London Road to Picardy Place
 - TAA submittal with CEC for approval. SDS submitted supplemental information based on initial comments received from CEC via letter.
 - Prior Approval granted.
 - SW approved drainage via email. Design with Business Stream and Scottish Water for formal approval.
 - Potential change due to works outside LOD on Little King Street.
 - Potential change due to developer request. Estimate being developed.



- b) Substation Cathedral Lane SS12 (Ch120+400)
 - Building Warrant submitted.
 - · Full planning permission granted.
 - Potential change due to developer request. SDS awaiting clarification from tie (via BSC).
- c) Tram Stop Picardy Place (Ch120+600)
 - TAA submittal with CEC for approval. Responding to initial comments from CEC on drainage concept.
 - Prior Approval granted.
 - Potential change due to developer request. Estimate being developed.
- 3.3.10 Subsection 1C3 Broughton Street to Section 1D
 - a) Roads, Track, Street Lighting and Landscaping Subsection 1C3 York Place
 - IFC already issued.
 - SW approved drainage via email. Design with Business Stream and Scottish Water for formal approval.
 - Closeout report issued to CEC. Acceptance and comments received. SDS reviewing.
 - b) Tram Stop Princes Street (Ch121+950)
 - · IFC already issued.
 - c) Tram Stop St Andrews Square (Ch121+150)
 - IFC already issued.
- 3.3.11 Subsection 1D
 - a) Roads, Track, Drainage, Street Lighting and Landscaping Subsection 1D
 - IFC already issued.
 - SW approved drainage.
 - Closeout Report issued to CEC. Acceptance and comments received. SDS reviewing.
 - b) Tram Stop Shandwick Place (Ch130+710)
 - IFC already issued.
- 3.4 Section 2
- 3.4.1 Subsection 2A
 - a) Roads, Track, Street Lighting and Landscaping Subsection 2A
 - · IFC already issued.



- Closeout Report issued to CEC.
- b) Drainage
 - Technical acceptance received from SW via email.
 - Design with Business Stream and Scottish Water for formal approval.
- c) Substation Russell Road SS03 (Ch 200+790)
 - · IFC already issued
- d) Russell Road Bridge S20 (Ch 200+770)
 - · IFC already issued
- e) Substation Haymarket SS02 (Ch 200+070
 - Prior Approval granted and Siemens now to complete the design and issue the IFC.
- f) Tram Stop Haymarket (Ch 200+070)
 - IFC already issued.
- g) Haymarket Station Viaduct S19 (Ch 200+020)
 - · IFC already issued
- h) Verity House Access road retaining wall
 - IFC already issued.

3.5 Section 3

3.5.1 Outstanding – Planning:

Approvals:

- 3/16 West Pilton Tramstop. SDS awaiting Change Order from BSC to proceed with redesign of platform boundaries as specified by CEC Planning. Once this is received, SDS can progress amended design. This is the only issue delaying the granting of Prior Approval.
- 3.5.2 Outstanding Technical:
 - All 6 technical approvals that are with CEC for consideration are currently on hold due
 to the agreed prioritisation list between tie and CEC. SDS is in delay with respect to
 these items.
 - Drainage information submitted to Scottish Water (SW).



3.5.3 Subsection 3A

- a) Roads, Track, Street Lighting and Landscaping Subsection 3A
 - Prior Approval achieved.
 - Roads, Drainage and Street Lighting IFC is outstanding as TAA comments are
 outstanding. Section 3 has been de-prioritised by CEC therefore it is not know at present
 when comments are likely to be received. Letter sent to BSC 08 July 2008. tie responded
 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC.
 tie stated expected IFC submission 09 August 208, which was not achieved. The deprioritisation is apparently as tie to CEC agreement. SDS awaits approval and any
 comments.

b) Drainage

- Submittal with SW for approval.
- Section 3 has been de-prioritised by CEC therefore it is not know at present when
 comments are likely to be received. Letter sent to BSC 08 July 2008. tie responded 07
 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. tie
 stated expected IFC submission 09 August 208, which was not achieved. The deprioritisation is apparently as tie to CEC agreement. SDS awaits approval and any
 comments.
- c) Tram Stop Crewe Toll for Western General (Ch 303+010)
 - · IFC already issued.
- d) Roseburn Corridor Retaining Structure H (Ch 302+600) (Ch 303+030)
 - · IFC already issued.
- e) Tram Stop Telford Road (Ch 302+604)
 - · IFC already issued.
- f) Roseburn Corridor Retaining Structure G (Ch 302+300) (Ch 302+600)
 - · IFC already issued.
- g) Telford Road Bridge S10 (Ch 302+220)
 - · IFC already issued.
- h) Groathill Road South Bridge S09 (Ch 302+010)
 - · IFC already issued.
- i) Substation Craigleith SS13 (Ch 301+960)
 - Prior Approval granted and Siemens now to complete the design and issue the IFC.
- j) Roseburn Corridor Retaining Structure F (Ch301+900) (Ch 302+300)
 - · IFC already issued.



- k) Tram Stop Craigleith (Ch 301+860)
 - IFC already issued.
- l) Queensferry Road Bridge S07 (Ch 301+700)
 - · IFC already issued.
- m) Holiday Inn Access Bridge S07 (Ch 301+630)
 - · IFC already issued.
- n) Roseburn Corridor Retaining Structure E (Ch 301+600) (Ch 301+900)
 - · IFC already issued.
- o) Craigleith Drive Bridge S06 (Ch 301+320)
 - IFC already issued.
- p) Roseburn Corridor Retaining Structure D (Ch 301+200) (Ch 301+600)
 - · IFC already issued.
- q) Ravelston Dykes Bridge S05 (Ch 300+960)
 - · IFC already issued.
- r) Roseburn Corridor Retaining Structure C (Ch 300+900) (Ch 301+200)
 - IFC already issued.
- s) Tram Stop Ravelston (Ch 300+860)
 - · IFC already issued.
- t) St George's School Footbridge S04 (Ch 300+650)
 - · IFC already issued.
- u) St George's School Access Bridge S03 (300+640)
 - · IFC already issued.
- v) Roseburn Corridor Retaining Structure B (Ch 300+500) (Ch 300+900)
 - IFC already issued.
- w) Coltbridge Viaduct S02 (Ch 300+470)
 - · IFC already issued.
- x) Tram Stop Roseburn (Ch 300+260)
 - · IFC already issued.



- y) Roseburn Terrace Bridge S01 (Ch 300+210)
 - IFC already issued.
- z) Roseburn Corridor Retaining Structure A (Ch 300+200) (Ch 300+500)
 - IFC already issued.

3.5.4 Subsection 3B

- a) Roads, Track, Street Lighting and landscaping Subsection 3B
 - Roads, Drainage and Street Lighting IFC is outstanding as TAA comments are
 outstanding. Section 3 has been de-prioritised by CEC therefore it is not know at present
 when comments are likely to be received. Letter sent to BSC 08 July 2008. tie responded
 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC.
 tie stated expected IFC submission 09 August 208, which was not achieved. The deprioritisation is apparently as tie to CEC agreement. SDS awaits approval and any
 comments.
- b) Drainage Subsection 3B
 - Submittal with SW for approval.
 - Section 3 has been de-prioritised by CEC therefore it is not know at present when
 comments are likely to be received. Letter sent to BSC 08 July 2008. tie responded 07
 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. tie
 stated expected IFC submission 09 August 208, which was not achieved. The deprioritisation is apparently as tie to CEC agreement. SDS awaits approval and any
 comments.
- c) Tram Stop Caroline Park (Ch 311+310)
 - IFC already issued.
- d) Substation Granton Mains East SS14 (Ch 310+950)
 - Prior Approval granted and Siemens now to complete the design and issue the IFC.
- e) Tram Stop West Pilton (Ch 310+670)
 - · Awaiting Change Instruction
- f) Crewe Road Gardens Bridge S12 (Ch 310+390)
 - · IFC already issued.

3.5.5 Subsection 3C

- a) Roads, Track, Street Lighting and Landscaping Subsection 3C
 - Roads, Drainage and Street Lighting IFC is outstanding as TAA comments are
 outstanding. Section 3 has been deprioritised by CEC therefore it is not know at present
 when comments are likely to be received. Letter sent to BSC 08 July 2008. tie responded
 07 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC.



tie stated expected IFC submission 09 August 2008, which was not achieved. The deprioritisation is as tie to CEC agreement. SDS awaits approval and any comments.

- b) Drainage Subsection 3C
 - Submittal with SW for approval.
 - Section 3 has been de-prioritised by CEC therefore it is not know at present when
 comments are likely to be received. Letter sent to BSC 08 July 2008. tie responded 07
 August 2008 (SDS received 27 August 2008) accepting there has been delay to IFC. tie
 stated expected IFC submission 09 August 208, which was not achieved. The deprioritisation is apparently as tie to CEC agreement. SDS awaits approval and any
 comments.
- c) Tram Stop Saltire Square (Ch 320+370)
 - · IFC already issued.
- d) Tram Stop Granton (Ch 321+120)
 - IFC already issued.
- e) Substation Granton Road SS15 (Ch 400+020)
 - Prior Approval granted and Siemens now to complete the design and issue the IFC.

3.6 Section 5

3.6.1 Outstanding - Planning:

Approvals:

- 5/06 Murrayfield Stadium Tramstop is pending consideration but on hold. Change Order received and redesign commenced.
- 5/07a Murrayfield Turnstiles and Accommodation Works (Full Planning Permission).
 SDS awaiting Change Order. It is understood that this may be withdrawn by tie.
- 5/30 Tram Stop Gogarburn. SDS awaiting Change Order.

Building Warrants:

- JB McLean submitted, pending consideration. Additional comments received from CEC. SDS preparing revised submittala
- 3.6.2 Outstanding Technical:
 - Balgreen Road Network Rail Access Bridge with CEC and Network Rail for approval.
- 3.6.3 Subsection 5A
 - a) Roads, Track, Street Lighting and Landscaping Subsection 5A
 - · Revised IFC issued.
 - Closeout Report issued to CEC.



- b) Drainage Subsection 5A
 - Technical acceptance received from SW via email.
 - · Design with Business Stream and Scottish Water for formal approval.
- c) Balgreen Road Tram Bridge S22 (Ch 511+400)
 - · IFC already issued
- d) Balgreen Road Network Rail Access Bridge (Ch 511+410)
 - Design issued to Network Rail and CEC.
 - Minor comments received from CEC via email.
- e) Baird Drive Retaining Wall W8 (Ch 511+190)
 - · IFC already issued
- f) Water of Leith Bridge S21E (Ch 511+060)
 - · IFC already issued
- g) Murrayfield Training Pitches Retaining Wall (Ch 510+870) (Ch 511-060)
 - · IFC already issued
- h) Murrayfield Stadium Underpass S21C (Ch 510+860)
 - · IFC already issued
- i) Murrayfield Stadium retaining Wall S21B (Ch 510+650) (Ch 510-870)
 - · IFC already issued
- j) Roseburn Street Viaduct S21A (Ch 510+580)
 - · Change Order Received.
 - · New TAA required.
 - · New Prior Approval required.
 - · Design underway.
- k) Murrayfield Tramstop Retaining Wall W18 (Ch 510-450)
 - Change Order received.
 - · SDS progressing design.
- I) Tram Stop Murrayfield (Ch 510-470)
 - Change Order received.
 - · SDS progressing design.



- m) Russell Road Retaining Wall 1 W3 (Ch 510-200)
 - · IFC already Issued.
- n) Russell Road Retaining Wall 2 W4 (Ch 510-150)
 - IFC already Issued

3.6.4 Subsection 5B

- a) Roads, Track, Drainage, Street Lighting and Landscaping Subsection 5B
 - · Revised IFC Issued.
 - Closeout Report issued to CEC.
 - Pending change for cycleway at Edinburgh Park Station (included in IFC).
- b) Drainage
 - Technical acceptance received from SW via email.
 - · Design with Business Stream and Scottish Water for formal approval.
- c) Tram Stop Edinburgh Park Central (Ch 524+530)
 - · IFC already Issued
- d) Edinburgh Park Station Bridge S27 (Ch 524+010)
 - · IFC already Issued
- e) Tram Stop Edinburgh Park Station (Ch 523+740)
 - · IFC already Issued
- f) Tram Stop Bankhead (Ch 522+960)
 - IFC already Issued
- g) Bankhead Drive Retaining Wall W11 (Ch 522+800)
 - · IFC already Issued
- h) South Gyle Access Bridge S26 (Ch 522+750)
 - IFC already Issued.
 - Pending change at South Gyle Access Bridge.
- i) Substation Bankhead Drive SS22 (Ch 522+580)
 - Prior Approval already Granted, Siemens to complete the design and issue IFC.



- j) Tram Stop Saughton (Ch 521+690)
 - IFC already Issued
- k) Carrick Knowe Underbridge S23 (Ch 521+030)
 - · IFC already Issued
- l) Substation Jenners Depository (Balgreen) SS21 (Ch 520+060)
 - Prior Approval already Granted, Siemens to complete the design and issue IFC.
- m) Tram Stop Balgreen (Ch 520+050)
 - IFC already Issued

3.6.5 Subsection 5C

- a) Roads, Track, Drainage, Street Lighting and Landscaping Subsection 5C
 - · Revised IFC Issued.
 - Closeout Report issued to CEC.
- b) Drainage
 - Technical acceptance received from SW via email.
 - · Design with Business Stream and Scottish Water for formal approval.
- c) Tram stop Gogarbum (Ch 531+860)
 - · On hold as instructed by tie awaiting RBS concept design
- d) Depot Access bridge S32 (Ch531+230)
 - · IFC already Issued.
- e) A8 Underpass S28 (Ch 531+000)
 - · IFC already Issued.
- f) Tram Stop Gyle Centre (Ch 530+770)
 - · IFC already Issued.
- g) Gyle Stop Retaining Wall W19 (Ch 530+750)
 - IFC already Issued.

3.7 Section 6

- 3.7.1 Outstanding Technical:
 - · Roads, Track, Drainage, Street Lighting and Landscaping with CEC for approval.



Drainage design with Business Stream and Scottish Water for formal approval.

3.7.2 Subsection 6A

- a) Roads, Street Lighting & Landscaping Subsection 6 Depot
 - With CEC for Technical Approval. Design being updated based on initial CEC comments.
- b) Drainage Subsection 6 Depot
 - Information with SW for approval.
 - · Design with Business Stream and Scottish Water for formal approval.
- c) Depot Earthworks
 - · IFC already Issued.
- d) Depot Internal Retaining Walls
 - · IFC already Issued.
- e) Depot Ductwork External Services
 - · IFC already Issued.
- f) Depot General Layout
 - · IFC already Issued.
- g) Depot Building Foundations
 - · IFC already Issued.
- h) Depot Main Building
 - · IFC already Issued.
- i) Ground Floor Slab and Pits
 - · IFC already Issued.
- j) Depot Building Steel Superstructure
 - · IFC already Issued.
- k) Track Subsection 6 Depot
 - IFC already Issued.
- l) Depot Halt
 - IFC already Issued.



- m) OLE in Depot
 - IFC already Issued.
- n) Substation Gogar Depot SS01
 - · IFC already Issued.

3.8 Section 7

- 3.8.1 Subsection 7A
 - a) Roads, Track, Drainage, Street Lighting and Landscaping
 - Revised IFC Issued.
 - · Closeout Report issued to CEC.
 - b) Species Mitigation Plan
 - · Issued as approved by SNH
 - c) Tram Stop Edinburgh Airport (Ch 712+560)
 - IFC Issued (less pending changes).
 - New change for Airport Kiosk.
 - New change for Relocation for Burnside Road.
 - New change for Airport Canopy.
 - d) Gogar Burn Retaining Wall Two W14 (Ch 712+220) (Ch 712+570) -
 - · IFC already issued.
 - e) Gogar Burn Retaining Wall One W14 (Ch 712+100) (Ch 712+190)
 - · IFC already issued.
 - f) Gogarburn Culvert Three S34 (Ch712+030)
 - IFC already Issued
 - g) Gogarburn Culvert Two S31 (711+830)
 - IFC already Issued
 - h) Tram Stop Ingliston Park & Ride (Ch 711+740)
 - · IFC already issued.
 - i) Substation Tram Eastfield Road (Ch 711-630)
 - Prior Approval granted. Siemens to issue IFC upon completion of their design.



- j) Gogarburn Culvert One S30 (Ch 711+420)
 - · IFC already Issued
- k) Gogarburn Bridge S29 (Ch 710+400)
 - IFC already Issued

4 ISSUE FOR CONSTRUCTION PROGRESS SUMMARY

As of 5 May 2009, the Issue for Construction packages status is as follows:

From a total of 115 IFC Packages, 100 (87%) have been delivered.

The remaining packages outstanding are being finalised, and have been subject to changes and/or delays due to resolution of comments. It should be noted that several IFC drawings already submitted will require to be updated in line with the emerging changes.

5 UTILITIES

5.1 Utilities

5.1.1 Section 1A

- Section 1A (1-5) IFA drawings issued and SDS seeking SUC and tie approvals...
- Section 1A (6-10) have been issued to the SUC's for approval and approvals being sorted.
- Section 1A (11-12) IFC drawings have been issued to tie.
- Section 1A (13-20) IFC drawings have been issued to tie.

5.1.2 Section 1B

- · IFC drawings have been issued to tie.
- The IDC has been carried out and issued to tie showing the conflicts between the Utilities IFC infrastructure design and the Approved infrastructure design.

5.1.3 Section 1C

- IFC drawings have been issued to tie
- 1C (Picardy Place) tie have requested that SDS compare the IFC design with the
 roads and track layout issued to CEC for approval, The IDC has been carried out and
 issued to tie showing the conflicts between the designs.
- The redesign of the Mound Gas design has been issued IFC.

5.1.4 Section 1D

- · IFC drawings have been issued to tie.
- Haymarket Junction utilities redesign is complete and issued IFC.



5.1.5 Section 2A

IFC drawings have been issued to tie

5.1.6 Section 5A

- IFC drawings have been issued to tie (except Scottish Water Sewers at Water of Leith)
- Water of Leith prier foundation and sewer lining under issued TAA, awaiting tie acceptance of utility design.
- Roseburn St Viaduct Change means that the utility diversions need to be reassessed in proximity to the new structure.

5.1.7 Section 5B

- · IFC drawings have been issued to tie.
- All sewer design issued for IFC except at South Gyle Access, design approved by Scottish Water. SDS have been issue a DCR for redesign of the South Gyle Access Bridge and conflicting sewer and submitted an estimate for the works.

5.1.8 Section 5C

• IFC drawings have been issued to tie.

5.1.9 Section 6A

IFC drawings have been issued to tie.

5.1.10 Section 7A

- 7A was carried out under RATS, tie to supply XYZ coordinate as-builts for comparison to design and issue any required IFC's.
- 5.1.11 Section 7B (utilities only section)
 - Design being carried out by others (not SDS scope)

6 ADDITIONAL CONSTRUCTION SUPPORT

6.1 TQs

TQs received during the reporting period:

- Received; 29
- Responses Issued; 29

Note TQ Register ULE90130-SW-MAT-00080 is provided to BSC on a weekly basis.

6.2 Month Ahead Org Chart and Activities

Proposed staffing for the upcoming month, based on anticipated construction activities from the BSC look-ahead programme is included as Appendix B.



Roads Construction Support Teams

- Support and attendance to section progress meetings
- Section 1B
 - a. Pavement Surveys/Conflict Reporting in an attempt to keep in front of construction works.
- Section 1C/1D
 - a. Princes Street area only, pavement surveys in order to continue conflict reporting in attempt to keep in front of construction works.
 - b. Supervision and consideration of road excavation.
 - c. Monitoring of ongoing activities in line with ITP requirements
 - d. Supervision of Ev2 testing.
 - e. Responding to on site and technical queries as required
 - f. Ensuring compliance with drainage designs
 - g. Ongoing monitoring of installation of ducting and drainage.
- Section 1A
 - Pavement surveys in order to commence conflict reporting in attempt to keep in front of construction works
 - b. Responding to on site and technical queries as required.
- a. Section 7A
 - a. Supervision of road works/car park construction at Hilton Hotel car park area.
 - b. Responding to on site and technical queries as required

Geotech Construction Support Teams

- Section 1C/1D
 - Assistance with GI for trackform ground improvement layer and OLE foundations
- Section 6
 - a. Depot remediation works survey and design
 - b. Ongoing technical support to construction team through Technical Queries
 - c. Attendance at client and package contractor progress meetings
 - d. Monitoring of ongoing activities in line with ITP requirements



Section 7

- a. Ongoing investigations and verifications of ground conditions in line with Farrans programme of works
- b. Ongoing technical support to construction team through technical queries
- c. Attendance at client and package contractor progress meetings as required
- d. Monitoring of activities in line with ITP requirements
- e. Review of value engineering opportunities related OGL

Section 5

- a. Inspection of base formations and embankment profile and track slab foundations.
- b. Ongoing technical support to construction team through technical queries
- c. Review and check suitability of arising for use in make up
- d. Monitoring of activities in line with ITP requirements

Civil and Structural teams

- a. Ongoing review of Construction programmes to ensure appropriate supervision to construction activities.
- b. Attendance at development workshops as required.
- c. Monitor and manage TQ's in and out
- d. Regular Liaison with SEPA for construction activites

Section 1C/1D

- a. Princes Street area only, supervision and consideration of GI survey input for trackform ground improvement layer and OLE foundations
- b. Review of drainage and ducting as installed
- c. Responding to site queries related to Ducting and drainage
- d. Attendance at Contractor and package contractor progress meetings

Section 7

- a. Ongoing inspections of, bridge and culvert concrete works.
- b. Design input to demolition of failed columns
- c. Attendance at Contractor and Package contractor progress meetings
- d. Ongoing technical support to construction teams through technical queries



- Section 5
 - a. Ongoing inspections of piling and bridge works.
 - b. Attendance at contractor and package contractor progress meetings
 - c. Monitoring of construction activities in line with ITP requirements
 - d. Ongoing technical support to construction teams through technical queries

7 DESIGN AND ADDITIONAL DESIGN SUPPORT

7.1 Activities Undertaken

SDS has continued to provide as-needed Additional Design Support to BSC as required and attended several meetings related to various items. Main focus over the past 4 weeks has been around:

- Reviews of emerging BSC OLE designs
- Coordination of requirements for upcoming design for Road Rehabilitation Works
- Coordination of requirements for upcoming design for BSC Trackform integration

7.2 Ongoing Design Issues

- 7.2.1 Airport Tram Stop and Kiosk Area (DCR0095)
 - June 08
 - Section 7A
 - Ongoing coordination for Stop, retaining walls and kiosk BAA has not approved the layout or land take for the area. tie to pursue.
 - SDS has received a change notice for alterations to the kiosk design which has been estimated. BSC to consider and issue Change Order to SDS.
 - SDS resubmitted the Change Estimate on 4th December 2008, 9th December 2008 and 7th January 2009 with additional information as requested by BSC.
 - SDS is due to attend a meeting with tie and BSC to discuss outstanding engineering issues at the Airport on 12 December 2008.
 - Revised estimate submitted 03 Feb 09.
 - Update meeting held 24 March 09.
 - Change Order required as a matter of urgency.
- 7.2.2 Ocean Terminal Area Including Bypass Road (DCR0100)
 - 29 Jul 2008
 - Section 1A-3
 - Re-design to agreed standards of CEC and Forth Ports to be instructed by tie. Meeting
 to be held on 12th August between CEC, tie and Forth Ports to agree to standard.
 Impact on PA, TA and IFC.



- Meeting between CEC and Forth Ports 15 August. SDS yet to be briefed.
- SDS verbally noted that Forth Ports Employer's Requirements for the Bypass Road have been agreed. Client notice of Change received.
- Letter provided to BSC outlining issues for passing on to tie / CEC.
- Forth Ports / tie confirm no movement of track is desired, although change identifies 300mm shift.
- Meeting to go through TQs on 5 November 2008.
- SDS submitted estimate of Change.
- SDS received closeout for TQ. Await supplementary information to be provided (Scottish Government agreement and access gate design, Forth Ports drainage info).
- Prior Approval application submitted 12 December 2008. Comments received from CEC via email on 08 January 2009.
- Change order received.
- SDS provided updated agreement drawings for review / comment. No comments received to date.
- Finalised Forth Ports (revised) agreement required for confirmation of design.
- Confirmation of Scottish Government gate relocation required to complete design.
- CEC currently holding Planning Application due to negotiations with Forth Ports.
 Design completed to current instruction. Planning approval required to complete design. Change order required if requirements due to Planning change.
- Meeting held between tie, CEC, Forth Ports on 12 March to discuss Planning Issues.
- CEC informally issued letter to SDS regarding the requirements as outcome of the meeting. Formal receipt of letter awaited.
- SDS reviewing letter and requirements for incorporation into design.
- Planning approval resubmitted 20 March 09.
- tie / FP meeting 20 March indicates that FP wish to further renegotiate agreement of location of bypass road due to CEC comments on planning.
- SDS provided to tie on 27 March 09 with rough estimate of programme and cost impacts related to implementing change at this point.
- SDS requested via email from tie on 02 April 09 to hold design pending immanent new change for location of Road 8.
- SDS requested by tie via email (A. Sim) to provide summary of design changes to FP Employers Requirements. Email sent to **tie**.
- SDS received client notification of change on 27 April 09. SDS developing change estimate.
- Change order required. Design on hold.

7.2.3 Picardy Place

- 29 Jul 2008
- Section 1C-2



- Layout generally agreed with Roads Authority at coordination meeting 06th August pending confirmation of updated modelling results. CEC to advise any further TAA issues. Impact on PA, TA and IFC.
- CEC planning desire 6no. additional cross sections as advised 01-September 08 via email.
- CEC Planning have provided no feedback on plaza concept provided for informal comment
- Informal Consultation drawings issued to CEC 26th Sep '08. Meeting to finalise PA on 02 Oct '08.
- Informal meeting of tie / CEC / SDS on 30 September 2008 where CEC identified new constraints with hotel.
- Informal meeting with CEC on 1st October 2008 to discuss design development. SDS issued letter on 2 October 2008.
- Prior Approval meeting on 2 October 2008. SDS issued information to CEC via email.
- Prior Approval issued on 17 October 2008.
- Comments on Prior Approval received informally from CEC on 30 October 2008.
- Technical Approval issued on 3rd November 2008. SDS responding to initial comments from CEC on TAA submittal.
- CEC informally noted to SDS on 20 November 2008 that they may wish to change Roads layout.
- Prior Approval including CEC comments re-submitted on 28 November 2008.
- TAA including CEC comments resubmitted on 28 November 2008.
- Updated Planning drawings submitted 05 December based on advance TAA comments received.
- Road Safety Audit and Tram Stop submitted to CEC on 12 December 2009.
- Meeting on 15 January 09 with CEC to discuss potential comments and provide clarifications.
- Meeting on 21 January 2009 to discuss CEC modelling concerns. No response from CEC on information provided.
- Email from CEC on 30 March 09 indicates potential CEC change to layout of the area.
 Clarification required.
- SDS received change notice from BSC. SDS reviewing and preparing estimate.
- tie requested this change be included on w/e 08 May Design Changes meeting.
- CEC identified that they have issue with operation of junction based on CEC internal
 modelling. Junction is designed to instruction provided and subsequent discussions
 during design development. SDS have doen significant advance modelling and have
 advised CEC of potential issue in advance of CEC raising the issue.

7.2.4 West Pilton Tram Stop (DCR0105)

- 30 Jul 2008
- Section 3B
- SDS has issued a Change Request to BSC and awaits further instruction.



- BSC to provide a change notice to SDS to request an estimate for works.
- Change notice received. SDS developing change estimate.
- SDS requested to provide revised estimate and additional justification as to the reason for change.
- Additional justification provided to BSC via letter on 19 March 09.
- SDS require closure on outstanding change.

7.2.5 New Ingliston Limited (NIL) (DCR0134)

- 04 Sept 2008
- Section 7A
- SDS awaits information from NIL's designer, Faber Maunsell, prior to being able to complete the Change Scope.
- SDS progressing design solution as possible.
- tie took action on Tuesday 29th November 08 meeting to instruct change in design to Gogar Mains Farm Access and to chase NIL for inputs to enable design to develop. tie have since met with NIL.
- SDS received change notice with increased scope of work.
- SDS submitted supplemental estimate based on new scope of work w/e 27 Feb 09.
- tie requested meeting to discuss current status.
- Meeting held 26 March 09.
- Revised estimate provided to BSC 23 April 09.

7.2.6 New Technical Approval – 5B Roads (DCR0092)

- 11 Sept 2008
- Section 5B
- Change of cycle route requested at Edinburgh Park Station Interchange. Notification of Change issued by SDS to BSC. BSC to instruct Change and request estimate.
- SDS issued drawing to BSC / tie for cycling concept.
- Change notice received.
- Change estimate submitted 27 March 09.

7.2.7 CEC preference for Demarcation between Tramway and Roadway (DCR0136)

- 09 Sept 2008
- Section 1
- CEC design comment unresolved as CEC need to determine preferred method of demarcation. Cost implications being discussed between tie and CEC. SDS awaiting resolution. Action with tie / CEC.
- SDS / BSC attended meeting on 11 November 2008 at the request of tie to discuss potential options proposed by tie / CEC.
- Samples placed by tie in Haymarket Car Park 14 November 2008.



- Draft letter received from CEC noting acceptance of imprinted concrete and desire to change concept at various locations.
- CEC note this as open issue in Section 1B, affecting closeout.
- SDS received letter directly from CEC outlining changed requirements.
- No further action to be taken by SDS until instructed with requirements.
- SDS submitted letter to BSC on 22 January 2009. SDS requested to revise estimate.
- Change Notice received.
- SDS submitted change estimate w/e 27 Feb 09.
- SDS awaiting completed report from PRIMSO before completing safety assessment.
 tie to provide.
- SDS received letter from BSC requesting information. SDS provided response letter.
- SDS received completed PRISMO report from tie on 17 March.
- SDS received letter from BSC on 23 March 09. Response provided under letter cover 29 April 09.
- Change order required.
- Discussed at Change Meeting on 23 April. SDS to provided substantiation on suitability of original SDS design 29 April 09.
- 7.2.8 Transdev comments on 5C Technical Approval Roads (DCR0102)
 - 17 Sept 2008
 - Section 5C
 - Transdev have written a paper on the design at Edinburgh Park. SDS has notified BSC of Change and will review paper when instructed.
 - SDS received response to letter from BSC. SDS has returned response confirming position that change is required.
 - Change Notice received. SDS submitted estimate w/e 27 Feb 09. SDS requested to provide revised estimate.
- 7.2.9 TRO Drawings (DCR0083, DCR0110, DCR0119)
 - 17 Oct 2008
 - Section 1
 - tie (Keith Rimmer) informally handed SDS marked up drawings catching fundamental changes to kerb lines for drawings already approved by CEC and in some instances, Issued For Construction to BSC. Change Order required.
 - These drawings must be formally submitted to SDS under cover of tie letter for audit trail and QA / QC procedures.
 - Discussion is required prior to execution of design work with the priority of Section 1B
 as changes to the Technical Drawings (i.e. gullies / kerbs etc) will need to be
 immediately instructed to BSC as construction work is already ongoing.
 - Additional work outside the LOD arising from drawing mark-ups.
 - Informal meeting with CEC on 14 November 2008 to discuss the mark-ups.



- SDS provided updated responses to Public Exhibition comments on 08 January 2009.
- SDS prepared scope and estimate for Changes (DCR0110)
- tie / CEC request final drawings for public deposit to be provided before Christmas.
 CEC have indicated that they have not yet reviewed sections 2-7. CEC indicate that they wish TAL 5/05 to be modelled. SDS yet to be instructed to use TAL 5/05, and have previously advised of potential issues which may arise.
- SDS advised tie via email on 08 January 2009 about issues arising from TAL5/05 and need for change order to SDS.
- BSC requested a meeting for discussion of TRO changes. BSC to advise.
- Change notices received, SDS submitted estimates w/e 27/02/09.(DCR0083, DCR0119)
- SDS received letter on 24 March 09.
- SDS has requested meetings with BSC to discuss, however these have been cancelled by BSC prior to meeting.
- Discussed at change meeting on 23 April 09. Agreed that higher level meeting to be scheduled to resolve commercial issue, as there is a fundamental disagreement with tie. SDS awaits meeting to be scheduled.

7.2.10 Operator Comments

- 21 Oct 2008
- System-wide
- At the Design Assurance Presentation, SDS and BSC were informed that Transdev are currently undertaking Operator reviews of the Design. Any changes arising out of this must be instructed via the Change Control procedure.
- 2A Operational Review was on Thursday 30th October 2008. BSC could not attend.
- 6A Operational Review was on Wednesday 29 October 2008. BSC in attendance (Colin Brady).
- There is an ATR outstanding for attendance at these meetings and any future meetings.
- Letter from BSC received on 02 March 09. SDS to formally respond indicating that no revisions to be made unless formally instructed.
- SDS provided response letter to BSC on 09 March 09 (our ref ULE90130-SW-LET-01442)

7.2.11 Wider Area Cycling Study

- 12 Nov 2008
- System wide
- tie (Keith Rimmer) informally notified SDS that inputs / assistance for a wider area
 cycling strategy are desired. ATR requested 12 November 08. SDS awaiting response
 before any work will take place.
- tie (G. Murray) requested information via email 24 Feb 09 on signing details. SDS responded for queries within LOD. SDS requested to tie via email on 26 Feb 09 (S. Ney to G. Murray) that any requirements be moved through BSC moving forward.



7.2.12 Airport Kiosk Canopy (DCR0146)

- 26 November 2008
- Section 7A
- tie advised SDS that they would be instructing SDS to design, and BSC to procure and install a canopy over the kiosk at the Airport. Change Notice to be issued ASAP including details of BAA CCRC Scheme.
- Change notice received. SDS submitted estimate w/e 27/02/09.
- Update meeting held 24 March 09.

7.2.13 Cycle Connection at Hawthornevale (DCR0141)

- Section 1A
- CEC requested new cycleway connection outside LOD. Change order required.
- Change estimate submitted w/e 27 Feb 09.
- Discussed at 23 April 09 change meeting. tie to review and respond.

7.2.14 Traffic Signal Upgrade – Western Harbour Access (DCR0147)

- Section 1A
- CEC requested works to pedestrian crossing outside LOD / Section 1 as part of comments. Change order required.
- Change estimate submitted w/e 27 Feb 09.
- Discussed at 23 April 09 change meeting. tie to review and schedule meeting with SDS / BSC to understand reasoning.

7.2.15 New access from Lindsay Road (DCR0142)

- Section 1A
- CEC requested additional access from high level at Lindsay Road to Mill Road, not previously included in Forth Ports agreement or commented at CEC Structures Approval. Change order required.
- SDS asked to provide further justification as to reason for change.
- SDS provided email containing required information. Formal letter provided.
- Discussed at 23 April 09 change meeting. tie to review and respond.

7.2.16 Section 1B Closeout

- Section 1B
- · CEC provided letter closing out 1B.
- New informatives included which must be closed during construction with procurement of items.

7.2.17 Section 1D Closeout

Section 1D



- CEC provided letter closing out 1D.
- New informatives included which must be closed during construction with procurement of items.

7.2.18 Substation in Forth Ports

- Section 1A4
- SDS require change order to verify as-built conditions of newly constructed Forth Ports substation to determine any impacts on the tram design.

7.2.19 Depot Sand Plant and Paint Shop Design

- Section 6
- The requirements of the BSC proposals for the Sand Plant and Paint Shop (Booth) are still unclear. Discussions are ongoing between BSC and tie regarding the design and new requirements for the design of both plants. This will hold up the completion of the depot design in this area.

7.2.20 Noise and Vibration Information

- System Wide
- Track infill materials handed to A. Dolan 16th April 2009. Sent to PB Noise & Vibration consultant 17th April 2009.
- Meeting convened for Tuesday 5th May. BSC & PB and N & V Consultants to meet to clarify requirements.
- PB Noise & Vibration consultant technical response to Siemens Information provided 15th April 2009. Still a difference in Siemens/PB stiffness assessments (13 times versus 2 times).



7.3 Additional Resources

The Design Team Leaders detailed below can be made available to respond to TQ's and attend the appropriate meeting (subject to suitable notice) on the proviso that BSC give instruction that these DTL's time spent will be paid for.

DISCIPLINE	Code	DTL (and contact details)
Tram	TRM	Tony Goodyear
Track (and Alignment)	TRK	Chris Cox
Track Auxiliaries	TRA	Mike Reeves
Roads	RDS	Liam Soffe and Orlando Walters
Structures (P)	STR-P	Andy Groves
Structures (H)	STR-H	Colin Walker
Traction Power Supply	TPS	Graeme Evans
Sub Stations	SUB	lan Brown
Depot	DEP	lan Brown
Tram Stops	STP	Ian Brown
Overhead Line Equipment	OLE	Farhad Janani
Supervisory, Control and Comms	SCC	Mike Goldsworthy
Low Voltage Supplies	LVS	lan Brown
Street Lighting	STL	Anthony Walsh
Drainage	DRN	Liam Soffe
Ducting	DUC	Chris Reid
Geotechnical	GEO	David Raeside
Environment	ENV	Kat Dennis
Utilities (L2 - Sections 2, 5, 6 and 7)	UTL	Alan Dolan
Utilities (L1 - Sections 1 and 3)	UTL	Brian McCrear
Landscape	LSC	lan Brown
Noise		Rupert Taylor



APPENDICES

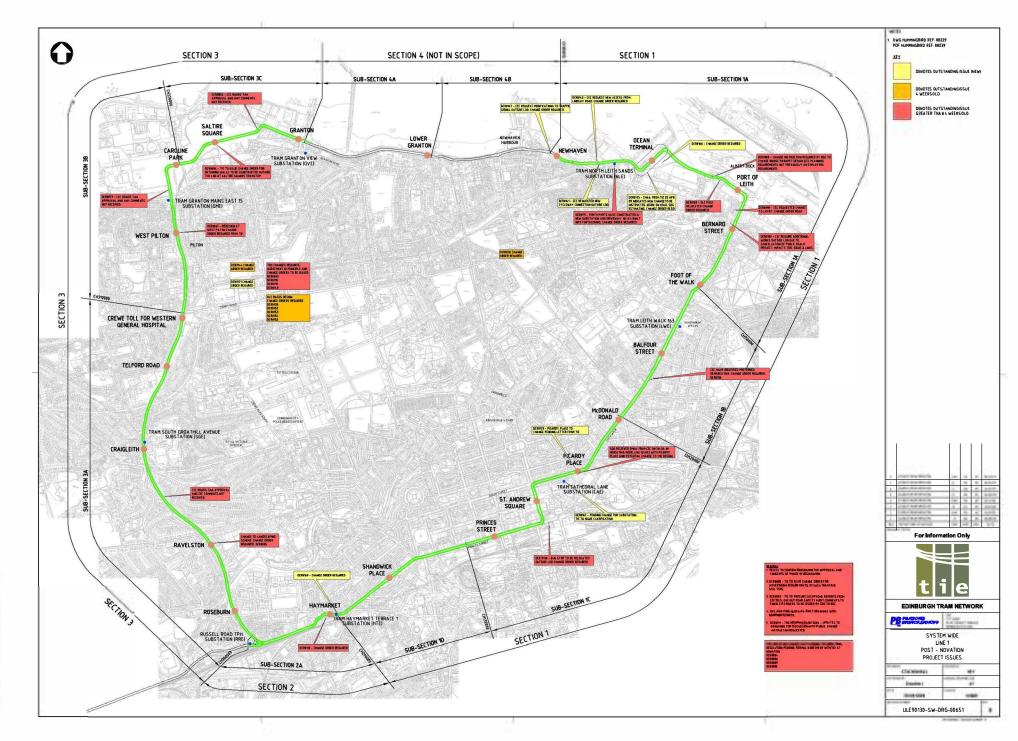


APPENDIX A - CRITICAL ISSUES DRAWINGS

Doc Ref ULE90130-SW-DRG-00651 (Line 1)

Doc Ref ULE90130-SW-DRG-00652 (Line 2)







APPENDIX B – ADDITIONAL DESIGN AND CONSTRUCTION SUPPORT ORGANISATIONAL CHARTS (PERIOD 3 FORECAST)



Design Support Services - For The Period 01/06/09 to 01/07/09

