

## Engineering Services Period 2 Report

### Review of SDS Design-Assured packages

The first package, for route section 1C3 – St. Andrews Square and Princes Street - is due from SDS on 2<sup>nd</sup> June, per SDS programme V31. The tie-led design review will start on 4<sup>th</sup> June, with a day of presentations from SDS on how the design meets safety and functional requirements and is “fit for purpose”.

### Approvals

SDS continues to issue completed approvals submissions to the Council. These relate to Prior Approvals (PA), with the Council as Planning Authority, and also Technical Approvals (TA) through the Council's dedicated Tram team. This process has not been without difficulty on either side and the Engineering Team has been engaged in unblocking issues and looking ahead to assist in the avoidance of potential conflicts to which otherwise could impact on the “Issued For Construction” (IFC) delivery dates as identified in V31 of the SDS programme V31. This includes managing a programme of twice weekly Approvals Task Force meetings attended by all relevant parties, and ongoing involvement in informal consultation ahead of SDS submissions.

A key approval issue remains the need to obtain property owner consent for the attachment of building fixings for the support of the overhead line equipment (OLE). Informal letters to property owners now been issued to all potentially affected parties and the formal Council notification letter is due to be issued on 21<sup>st</sup> May. This will mark the beginning of a 28 day objection period. If owners make no response within this period they are deemed to have given unconditional consent.

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### EMC & Electrolysis

A series of site walks has taken place in and around utility companies' infrastructure (including Scotland Gas Networks, Scottish Power, Scottish & Southern Energy, Virgin Media, Forth Ports and EAL), identified as being under threat from ETN stray current corrosion effects. This has enabled further rationalisation by the joint utilities independent stray current expert of the potential test sites on for utilities infrastructure. (Note: Disappointingly, Scottish Water failed to show for the site walk.)

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A second meeting was held between Infraco and EAL to establish the mechanism for the “Letter of No Objection” (LoNO) from EAL in respect of EMC. Further meetings will occur following Infraco's development of their EMC programme.

### NR System Immunisation Works

Infraco verification has now been completed of the expected interaction with NR infrastructure under failure conditions of their insulation measures. has now been completed and a A report is now being prepared.

Infraco are expected to be instructing Ferrey-Moore Associates (FMA) with developing the “Case for Safety – Signalling” assurance case for NR's acceptance. That Case for Safety will include the proposed technical solution. Therefore its acceptance, by in the form of a LoNO from NR, will constitute NR's acceptance of the technical solution also.

FMA are currently performing a “Whole Life Cost Analysis” between the “FETR” and “TI 21” technical solutions. The output of that study will provide the final answer to determine the technical solution.

The actual resources to implement the immunisation works is still under discussion with NR and is subject to analysis under tie paper “Network Rail Immunisation Works Development Study”.

All of this work is ongoing and is on schedule.

## NR Lift and Shift Works

NR have declared that Jarvis aspects of L & S works will be completed on 21<sup>st</sup> May 08 – i.e. the point heater equipment relocation. However, there is also an outstanding action need for Thales to move a fibre communications cable by Thales recently discovered. No date given yet but this is expected to have been completed by the end of May 2008.

## System Safety

The tie's Safety Verification Scheme is currently under being updated/review to reflect recent changes in the organisation structure and the Safety Verification methodology. A key underpinning process is the identification of hazards, the associated risk assessment and the ensuing determination of necessary and effective mitigations.

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Safety Verification is managed overall by tie's Programme Safety Certification Committee (PSCC) and is reviewed by tie's Independent Competent Person (ICP).

Infraco are now represented on the PSCC and its associated activities.

## Procurement Assistance

The Engineering team continued to provide support to the Procurement team in finalising the INFRACO Infraco, and related, contracts by reviewing technical elements passed on by the Procurement team, and facilitating response to technical queries raised by BBS. Support was also provided in the form of providing background on specifications for ballast and also on testing methods proposed to inform further detailed design of the on-street road construction.

Moving into the construction phase, our focus is being shifted to assist in matters such as confirming that Building Warrants are in place and relevant undertakings / consultation achieved.

## Ongoing Issues being managed

- Airport Tramstop – Design Development and interface with BAAEAL projects
- Production of assurance packages for BAA-EAL
- RBS t – Tramstop Development
- A8 Underpass – Design development
- Roseburn Street Viaduct – VE redesign
- Edinburgh Park Station Bridge viaduct - finalisation of VE redesign
- SRU accommodation works - Design and build required issues
- CEC Public Realm projects – interface
- MUDFA involvement in sewer surveys
- Forth Ports – Design Development

## Issue requiring direction/instruction

- Burnside Road – design and build instruction required to Infraco (because it's outwith the LOD and outside SDS scope)

**Tony Glazebrook**  
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20<sup>th</sup> May 2008

