

Programming Assumptions (12 May 2008)

1 GENERAL

1.1 Our programme for the works recognises the allowed working hours stated in the Code of Construction Practice of 0700 to 1900 Monday to Friday and 0800 to 1300 on a Saturday. Schedule 15 separately identifies areas where Infracore may make applications for relaxations to the CoCP. General assumptions are as follows

1.1.1 Removal of hedgerows, trees, vegetation and other habitats used by breeding birds will be executed before March 2008, as part of an advanced works contract.

1.1.2 The scope and complexity of the works is as shown on the drawings at 25 November 2007 and detailed in the bill of quantities.

2 DESIGN PROGRAMME

2.1 Version 26 of the SDS design programme has been used to establish milestone dates for the Issue for Construction drawings. We have assumed that there will be no amendments to the SDS design programme. The dates from the following activities have been extracted,

2.2 Substations – There are no dates for the Issue for Construction drawings and it is assumed that the civil engineering and building designs will be Issued for Construction sufficiently in advance of programme so as to ensure that the programme is maintained.

2.3 There are no dates given for the design of the structure that has replaced the A8 retaining wall. We have assumed that the design of this structure will be Issued for Construction as part of the depot earthworks redesign and that this redesign will be completed by the end of April 2008.

2.4 The programme assumes that Issue for Construction information for the Gogar Depot building will be released as required to construct the Depot in accordance with the programme. This will require Issue for Construction in advance of the date shown on version 26 of the SDS design programme.

2.5 Version 26 of the SDS design programme has been used to identify Issue for Construction programme milestone dates that are 4 weeks in advance of the start of construction works on site. It has been assumed that where a longer lead in time is required for items on extended delivery (i.e. bridge beams) that this can be accommodated by advanced information release by SDS.

2.6 It is assumed that where Issue for Construction programme milestones shown against version 26 of the SDS design programme as “letters of completion”, the design is complete. Where no milestone is identified it is assumed that the design is complete.

2.7 The trackwork activities in Section 2A commence on 21 July 2008 as requested by tie to accommodate the revised forecast receipt of Issued for Construction drawings from SDS.

3 MUDFA & UTILITIES

3.1 The programme is based on MUDFA having completed all works and all utilities being diverted that would conflict with INFRACO operations by the following dates;

- 1A 31 October 2008
- 1B 01 August 2008
- 1C 31 October 2008
- 1D 19 December 2008
- 2A 16 May 2008
- 5A No constraint
- 5B 11 April 2008
- 5C 16 May 2008
- 6 SGN Diversion, 18 April 2008
Watermain Diversion 30 May 2008
- 7A 16 May 2008

3.2 No enabling works shall be required to be undertaken by INFRACO before MUDFA (or other Utilities) can complete their works. The programme is based on the Utilities in the Victoria Dock Access Bridge and Tower Place Bridge area being temporarily diverted away from INFRACO works by MUDFA in advance of the INFRACO works.

4 NETWORK RAIL

4.1 The programme assumes that the Bridge beams will be placed at Carrick Knowe Bridge and Edinburgh Park Bridge over the Christmas and New Year period 2008.

4.2 In the other possessions already booked for 2008 we will undertake the following works:

- Site Clearance
- Temporary earthworks support at Carrick Knowe.
- Temporary earthworks support to corner of base at Piers 3 & 4 Edinburgh Park.
- Bunding to protect beam support at Scaffold at Edinburgh Park.
- Temporary Rail protection.

4.3 Further possessions will be required in 2009 to remove crash decks, take down safety fences, erect OLE poles and string catenary wires and the programme assumes that this will be available as required.

4.4 In addition works to be undertaken at the following bridges South Gyle Access, Balgreen Road, Water of Leith, Russell Road and Roseburn Street Viaduct may require to be undertaken

in existing or new possessions depending on the requirements of Network Rail. The programme assumes that these works can be undertaken at such times as enable the programme to be maintained.

5 TRACKWORK

5.1 There is no allowance in the programme for excavation below earthworks outline level for soft spots or more extensive areas of ground improvement.

6 DESIGN/INFORMATION

6.1 There are a number of sections of Phase 1a of the Project where we do not have information that enables us to firm up our programme. The most significant are as follows;

6.1.1 Sub-section 1A, Newhaven to Foot of the Walk

The road and tramway layout is in the process of being changed, we understand to Forth Ports requirements. This also affects the 3 structures in the section, Lindsay Road RW, Tower Place Bridge and Victoria Dock Bridge. We have assumed that Victoria Dock Access Bridge will only require resurfacing. The programme, for the other activities, is based on the information made available by tie for pricing prior to 25 November 2007.

6.1.2 Subsection 1C, McDonald Road to Princes Street West

The junction layouts are being radically changed at London Road and Picardy Place, due to CEC requirements, and a significant vertical alignment change is being made to the North St Andrews St/York PI junction for tramway alignment reasons. Picardy and York may also involve us in Utility Works. Only provisional activities (called dummy) are included in the programme for these locations. The programme assumes that these activities are no longer in duration than the "dummy" activities shown on the programme.

6.1.3 Sub-section 5A, Roseburn Junction to Balgreen

6.1.3.1 Balgreen Road Bridge and the adjacent Baird Drive and Balgreen Road Walls are being changed to Network Rail requirements. The requirements for one element of the bridge have not been agreed between CEC and Network Rail.

6.1.3.2 Dummy item included in the programme for Balgreen Road. - the programme assumes that these activities are no longer in duration than the "dummy" activities shown on the programme.

6.1.4 Sub-section 5B, Balgreen to Edinburgh Park

Carrick Knowe Railway Bridge is being re-designed (widened) to incorporate a cycleway, CEC requirement. (No time allowance made for widening)

6.1.5 Sub-section 5C, Edinburgh Park to Gogarburn

6.1.5.1 A dummy programme item of 20 days has been allowed for supporting and working around the large bank of BT ducts which conflict with the A8 underpass construction. The Base Date Design Information for the A8 underpass does not cater for the large BT duct (above) and the large diameter sewer (below) which prevent the secant (or contiguous) piled wall design from working where these two services intersect the line of the structure. Whilst it is recognised that the resolution of this problem will have an impact on the programme, the programme allows only

a duration of 20 days, as noted above, for the impact of the works required to resolve the BT duct problem.

6.1.5.2 The Depot Access Bridge is being re-designed (dummy item added). The programme assumes that this activity is no longer in duration than the "dummy" activity shown on the programme.

6.1.6 Sub-section 7A, Gogarburn to Edinburgh Airport

Due to the cancellation of EARL, the vertical alignment of the Tramway, 3No Culverts and 2No Walls at the Airport Tramstop are being changed. (No allowance for these changes has been made and the programme assumes that there will be no impact).

7 OLE DESIGN

7.1 The programme milestone for OLE design to commence (i.e. SDS issue Issue for Construction track alignment drawings) includes the receipt by the Infracore of the following information sufficient to allow construction in accordance with the programme:

7.1.1 Complete and approved track alignment in data format.

7.1.2 Other structures and Utilities data.

7.1.3 tie decision re OCS system in City Centre.

7.1.4 Complete and approved vehicle data.

7.2 That approval of the OLE design is not required prior to Issue for Construction of the OLE foundation design (i.e. no approval periods have been allowed in the logic SDS issue track alignment drawings – Siemens design OLE – SDS design OLE foundations – OLE foundation construction).

7.3 That approval of the OLE design is not required prior to Issue for Construction of the OLE building fixing design (i.e. no approval periods have been allowed in the logic SDS issue track alignment drawings – Siemens design OLE – SDS design building fixings –Siemens OLE installation).

8 DESIGN STAGE AND TIE CONSENTS

8.1 The programme assumes that tie will timeously obtain the relevant TTRO's and TRO's to allow the necessary traffic management for the construction and operation of the tram respectively.

8.2 The programme also assumes that all third party consents will be granted to allow works to proceed in accordance with the logic and timescales shown.

9 MAIN PROGRAMMING ASSUMPTIONS

9.1 Further assumptions upon which the programme is based are as follows:

9.1.1 Relaxations on City Centre Constraints are required which could be subject to full CEC approval. The programme assumes that such relaxations shall be permitted so as to ensure that the programme is maintained as identified in Schedule 15.

9.1.2 tie shall accept that commissioning shall commence (on the date shown on the programme) prior to the completion of the Picardy Place Roadworks.

9.1.3 That there shall be no slippage in the MUDFA programme.

9.1.3 That there shall be no slippage on the SDS programme.

9.1.4 That the SDS design will allow road construction by planing the existing surfacing to underside of new surface course and laying the new surface course.

9.1.5 The only programming constraint imposed by the Scotrail Depot at Haymarket is that Roseburn Street Viaduct cannot commence until the oil tanks have been relocated. For the avoidance of doubt, the relocation of the oil tanks only, will be deemed to be delayed if such relocation is not completed by the date on the Programme regardless of the date noted in Schedule Part 26, tie Obligations, for the same activity.

9.1.6 Construction of the trackwork to the Guided Bus Way will commence in November 2008.

10 COMPLETION

10.1 The current version of the programme completes Airport to Haymarket in May 2011, Haymarket to Newhaven in July 2011.