



## File Note

Key documents located and relevant matters are identified and addressed at each section of the main narrative. Main actions currently outstanding, and/or issues to be further developed are noted below under the section heads taken from the narrative.

### Headline Issues:

- Detailed discussions with lawyers are required to address matters previously advised under cover of various emails and various discussions (most of these matters are also noted in the narrative).
- Land Agreement (Drawdown Notice): tie is required to submit a Drawdown Notice request to EAL pursuant to Schedule Part 2 of the License Agreement for works to be undertaken outwith the LOD. To date, the Drawdown Notice is yet to be submitted.
- CAR License: The Infraco has an obligation under the Contract to obtain a Controlled Activity Regulations (CAR) License. This License is required as the Infraco are undertaking engineering activities (i.e. Gogarburn retaining wall, W14) in or near water bodies (i.e. the Gogar Burn). This License must be in place before works can commence to retaining wall W14C. To date, the CAR License remains outstanding.
- Otter Holt/Disturbance License: The Infraco has an obligation under the Contract to obtain an Otter Holt / Disturbance License. This License must be in place before works can commence to retaining wall W14C. To date, the Otter Holt/Disturbance License remains outstanding.
- EAL Residual Flood Concerns: EAL have formally removed its 'Flood Objections' attaching to the impact of the construction of the Gogarburn retaining wall (W14C). However, it has raised further concerns that the current design 'may' present a potential flood risk to the Burnside Road Bridge. Consequently EAL have requested that tie (and therefore the Infraco) carry out further analysis of the combined effects of the design and performance of the Burnside Road Bridge and the Retaining Wall on the Gogarburn.
- BDDI to IFC changes: Confirmation is required that the recent release of IFC drawings (Feb 2011) for the retaining wall (W14C) is now *final*. This will allow an Estimate to be produced by the Infraco (which is currently outstanding).

**Section 1: Executive Summary** to be drafted upon completion of the narrative.

**Section 2: Introduction** to be finalised upon completion of the narrative. CEC Approval in Principle information still to be received.



### Section 3: Programme Observations

- Address comments noted within narrative.
- Further discussions required with IMc with respect to the Section 07A programming impact on Section C Completion.
- “Phoenix Programme”: we understand that both tie and the Infraco have separately been involved in preparing what have been referred to as “Phoenix” programming exercises in respect of the remaining off-street works. The output of those exercises has not [yet] been made available for our review but should be discussed within this narrative.
- ‘Rev01 Programme’/ ‘Update Programme’ Comparison: Although differences have been identified between the programmes in the current narrative, investigations and analysis attaching to the reasoning behind same is not part of the current remit. This may or may not be something to address in future.
- Confirmation of how the Infraco ‘currently intends’ to carry out the work to the Gogarburn Retaining Walls (W14C) remains unresolved. Infraco action.

### Section 4: General issues affecting the Infraco’s ability to commence

- Address Comments noted within narrative.
- IFC Process: response to the legal/contractual question (Acutus email of 28/01/11 refers) to be included upon receipt. It is also important to bear in mind that until final resolution of all INTC’s affecting a structure is resolved it is not possible to be certain that the IFC process itself is complete.
- EAL Flood Objections: Refer to Headline Issues above.
- CAR License: Refer to Headline Issues above.
- Otter Holt/Disturbance License: Refer to Headline Issues above.
- Land Agreements (Drawdown Notice): Refer to Headline Issues above.

### Section 5: Contractual considerations

- Interface with McGrigors is required to close out the issues raised.

### Section 6: The Change Process: generally, address Comments noted within narrative and:-

- Gogarburn Retaining Walls INTC’s: These have been addressed and identified.
- Edinburgh Airport Tramstop INTC’s: These have been identified. The factual matrix attaching to same has not been addressed as part of the current exercise.
- Although tie has issued letters to proceed with the Design at the Gogarburn Retaining Walls, it has yet to issue a tie Change Order for same.
- BDDI to IFC changes: Refer to Headline Issues above



## **Section 7: Assessment of 'material and adverse' impact of Infraco Default**

- Address Comments noted within narrative
- It is significant to note that both Parties appear to agree that the delay to the completion of the Design for the Gogarburn Retaining Walls (W14C), could materially and adversely affect the carrying out and/or completion of the Infraco works (See Main Body Narrative for further details).
- It is apparent that Infraco failures have and continue to have a significant effect on progress at Gogarburn Retaining Wall (W14C). That said, and notwithstanding the Infraco's contemporaneous failures in, for example, the provision of INTC Estimates, it is also apparent that certain actions are within the control of **tie**. It is therefore recommended (essential) that **tie** expedite resolution of those matters to prevent the Infraco from being able to rely upon same as either the dominant or alternatively, concurrent causes of delay.
- The Factual Matrix identified by Acutus should be reviewed by and discussed with McGrigors. Thereafter, detailed interface with McGrigors is required to agree on the articulation of same.
- Programmatic analysis of same to be discussed with IMcA and conclusions summarised / presented.

**Section 8: Conclusions / Recommendations** to be drafted upon completion of the narrative.



## **Section 1    Executive Summary**

*This Executive Summary will be drafted last*

### **1.1    Synopsis of [apparent/alleged] Infraco Default**

1.1.1    xxx

### **1.2    Summary of assessment of material and adverse impact**

1.2.1    xxx

### **1.3    Areas of potential tie culpability which require to be addressed**

1.3.1    xxx





## Section 2 Introduction

### 2.1 Background

2.1.1 On 12 October 2010 tie issued a Remediable Termination Notice (RTN) to the Infraco in respect of an [alleged] Infraco default relating to Clauses 7.1, 7.2, 11.3 and 11.4 (INF CORR 6422 refers). Internally within tie this RTN has been generically referred to as “RTN10”. The nature of the Infraco Default (a) was expressed at paragraph 2.1 of that notice as follows:-

“2.1 As at the date of this Remediable Termination Notice:

2.1.1 the Infraco has not completed the Design for the Gogarburn Retaining Walls W14C and W14D;

2.1.2 the Infraco has not obtained the approval of Edinburgh Airport Limited (“EAL”) for the Design of Gogarburn Retaining Walls W14C and W14D in accordance with its obligations under the Infraco Contract (including Schedule Part 44 (EAL Works));

2.1.3 the Infraco is now carrying out a redesign of the Gogarburn Retaining Walls W14C and W14D (despite it being significantly after the date of programmed completion);  
and

2.1.4 the Infraco has notified tie of an Infraco Notice of tie Change (“INTC”) in respect of Gogarburn Retaining Walls W14C and W14D (INTC 155c, forming part of INTC 155 notified on 16 October 2008 and subsequently split into three) and has not withdrawn the INTC as there is no Design.”

2.1.2 The Infraco responded to that RTN on 22 November 2010 disputing the validity of same and invited tie to withdraw the RTN (25.1.201/KDR/7500 refers).

2.1.3 In addition to the foregoing, the Infraco stated that (in its opinion) since the facts and circumstances surrounding Gogarburn Retaining Walls are matters for which tie is culpable it is therefore unable to forward a Rectification Plan, until such times as tie “provide the outstanding information required by the Infraco and conclude the flood risk issues with EAL”.

2.1.4 Strategy for ongoing investigations and analysis

2.1.5 Notwithstanding the issue of the RTN for Gogarburn Retaining Walls detailed above, following detailed discussions with tie, DLA and McGrigors concerning same, it was agreed that the main objectives concerning the ongoing / future investigations into the issues raised within the original RTN 10 centred on the following:-

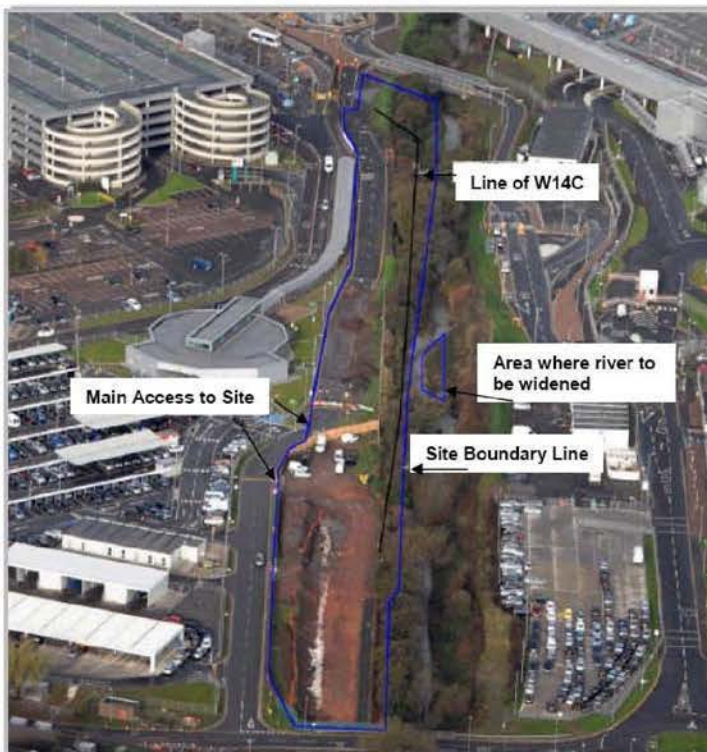


- i) the examination of the underlying factual matrix with the aim of providing a detailed and evidenced analysis of **potential areas of Infraco breach** which will inform, where considered appropriate, the preparation of a robust RTN; and
- ii) the identification of any areas of potential **tie** culpability which may be required to be addressed, or actions which may be required to be taken, the ultimate aim of which is the **protection of tie's position**.

2.1.6 As a consequence, sections X to X below address the above matters along with our current [interim] views on the “material and adverse” affect of the apparent / alleged Infraco breaches.

## 2.2 Explanation of the structure / workscope

2.2.1 Gogarburn Retaining Wall W14C<sup>1</sup> is one of 08 structures populating Intermediate Section 07A (Gogarburn Underbridge (S29) to Edinburgh Airport Tram Stop) of the Tram Works. This retaining wall is located immediately to the east of the Edinburgh Airport Tram Stop (photograph below refers)<sup>2</sup>.

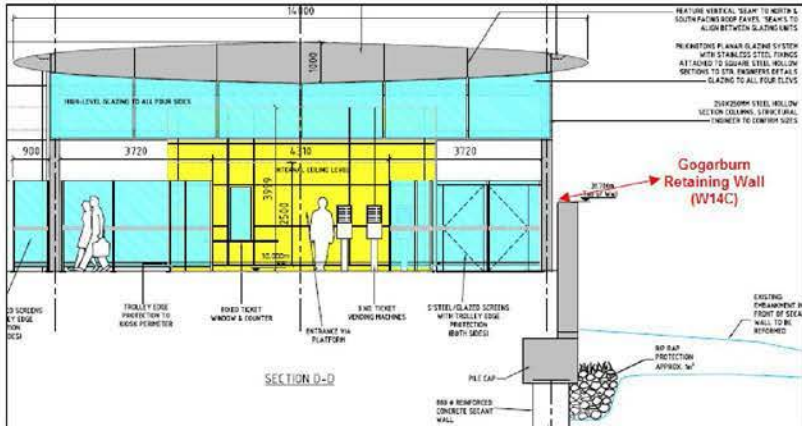


<sup>1</sup> We have been advised that Gogarburn retaining walls W14C and W14D are now collectively referred to as W14C.

<sup>2</sup> Excerpt taken from the Infraco Package Contractor, Farrans Civil Engineering photograph.



2.2.2 The undernoted graphic (extracted from Drawing Numbers ULE90130-07-PLG-00056 rev 5 dated 07/12/10) usefully presents a sectional view of the Gogarburn Retaining Wall (W14C) in relation to the Edinburgh Tram Stop. For ease of reference the interface / demarcation lines between the Gogarburn Retaining Wall (W14C) and the adjacent structure i.e. Edinburgh Airport Tramstop has also been identified.



2.2.3 The City of Edinburgh Council (CEC) Approval in Principle was achieved for the Gogarburn Retaining Walls on xx xxx xx.<sup>3</sup> Subject to that approval process Gogarburn Retaining Walls was described as follows:-

2.2.4 “Requested AIP detail from AS xxxxx”

<sup>3</sup> See Edinburgh Tram Network, Gogarburn Retaining Walls, Structure W14C and W14D - Approval in Principle (Doc Ref ULE 90130-05-REP-XXXX)





### Section 3 Programme Observations

#### 3.1 Generally

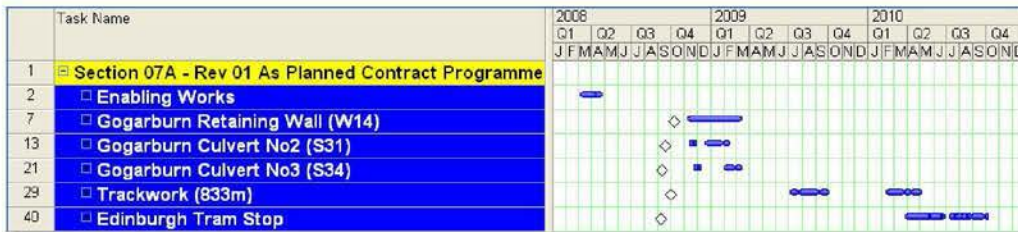
3.1.1 When considering the materiality of any issues / possible breaches arising in respect of the Gogarburn Retaining Walls it is important to place each structure in the context of the Infraco’s ‘planned’ and ‘current’ programming intent for same. This section therefore, summarises the Infraco’s planned sequencing as detailed within the original Revision 1 Programme; and also its current intent, as detailed in both the Infraco’s current Revision 1 Programme (Progressed to 29/01/2011) and its Update Programme.

3.1.2 Before a commentary on the programmes is provided, it is relevant to note that In terms of constructional dependencies, the Gogarburn Retaining Wall (W14C) is not physically dependent on either the completion or partial completion of adjoining structures (i.e. the Edinburgh Airport Tramstop). Construction of this retaining wall can therefore proceed independently from same.

#### 3.2 Gogarburn Retaining Walls - Rev.1 original planned intent

3.2.1 The following excerpt from the Infraco’s original Rev 1 programme<sup>4</sup> details / depicts the Infraco’s planned intent for all activities relating to the construction of Gogarburn Retaining Wall (W14) and the adjacent structures attaching. It is noted that the planned Rev 1 programme shows only one activity for what (in reality) are a number of retaining walls in section 07A namely W14A, W14B, W14C and W14D.

**Comment [JQ1]:** Note: the programmes inserted for the moment are interim illustrations only. These will be updated as appropriate in due course.



Note: the symbol above represents the initial “Issue Construction Drawings” date.

3.2.1.1 In summary, on analysis of the planned programme (Rev.01) excerpt above, the Infraco intended to carry out the construction of all ‘W14’ retaining wall structures over a period of 18 weeks from 06/11/08 to 13/03/09. It is also noted that the retaining walls were planned to be completed 54 weeks prior to the commencement of the Edinburgh Airport Tramstop.

<sup>4</sup> Contract Programme Updated for V31 & Mitigation dated 14/08/2008

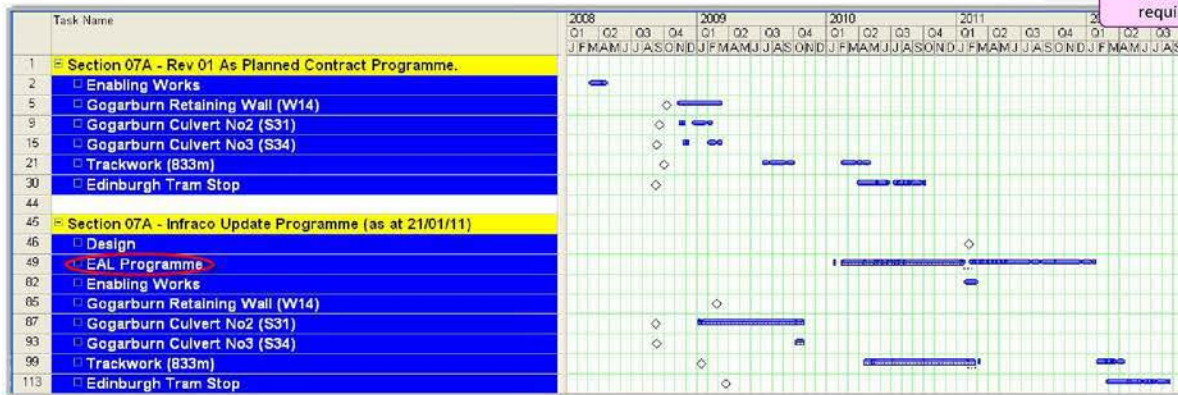




### 3.3 Gogarburn Retaining Walls – Revised programming intent

- 3.3.1 The Infraco Period Report 3-10 / 3-11 dated 29 January 2011 contains two programmes as follows:-
- “Programme Revision 1 tracked for V66 Design Programme and Progress to 21 January 2011”; and
  - “Update Programme updated for V66 Design Programme and Progress to 21 January 2011”
- 3.3.2 We understand that the latter ‘Update Programme’ is based upon the Infraco’s Rev.3 programme. That programme submission was rejected by tie<sup>5</sup>. That said however, this programme is likely to be more representative of the Infraco’s current intentions in terms of sequencing and activity durations than the progress updated Rev.1 programme<sup>6</sup>. As such, for present purposes, we have used that ‘Update Programme’ for comparison with the original Rev.1 programme. Section xx below details that comparison.

**Comment [RB2]:** Double-check with IM on programme used in his report on MUDFA 2. Include further comparison of ‘Rev.1 Update’ if required.



- 3.3.3 On review of the ‘Update Programme’<sup>7</sup> above, an analysis of the detailed activities found under the ‘EAL Programme’ activity (circled in red above), show that the sequencing of how the Infraco’s ‘currently intends’ to carry out the works relating to the Gogarburn Retaining Walls (W14) is substantively different to its original ‘planned intent’. These matters are discussed below.

**Comment [JQ3]:** This is in part due to the introduction of W15 RTW’s. However W14 has also been substantively reprogrammed. Note: the original programme showed 1 single bar activity for the W14 structures.

- 3.3.3.1 It would appear that the Infraco ‘Update Programme’ for the activities attaching to the Gogarburn Retaining Walls have been completely revised and separated into 3 separate Phases namely:-
- Phase A: Includes works to retaining walls - W14A, W15A, W15B and W15C;

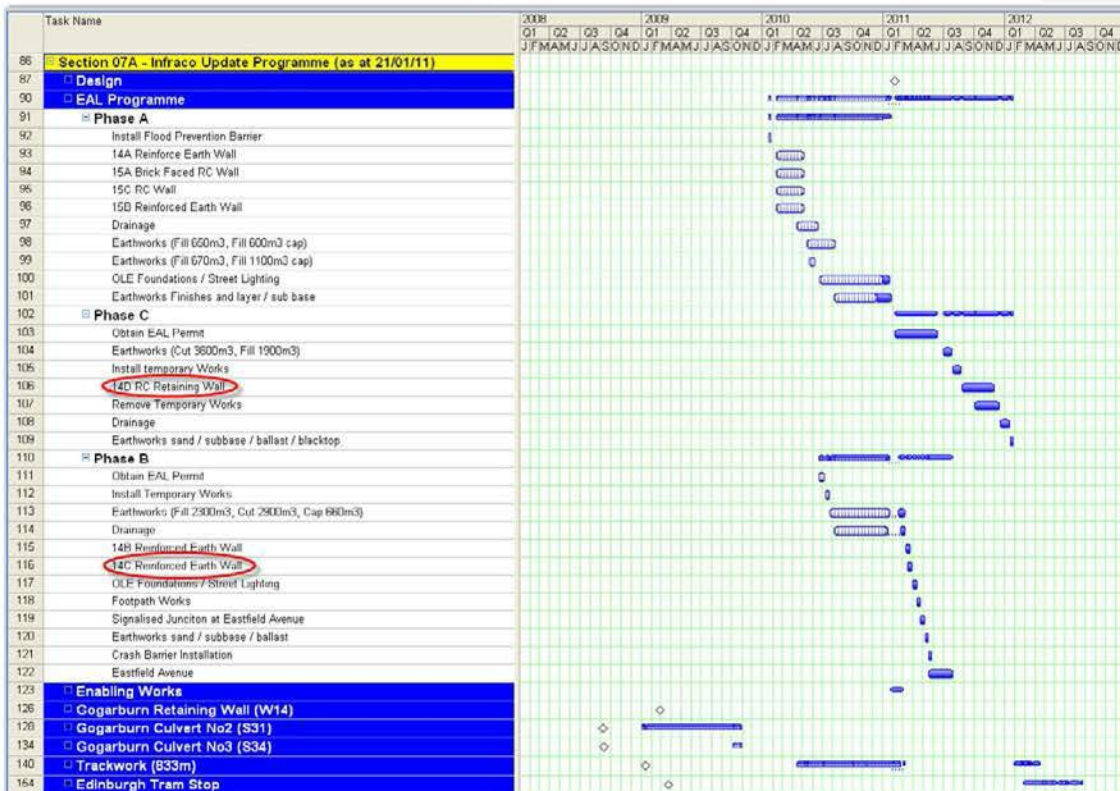
<sup>5</sup> To insert INF CORR reference and reasons.  
<sup>6</sup> Refer to Infraco letter ref. 25.1.201/KDR/6791 dated 24 September 2010 at paragraph Section 1.2.2 refers “... we are recording progress against the most realistic programme “Programme (Revision 3A)” to complete the Infraco Works. This is in the interests of effective management and communication of the programme for completion of the Infraco Works. To record progress solely against Programme (Revision 1) would be entirely meaningless. tie are well aware that this Programme is unachievable.”  
<sup>7</sup> Contract Programme Revision 1 tracked for V66 Design Programme and Progress to 21 January 2011.



- ii) Phase B: Includes works to retaining walls – W14B and W14C.
- iii) Phase C: Includes works to retaining walls – W14D;

3.3.3.2 These Phases have been included under the summary heading ‘EAL Programme’

3.3.4 The excerpt below expands the summary heading titled ‘EAL Programme’ and illustrates the detailed activities for Phases A B and C. The activities circled in red in Phases C & B below, namely ‘14D RC Retaining Wall’ and ‘14C Reinforced Earth Wall’ are the structures which relate specifically to the issues detailed in tie’s RTN 10 submission<sup>8</sup>.



3.3.4.1 On analysis, it is difficult to rely on the ‘Update Programme’ as a true reflection on how the Infraco ‘currently intends’ to sequence the construction works and the durations attaching to same for the following reasons:-

- i) The activities for retaining walls W14C and W14D are shown as two separate phases, i.e. B and C respectively. However as discussed at paragraph XX above we have been

<sup>8</sup> tie letter ref: INF CORR 6422 dated 12/10/2010.

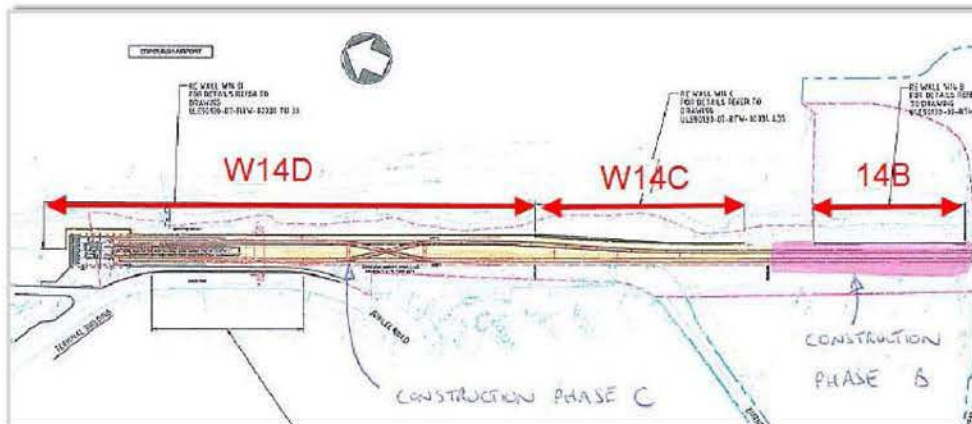




advised that Gogarburn Retaining Walls W14C and W14D, are now collectively titled 'W14C'.<sup>9</sup> Consequently, it is difficult to determine the duration and the sequencing of retaining wall W14C in isolation, and also the adjacent activities which are physically linked to the construction of the retaining walls, for example the temporary works, the earthworks and the drainage.

- ii) The programme details retaining wall W14C as a “reinforced earth wall”, however it is noted that the current (and approved) design of retaining wall W14C is based on a secant piled wall construction. Therefore duration and sequencing cannot be determined as it would appear that the design detailed in the programme is superseded;

3.3.4.2 Notwithstanding the above we have been advised by tie management that retaining wall W14B is to be constructed in Phase B of the programme and retaining walls W14C and W14D are to be constructed in Phase C. This programmed phasing is consistent with tie’s letter dated 24/06/2010<sup>10</sup> to Edinburgh Airport Limited which attached an annotated drawing ULE90130-07-RTW-00031 rev 2, detailing how the works will be carried out by the Infraco (excerpt from said drawing below refers)<sup>11</sup>.



3.3.4.3 In light of the foregoing and in summary, it would appear that the Infraco currently intends to carry out the construction of Phase C of the Gogarburn Retaining Wall, over a period of 51 calendar weeks from 03/02/11 to 26/01/2012. It is also noted that revised completion date for the retaining walls is now only 4 calendar weeks prior to the commencement of the Edinburgh Tramstop.

<sup>9</sup> Information taken from RBB draft report, page 103 Draft B.

<sup>10</sup> INF CORR 5414/AS

<sup>11</sup> Overlay of arrows and Wall references inserted for clarity



3.3.4.4 Confirmation of how the Infraco 'currently intends' to carry out the work to the Gogarburn Retaining Walls (W14C) remains unresolved. Further analysis on same may be required if it is agreed that the issues / conditions attaching to the Gogarburn Retaining Walls (RTN 10) are deemed appropriate for termination purposes.

3.3.5 Recent "Phoenix" programme exercises carried out by tie and Infraco

3.3.6 In addition to the above, we have been informed that both tie and the Infraco have separately been involved in preparing what have been referred to as "Phoenix" programming exercises in respect of the remaining off-street works<sup>12</sup>. The output of those exercises has not [yet] been made available for our review. It is relevant to note however that this output may have the effect of superseding the sequencing referred to, and points made, above.

### **3.4 Actual Progress / Construction Status (current progress set against planned intent)**

3.4.1 As discussed at paragraph xx above the Infraco Period Report 3-10 / 3-11 dated 29 January 2011 contains two programmes<sup>13</sup>, which purport to record actual progress of the Infraco Works and specifically the Gogarburn Retaining Walls structure which is the subject of the current exercise.

3.4.2 In short, work is yet to commence on Gogarburn Retaining Wall (W14C).

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<sup>12</sup> That is, remaining works from Haymarket to Edinburgh Airport

<sup>13</sup> "Programme Revision 1 tracked for V66 Design Programme and Progress to 21 January 2011"; and "Update Programme updated for V66 Design Programme and Progress to 21 January 2011"





## Section 4 General issues affecting the Infraco's ability to commence / progress work to the Gogarburn Retaining Wall (W14C)

### 4.1 Introduction

4.1.1 As noted at section XX above, in carrying out the current analysis a balanced and objective review of the potential areas of Infraco default must be undertaken. That is to say, it is necessary to examine all surrounding circumstances and also the Infraco's position / likely position in respect of the matters which have formed or may form the basis of an RTN. Not to do so would render any conclusions reached [unsound / unreliable] until such time as the full factual matrix had been considered including the validity or otherwise of any defences which the Infraco may be able to rely upon.

4.1.2 A number of issues have been identified during the process of the current investigations which may have an effect of commencement and early progress. The main sources of that data were (i) the Infraco responses to the RTN's issued; (ii) the Infraco Period Report 3-10 & 3-11 dated 29 January 2011; (iii) discussions with tie personnel; and (iv) the interrogation of contemporaneous correspondence. The issues identified are as having an effect on early commencement and early progress follows:-

- a) The Infraco Position on Issues Affecting Commencement / Progress (section XX below);
- b) IFC process (section XX below);
- c) Planning Applications (section XX below);
- d) EAL Flood Objections (section XX below);
- e) MUDFA / utilities issues (section XX below);
- f) CAR License (section XX below);
- g) Otter Holt / Disturbance License (section XX below);
- h) Land Agreements (with EAL) (section XX below);
- i) Sub-contractor procurement (section XX below);
- j) WPP process (section XX below);
- k) 'Form C' process (section XX below);
- l) Track Monitoring (section 4.14 below).

4.1.2.2 The Change Process (Section XX below).



## 4.2 The Infraco Position on Issues Affecting Commencement / Progress

4.2.1 Central to providing an objective opinion on matters affecting the commencement / progress of Gogarburn Retaining Wall is an understanding of the Infraco's current position on same. The Infraco Period / Progress Report to 29 January 2011 articulates the (allegedly unresolved) matters which it contends are compromising / frustrating commencement and/or progress to this structure. The list is as follows:-

*"Gogarburn Wall W14C*

*Changes from BDDI to IFC have yet to be agreed (Refer to INTC 155c at paragraph xx below);*

*Redesign of Walls 14C is incomplete (Refer to INTC 078 at paragraph xx below);*

*Construction of redesign will delay completion of trackwork;*

*Commencement is dependent on agreement of changes from BDDI to IFC (Refer to INTC 155c at paragraph xx below)."*

## 4.3 IFC<sup>[14]</sup> process

4.3.1 The original Infraco Rev.1 Programme included an activity against each of the prioritised structures (including the Gogarburn Retaining Walls), for "Issue Construction Drawings". Those activities always (correctly) precede the actual construction activities. Those construction drawings would provide the information necessary to, as a minimum, facilitate meaningful commencement and progress of the specific parts of the Infraco Works. The "Issue Construction Drawings" dates included within the Rev.1 programme are derived from the SDS Design Delivery Programme V31.

### 4.3.2 Terminology

4.3.2.1 At this point it is relevant to outline and explain the different terms which have been used in the Infraco Contract, the Infraco Programmes and general usage. Section 3.4 of the on-street trackform design narrative (generic RTN06) refers. For ease of reference the content of same is included directly below.

4.3.2.2 For general information and understanding of the various terms used in relation to the status of design packages or drawings, it is relevant to set out below our understanding of same. Schedule Part 1 includes the following definition of "Issued for Construction Drawings":-

<sup>14</sup> Note: generic references to "IFC" can refer to either a group of drawings or a single drawing



"Issued for Construction Drawings" means those Deliverables necessary for the Infraco to commence construction of the relevant part of the Infraco Works and as shown on the Design Delivery Programme which have been fully approved by all Approval Bodies and in accordance with the Review Procedure;

- 4.3.2.3 It is submitted that the above definition should be distinguished from the wider use of the abbreviation "IFC" ("Issued for Construction") and "AFC" ("Agreed for Construction").
- 4.3.2.4 The defined term "Issued for Construction Drawings" was not included in the SDS Agreement. Rather it appears to have been introduced for the SDS Novation Agreement and the Infraco Contract. As a defined term it has a limited application inasmuch as it relates to only an element of the SDS design sufficient for the Infraco to commence a part of the Infraco Works.
- 4.3.2.5 The "IFC" abbreviation is ordinarily used to refer to drawings which are "Issued for Construction" regardless of the revision status of same (i.e. in general usage, and in the present circumstances, it is used to relate to more than the first "Issued for Construction Drawing"). This would therefore cover more than only the drawings covered by the Schedule 1 definition directly above. It could, and does, relate to subsequent revisions to the defined term "Issued for Construction Drawing".
- 4.3.2.6 "AFC" was introduced by the Infraco as part of its design management procedures (see section XX above<sup>15</sup>). This appears to relate to the post IDC (Interdisciplinary Design Check) process and therefore should represent the integrated design. That said, an SDS final "IFC" may also result from the integration process.
- 4.3.2.7 Another issue which may arise is that the SDS DDP v31 and the Infraco Construction Programme Rev.1 generally only include one single issue of construction drawings for each element. There does not appear to be express provision made for subsequent revisions to same (although that does not of itself preclude same). If the Rev 1 programme / SDS v31 design dates only relate to the first "Issued for Construction Drawings", then those programmes may be incomplete in terms of the intended design process. *The potential implications of this are being discussed with Iain McAlister.*
- 4.3.3 Summary of investigative approach to IFC process
- 4.3.3.1 tie maintains a detailed Drawing Register (in MS Excel format) which we are informed contains the most comprehensive summary of design / drawing issues (generally for construction). That tie Drawing Register therefore formed the main source of data for our review. In carrying out that IFC review we focussed on identification of the following:-

<sup>15</sup> See for example Appendices 2 & 5 to the BSC IDC/ DAS procedure; and Appendix A to the BSC Design Management Plan





- a) *Confirmation that an IFC had been issued for each of the structures.* For each of the prioritised structures it was established that an (initial) IFC<sup>16</sup> had been issued by the Infraco.
- b) *Whether multiple IFC's have been issued for the same structure and the latest date of same;*
- c) *The considered effect of the IFC issue dates on the subsequent INTC process.* That is to say, we have attempted to align / correlate INTC's raised by the Infraco against specific IFC issue dates. The adoption of this process allowed us to observe whether or not the production of an IFC has precipitated the need for the Infraco to raise INTC's or not. Although there are instances where the Infraco has not raised INTC's, it does appear that an IFC or iterations of IFC's ordinarily result in the production of new INTC's. Therefore in instances where it is evident that no INTC's have been raised against an IFC (for example, see Appendix 05 at paragraph XX) tie needs to be mindful of the possibility that new / further INTC's may well be forthcoming.

#### 4.3.4 Further observations

4.3.4.1 Notwithstanding the comments made at 4.3.3.1c) above, it is also relevant to note that the subsequent effect of said INTC's on the IFC process also warrants consideration. By way of explanation, resolution / agreement reached on certain INTC's *can* in certain instances result in the need for redesign work which as a consequence requires the IFC drawings to be updated.

4.3.4.2 It is therefore important to bear in mind that until final resolution of all INTC's affecting a structure is resolved it is not possible to be certain that the IFC process itself is complete<sup>17</sup>.

#### 4.3.5 The IFC Process at Gogarburn Retaining Walls (W14)

4.3.5.1 The Rev 1 programme<sup>18</sup> identifies the planned date for the issue of the IFC<sup>19</sup> against Gogarburn Retaining Wall (W14C) as being 09/10/2008; the actual issue date was 26/02/2009<sup>20</sup> circa 20 weeks later than originally planned. It is notable that the date on the IFC drawings is the 16/10/2008. It would appear therefore although the original IFC drawings had been completed, tie did not receive same until approximately 19 weeks later.

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<sup>16</sup> Whether this particular IFC satisfied the Schedule Part 1 definition of "Issued for Construction Drawings" (i.e. sufficient to permit commencement of the relevant part of the Infraco Works) is a matter for separate analysis.

<sup>17</sup> See Appendix 01 of RTN 04/08 Report re INTC 625 and the potential effect on the IFC for S21B and other adjacent structures (namely S21C & S21D)

<sup>18</sup> Contract Programme Updated for V31 & Mitigation. Date 14/08/2008

<sup>19</sup> Information for Construction

<sup>20</sup> SDS Document Transmittal: Numbers ULE90130-SW-DTF-04638 revisions 1 and 2.





4.3.5.2 Analysis of tie's drawing register<sup>21</sup> as at 25/01/10 indicates that a further 2 nr IFC drawings were issued against the Gogarburn Retaining Walls, namely ULE90130-07-RTW-00034 rev4 (on the 31/03/10)<sup>22</sup> and ULE90130-07-RTW-00036 rev4 (on the 01/04/09)<sup>23</sup>.

4.3.5.3 On the XXX the Infraco finally released the IFC drawings (9nr) for structure W14C<sup>24</sup>

4.3.5.4 The process of aligning the IFC process and the subsequent issue of INTC's (by the Infraco) presently lacks transparency. **Recommendation:** It may be that tie should consider developing the INTC tracker / IFC tracker which identifies and links INTC's to the relevant specific IFC release.

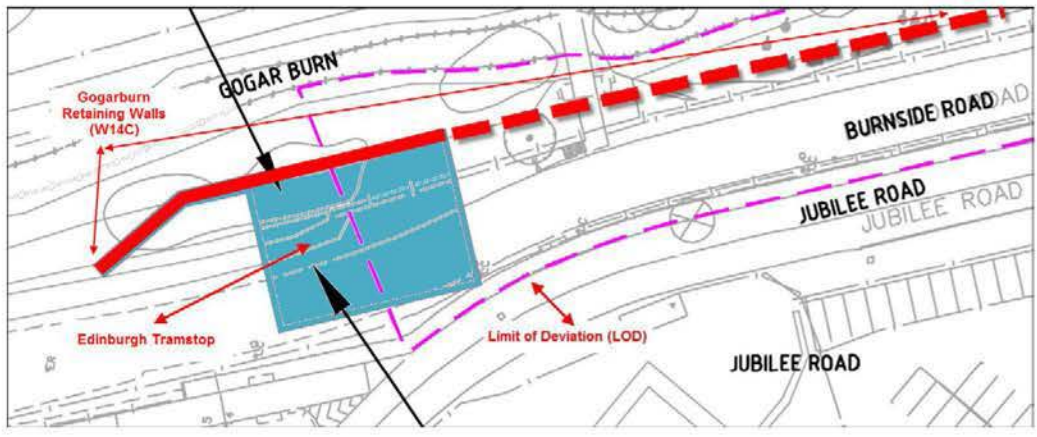
**Comment [JQ4]:** It is our understanding that these drawings have now been released by the Infraco and received by tie on or around the first week in February 11. Clarification required.

**Comment [RB5]:** This would allow review of IFC's to better understand whether all issues arising from same are covered by INTC's or if the potential exists for further INTC's to be raised by the Infraco

#### 4.4 Planning Applications

4.4.1.1 The Infraco Planning Application for the north section of the Gogarburn Retaining Wall (W14C) was combined with the Edinburgh Tram Stop into one application.

4.4.1.2 The solid red line i.e. Gogarburn Retaining Wall (W14C) denotes the section of the wall which has been combined with the Edinburgh Tram Stop, in-filled in blue (the graphic below refers<sup>25</sup>) :-



4.4.1.3 Notwithstanding that the commencement of the Gogarburn Retaining Walls is not 'physically' dependant on adjacent structures (paragraph xx above refers); its interdependence with the Edinburgh Tram Stop exists inasmuch as it is part of a combined Planning Application. As such both structures are inextricably linked through that combined application and CIC's approval of same.

4.4.1.4 The Planning Application was finally approved by CEC on the 10 March 2011.<sup>26</sup>

<sup>21</sup> tie Drawing Register (received from Damian Sharp 25 January 2011)

<sup>22</sup> Only a minor change - setting out point updated (SOP4).

<sup>23</sup> Change – Pedestrian Parapet Dimensions added.

<sup>24</sup> Drawing Numbers: ULE90130-07-RTW-00034, 35, 36, 37, 38, 44, 45, 50, and 51.

<sup>25</sup> Excerpt taken from General Arrangement Drawing – ULE90130-07-PLG-00051 Rev 5

<sup>26</sup> Planning Application No: 11/00061/FUL



## 4.5 EAL Flood Objections

4.5.1.1 A workshop meeting attended by tie, SDS, the Infraco and BAA on the **29 May 2008** was convened to discuss (among other things) the requirement for additional works to the Edinburgh Airport Tram Kiosk. Consequent to the foregoing, the SDS in its letter to the Infraco dated 19/06/2008<sup>27</sup> stated that, as a result of same *“there is an alteration to the retaining wall design at Jubilee Road along the Gogar Burn at the rear of the airport kiosk”*.

4.5.1.2 The Infraco in its letter dated 04/07/2008<sup>28</sup> (which attached the aforementioned SDS letter), reiterated the SDS position that, alterations to the retaining wall at the Jubilee Road along the Gogar Burn would be required in light of the recent workshop meeting.

4.5.1.3 The proximity of these works to Edinburgh Airport creates an obligation on the Infraco, pursuant to Schedule 44, Appendix 3 of the Contract, to provide tie and EAL with Reviewable EAL Works Data (REWD).

4.5.1.4 It would appear that the **[EAL Works Data / drawings]** were provided by the Infraco during the BAA interface Meeting dated 01/06/2008.

4.5.1.5 On receipt of this Work Data, EAL in its letter dated 30/06/2009<sup>29</sup> subsequently raised its concerns over the increased flood risk to the Airport as a result of the aforementioned redesign (i.e. its 'Flood Objections').

4.5.1.6 It is notable that while the EAL 'Flood Objections' remained outstanding, the Infraco in accordance with Schedule 44 clause 4.1 of the Contract, would not be permitted to commence any element of the EAL Works to the Gogarburn Retaining Walls (W14C) until such objection had been withdrawn.

4.5.1.7 It is noted that these 'Flood Objections' remained in place until February **2011**.

4.5.1.8 EAL finally lifted its 'Flood Objections' in its letter dated 09/03/2011<sup>30</sup>. This letter also stated that despite EAL withdrawing its objections, *“It is regrettable however that it has taken 20 months to come up with a suitable design since the objection was first raised.”*

4.5.1.9 Notwithstanding EAL's formal removal of its 'Flood Objections' (discussed above), we have recently been advised that there is a residual issue with regard to flood risks attaching to the Gogarburn Retaining Walls. By way of explanation, EAL in its letter dated 09/03/2011<sup>31</sup> have raised further

**Comment [JQ6]:** Summary only. Not relevant to go into this section in detail. Discuss with RB

<sup>27</sup> ULE90130-07-LET-00344

<sup>28</sup> 25.1.201/JHi/261

<sup>29</sup> See RRB Draft report – **no letter reference**.

<sup>30</sup> EAL letter ref: KJ/DL 1.

<sup>31</sup> EAL letter ref: KJ/DL 2.





concerns, that the current design of retaining wall W14C 'may' present a potential flood risk to the Burnside Road Bridge.

4.5.1.10 In light of the foregoing, EAL has requested that tie (and therefore the Infraco) "carry out further analysis of the combined effects of proposed works in order to demonstrate the suitability of the design and performance of the Burnside Road Bridge (and Retaining Wall) and furnish me with same."

4.5.1.11 It is our understanding that in the coming weeks, the Infraco will submit a brief report on the analysis requested above (pending its analysis of the relevant water models) which will clarify the significance (or otherwise) of this flood risk.

Comment [JQ7]: AS to confirm.

4.5.1.12 This residual issue is significant, because until this matter is resolved, the Infraco will not be able to commence work to retaining wall (W14C).

#### 4.6 MUDFA / Utilities

4.6.1 We have been advised that there are no outstanding MUDFA utility issues affecting this section of the works. In this regard tie confirmed same, in its letter dated 01/10/2009<sup>32</sup> which stated (amongst other things) that "the completion dates for services diversion works is 30<sup>th</sup> October 2009 and Burnside Road Relocation is 8<sup>th</sup> January 2010."

4.6.2 MUDFA Utility As-Built drawings were submitted to the Infraco under cover of tie's letter dated 15/01/2010<sup>33</sup> for works carried out between Ch 712170 and the EAL Tramstop.

#### 4.7 CAR License

4.7.1.1 Notwithstanding the recent release of IFC drawings (paragraph xx above refers), there is a further obligation / requirement under the Contract for the Infraco to obtain a Controlled Activity Regulations (CAR) License. This license is required as the Infraco are undertaking engineering activities (i.e. the retaining wall) in or near water bodies (i.e. the Gogar Burn)<sup>34</sup>. Without a CAR License, works cannot commence on retaining wall (W14C).

4.7.1.2 Schedule 1 of the Contract titled "Definitions and Interpretation" defines the SDS's (and therefore the Infraco's) responsibilities with regard to 'Design Stage Consents' as follows:-

*"Design Stage Consents' means the consents (in respect of Design produced by SDS Provider or Infraco Design) listed in table A below and any further consents that the SDS Provider is responsible for obtaining under the SDS Agreement, save for Construction and Maintenance Stage Consents"*

<sup>32</sup> tie letter ref: INF CORR 2470/AS

<sup>33</sup> tie letter ref: INF CORR 3165/AS

<sup>34</sup> Information taken from the SEPA website titled "Controlled Activity Regulations".



- 4.7.1.3 Table A includes a requirement for the SDS to provide a 'CAR License' which requires the approval of the Scottish Environmental Protection Agency (SEPA).
- 4.7.1.4 To date this CAR license remains outstanding. We have been advised that the timescales attaching to the approval of same (by SEPA) is in the region of 8 weeks.

**Comment [JQ8]:** AS confirmed that there is no correspondence attaching to this item.

#### 4.8 Otter Holt / Disturbance License: Scottish Natural Heritage

- 4.8.1.1 As stated at paragraphs xx – xx above, table A in Schedule 1 (page 249 of the Contract) details the 'Design Stage Consents' which the SDS (and therefore the Infraco) is responsible for obtaining under the SDS Agreement.
- 4.8.1.2 The table includes an obligation on the Infraco, to obtain an Otter Holt/Disturbance License from the Scottish Natural Heritage (SNH) should such a requirement for same arise.
- 4.8.1.3 We have been advised that in order for works to commence to retaining wall (W14C), an existing otter hole will have to be relocated.
- 4.8.1.4 To date this Otter Holt/Disturbance License remains outstanding.

**Comment [JQ9]:** AS confirmed that there is no correspondence attaching to this item.

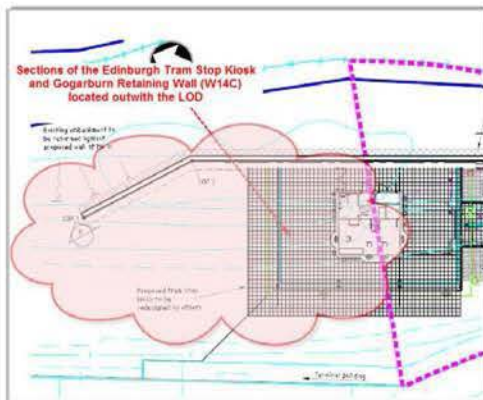
#### 4.9 Land Agreements

- 4.9.1.1 As discussed at paragraph xx above, the recent release of the IFC drawings (9 nr) for Gogarburn Retaining Wall (W14C), gained CEC Planning Approval on the 10/03/2011.
- 4.9.1.2 The drawings, also formed part of the EAL Reviewable Tram Works Data, and EAL confirmed that there were no objections to same in its letter dated 09/03/2011<sup>35</sup>.
- 4.9.1.3 Notwithstanding the above, the excerpt below, taken from drawing number ULE90130-07-RTW-00034 rev 13 dated 03/02/111 (included within the latest IFC release) shows a section of the Edinburgh Tram Stop Kiosk and Retaining Wall (W14C) to be constructed outwith the LOD (clouded below for ease of reference).

**Comment [JQ10]:** Discuss with RB / JH

<sup>35</sup> EAL letter Ref: EAL/TRAM/KJ  
J086- 337 Ver 07 DRAFT





License Agreement

4.9.1.4 In order to gain approvals for works to be undertaken outwith the LOD, tie must apply (in the first instance) to EAL for a license for same, pursuant to the License Agreement between EAL and CEC (December 2007).

4.9.1.5 In this regard clause 3.1 of the License Agreement states:-

*“Not less than 20 Business Days prior to its intention to occupy any part of the Land, the Authorised Undertaker<sup>36</sup> will issue to EAL a Drawdown Notice with accompanying coloured plans indicating the land to be licensed in terms of this license”*

4.9.1.6 In light of the foregoing, it is noted that the License required to cover the additional works to the Tram Stop and the Retaining Wall located outside the LOD, appears to be included within the existing EAL license Area (excerpt below details the existing License Area for the Edinburgh Airport).



<sup>36</sup> Authorised Undertaker is defined in clause 1.1.9: “means CEC or any person to whom the powers of the authorised undertaker under the Act are transferred.



- 4.9.1.7 Consequently tie are required pursuant to clause 3.1 of the Agreement to complete the “Pro-Forma Drawdown Notice” form appended to the License Agreement at Schedule Part 2. This form is requires tie to include (amongst other things) the following:-
- a) a colour plan of the ‘License Area’ required;
  - b) the date occupation will commence;
  - c) the Stated Vacation Date;
  - d) a collateral warranty.
- 4.9.1.8 On receipt of an acknowledgement by EAL that tie’s Drawdown Notice is valid, tie pursuant to clause 3.4.2 are entitled to:-
- “take access to such Land and to use it for the Permitted Use as set out in the Drawdown Notice, from the commencement date specified in the Drawdown Notice.”*
- 4.9.1.9 Consequently, pending this receipt, the Infraco can commence the works to Tram Stop and the Retaining Wall structures.
- 4.9.1.10 Lease Agreement
- 4.9.1.11 Given the current time constraints (as at 25/03/2011), it is not our intention to provide a detailed legal / contractual commentary and analysis of the Lease Agreement between EAL and CEC.
- 4.9.1.12 In summary, we have been further advised that the existing ‘Lease Area’ will be the subject of a final review pending the completion of the works and the submission of the as-built drawings.
- 4.9.1.13 In light of same, the resolution of the ‘Lease Area’ will not preclude the Infraco from commencing the works to the Tram Stop or the Retaining Wall.
- 4.9.1.14 Observations on Land Agreements
- 4.9.1.15 In summary, recent discussions with tie management have confirmed that a Drawdown Notice request to EAL pursuant to Schedule Part 2 of the License Agreement remains outstanding for the works outside the LOD.
- 4.9.1.16 It is noted that tie management are alive to this outstanding requirement, however, it does not consider this to be a major obstacle affecting the Infraco commencement of the works, as the additional works space required, is already included within the existing EAL ‘License Area’, discussed at paragraph above.



#### 4.10 Subcontract Procurement

- 4.10.1.1 One issue which has been highlighted by tie historically throughout the currency of the project has been the failure of the Infraco to comply with the terms of Clause 28 of the Infraco Contract (“*Sub-letting and the appointment of Sub-Contractors*”).
- 4.10.1.2 Consideration of this issue formed part of the Acutus investigations leading up to the issue of the “*Report on Investigation into delays incurred to certain elements of the Infraco Works*” (dated 25 June 2010). At that stage it was found that, in respect of the elements investigated, the Infraco’s procurement of sub-contractors had not been a substantive / material factor affecting progress. That conclusion had been arrived at essentially on the basis that while no formal sub-contract existed, those sub-contractors had generally been engaged by the Infraco on letter(s) of intent.
- 4.10.1.3 That said however, this matter appears to have become more significant particularly in relation to the WPP and Form C processes. In terms of the Gogarburn Retaining Wall, because it is not proximate to the Network Rail Track, Form ‘C’ issues will have no relevance / impact on this section.
- 4.10.1.4 We are advised that the Infraco requested permission to sub-contract works to Farrans for works to Gogarburn Retaining Wall (W14C) on XX/XX/XX. This permission was granted by tie on XX/XX/XX.
- 4.10.1.5 Under the heading ‘Civil & Building Procurement’, the Infraco Period Report No 3-10 & 3-11, to 29 January 2011 states “BBUK have concluded the procurement process for Section 7A”.
- 4.10.1.6 *It would appear therefore that a sub-contract (LOI?) has been formally agreed between the Infraco and Farrans.*

**Comment [RB11]:** Final check with Fiona Dunn if required.

#### 4.11 WPP Process

- 4.11.1.1 Please refer to Section XX of the main body of Section 5A report, which contains an overview / explanation of the WPP process.
- 4.11.1.2 *Extract below is from Infraco’s WPP tracker (the intention to re-tabulate the undernoted snag to provide clarity of content).*  
  
*[Do not have WPP tracker for Section 07A – Requested same from Andy Scott]*

#### 4.12 Form ‘C’

- 4.12.1.1 Not relevant to this section.

#### 4.13 Observations on relevant DRP’s

- 4.13.1.1 On analysis of tie’s DRP tracker dated 26/01/2011 it would appear there are currently no Dispute Resolution Procedures attaching to Gogarburn Retaining Wall (W14C).





#### 4.14 Track Monitoring

4.14.1.1 Not relevant to this section.



## Section 5 Contractual considerations

### 5.1 The Infraco Default (a)

5.1.1.1 As noted at paragraph **xx** above, the original RTN issued by tie in respect of the Gogarburn Retaining Walls W14Cs and W14D, cited four [alleged / apparent] Infraco defaults under the following clauses:-

- a) **Clause 7.1:** The original RTN<sup>37</sup> issued by tie in respect of Clause 7.1, cited the Infraco failures / defaults as, being:-

*“The Infraco has breached its obligations under clause 7.1 of the Infraco Contract to carry out and complete the Infraco Works fully and faithfully in accordance with the Infraco Contract”;*

- b) **Clause 7.2:** The original RTN issued by tie in respect of Clause 7.2, cited the Infraco failures / defaults as, being:-

*“The Infraco has breached its obligations under clause 7.2 of the Infraco Contract to ensure that, in carrying out and completing the Infraco Works, the Infraco exercises a reasonable level of professional skill, care and diligence to be expected of a properly qualified and competent professional contractor experienced in carrying out works and services of a similar nature to the Infraco Works in connection with projects of a similar scope and complexity.”;*

- c) **Clause 11.3:** The original RTN issued by tie in respect of Clause 11.3, cited the Infraco failures / defaults as, being:-

*“The Infraco has breached its obligations under clause 11.3 of the Infraco Contract to procure that the SDS Provider carries out and completes the SDS services in accordance with the SDS Agreement.”;*

- d) **Clause 11.4:** The original RTN issued by tie in respect of Clause 11.4, cited the Infraco failures / defaults as, being:-

*“The Infraco has breached its obligations under clause 11.4 of the Infraco Contract to carry out all management activities in order to manage the performance of the SDS Services”.*

5.1.1.2 As noted at paragraph **xx**, the Infraco responded to that RTN on 22 November 2010 disputing the validity of same and inviting tie to withdraw the RTN (25.1.201.KDR.7500).

5.1.1.3 As discussed at paragraph **xx** above, clauses 11.3 and 11.4 details (what are in tie’s opinion) the Infraco’s contractual breaches, in relation to its failure to manage the performance of the SDS, such that it has not carried out its services in accordance with the SDS Agreement.

<sup>37</sup> Tie letter ref: INF CORR 6422



- 5.1.1.4 In light of the foregoing, it is noted that the Infraco's ability to manage the design process (and the SDS accordingly) has been reviewed both generally, by Robert Blois Brooke of William J Marshall & Partners in his draft Report titled "*Preliminary Report on the Management of the Design Process*" in sections 1-4 & 8, and specifically to the Gogarburn Retaining Walls in section 6 titled "*Analysis – Gogarburn Retaining Walls W14C and W14D*".
- 5.1.1.5 Consequently, it is not our intention (given that this analysis has already been undertaken), to provide a detailed commentary and analysis of the 'Design Process' and the Infraco's management of same.

## 5.2 Review of alleged Infraco failures (and Infraco responses)

- 5.2.1.1 It is relevant however, to make comment, (albeit briefly) on the nature of the Infraco defaults which require to be rectified, and the Infraco responses to same. It is also important to review these alleged failures against the factual matrix of events (which have been collated over recent weeks). Conclusions on same will facilitate ongoing discussions as to whether these findings support (or otherwise) tie's current position that RTN 10 (or a derivation of same) remains tenable.

### 5.2.1.2 RTN10 2.1.1 The Infraco has not completed the Design for the Gogarburn Retaining Walls W14C and W14D:

- a) tie's position:
- b) Infraco response:
- c) Comment:

### 5.2.1.3 RTN10 2.1.2 The Infraco has not obtained the approval of EAL for the Design of the Gogarburn retaining Walls W14C and W14D in accordance with its obligations under the Infraco Contract (including Schedule Part 44):

- a) tie's position:
- b) Infraco response:
- c) Comment:

### 5.2.1.4 RTN10 2.1.3 The Infraco is now carrying out a redesign of the Gogarburn Retaining Walls W14C and W14D (despite being significantly after the date of programme completion):

- a) tie's position:
- b) Infraco response:
- c) Comment:





5.2.1.5 RTN10 2.1.4 The Infraco has notified tie of an INTC (155c) and has not withdrawn the INTC as there is no Design:

- a) tie's position:
- b) Infraco response:
- c) Comment: See comments at paragraph **XX** above.



## Section 6 The Change Process and INTC's affecting or likely to affect commencement and early progress

### 6.1 Generally

- 6.1.1.1 The issues arising from the operation of Clause 80 and in particular the INTC process, have been observed as causing considerable delay to commencement and progress of many structures and areas of the Infraco Works. The main body narrative for the Section 05A priority structures at section xx outlines the key / relevant contractual provisions relating to same.
- 6.1.1.2 The purpose of this section is to investigate the INTC's that have been observed as being an obstacle to commencement to Gogarburn Retaining Wall (W14C) and where possible arrive at an opinion on the party on whom the current action now rests.
- 6.1.1.3 It is important to note that the objective of the present exercise is to identify any Infraco breaches which *presently exist* such that tie can, where or if appropriate, issue a further notice to the Infraco to remedy those breaches thereby enabling the relevant works to commence/progress. As such the present purpose is not to carry out a detailed analysis of culpability leading up to this point (although it is relevant to provide a brief explanation of the events leading up to same). That however does not diminish the effect of, or excuse the Infraco from, earlier breaches in, for example, the late provision of Estimates or the raising of INTC's. The detailed analysis of those earlier breaches is more related to the retrospective analysis of, and respective culpability for, delay (albeit *they* provide an explanation and context of why certain INTC's remain unresolved).

### 6.2 Identification, categorisation and prioritisation of INTC's re the Gogarburn Retaining Walls

- 6.2.1.1 As discussed at paragraph xx above, Gogarburn Retaining Wall (W14C) is located in close proximity (and to the east) of the Edinburgh Airport Tram Stop. Notwithstanding the proximity, of these structures, we have been advised that (with the exception of tie's instruction to the Infraco dated the 23/04/2008<sup>38</sup>) subsequent tie changes to the Edinburgh Tramstop do not affect the physical construction of Gogarburn Retaining Wall (W14C).
- 6.2.1.2 In light of the foregoing and since Remediable Termination Notice (RTN 10) centres specifically on the Gogarburn Retaining Wall (W14C), this report will therefore focus specifically on the Infraco INTC's affecting same.

<sup>38</sup> tie letter ref: PD.CORR.057SB/JS dated 23/04/2008



6.2.1.3 For completeness however, it will also prudent to include / identify the INTC's which relate to the Edinburgh Airport Tram Stop (due to its proximity to the retaining wall (W14), and the fact that both structures have been combined into one Planning Application (paragraph xx above refers).

6.2.1.4 Consequently, the INTC's have been categorised as follows:-

Comment [JQ12]: Reword.

- a) 'Gogarburn Retaining Walls INTC's': INTC's which are preventing / compromising the Infraco commencement and/or early progress of the works to Gogarburn Retaining Wall (W14C); and
- b) 'Edinburgh Airport Tramstop INTC's': INTC's which will prevent / compromise the Infraco later progress or completion of the works to the Edinburgh Airport Tramstop.

6.2.1.5 The resolution of the INTC's affecting the Gogarburn Retaining Wall (W14C) (detailed at paragraph xx below) will free up sufficient workforce availability to allow the Infraco commencement of, or at the very least for it to make meaningful progress on, the critical areas of work to this structure. As explained, although the Edinburgh Airport Tramstop INTC's will be identified in this report, they will not be reviewed in detail, as part of this process. That is not to say however that those INTC's will not need to be resolved in due course.

6.2.1.6 **Contemporaneous List of INTC's impacting on Gogarburn Retaining Wall (W14C)**

6.2.1.7 The contemporaneous list of INTC's yet to be resolved and thereby impacting (albeit to varying degrees) upon the meaningful commencement / progress of the construction works to Gogarburn Retaining Wall (W14C) is as follows;

1	2
INTC	Description
78	Alterations to Edinburgh Airport Tram Stop / Retaining Wall
80	Gogarburn Retaining Wall Finishes
155	BDDI to IFC changes for Gogarburn Retaining Walls 14D, 15A and 15C.
682	Impact of Tram Infrastructure on Flood Risk in the Gogar Burn

6.2.1.8 The following paragraphs xx to xx contain a review of INTC's 78, 80, 155 and 682 (as highlighted above) and sets out our [presently interim] conclusions relating to the current contemporaneous position on responsibility for issues yet to be resolved.

6.2.1.9 **INTC 78: Alterations to Edinburgh Airport Tramstop/Retaining Wall – [DESIGN ONLY?]**

6.2.1.10 INTC 78 was issued by the Infraco on the 02/09/2008<sup>39</sup> (circa 35 calendar days before the planned release of the IFC drawing issue and circa 178 calendar days before actual IFC drawing release). The

<sup>39</sup> Infraco letter ref: 25.1.201/JHi/444.





notice attached the SDS letter dated 20/08/2008<sup>40</sup> explaining that the changes required were due to:

*"the increase in size of the kiosk at Edinburgh Airport Tramstop there is a requirement for significant changes to the Gogarburn retaining wall and an additional wall to suit the requirements of the BAA walkway."*

**Comment [RB13]:** Check and add due diligence content where/if appropriate

**Comment [JQ14]:** Why was this INTC issued on the 02/09/2008, when tie had instructed the SDS of the changes to the kiosk in April 2008 [See Sched.Part 23 Nov. Agreement at .....]? The IFC drawings dated 06/10/2008 (rec'd 02/2009) seems to have allowed for changes to the kiosk by introducing a "kink" into the RTW. What therefore forms the basis of this INTC? Discuss with AS and CN.

**Comment [JQ15]:** Although the letter does not specifically state it. It can be inferred that tie require the construction element of the Estimate as well as the design element

6.2.1.11 This letter also enclosed the Infraco's 'Design Only' Estimate for these changes in the sum of **£61,734.06**.

6.2.1.12 tie acknowledged receipt of this Estimate on the 25/09/2008<sup>41</sup> and requested that the Infraco submit same in full compliance with clause 80.4. On receipt tie would review and respond.

6.2.1.13 The Infraco revised its 'Design Only' Estimate for INTC 078 on the 09/01/2009<sup>42</sup> to the sum of **£48,620.04**. It also indicated that SDS would require a 6 week period to complete this design work from a receipt of a tie Change Order.

6.2.1.14 In response to the aforementioned tie, in its letter dated 29/01/2009,<sup>43</sup> authorised the Infraco to proceed with the design works detailed in the validated SDS Design Change Estimate titled "Gogarburn Retaining Wall – Design Only".

6.2.1.15 It is notable that no tie Change Order has been provided for these works.

6.2.1.16 In light of the foregoing, the Infraco in its letter dated 05/02/2009,<sup>44</sup> stated that it would proceed with the design works detailed in the corresponding validated SDS Design Change Estimate, in order to secure progress of the works. Consequently, this acknowledgment would mean that the SDS design (which would take a 6 week period to complete) should be due on or around the 18/03/2009 at the latest.

**Comment [JQ16]:** When was the design finalised? First attempt.

6.2.1.17 In its letter dated 09/02/2009<sup>45</sup>, tie responded to the above and stated that it has yet to receive the "construction element" of the Estimate. It also stated that the amount of time which has elapsed since its instruction for these works under cover of letter (reference INF CORR 122) and dated 28/08/2008 is an unreasonable period of time, necessary for it to fulfil its obligations under clause 80.

<sup>40</sup> SDS letter ref: ULE90130-07-LET-00363. SDS Estimate number DCR0015.

<sup>41</sup> Tie letter ref: INF CORR 184.

<sup>42</sup> Infraco letter ref: 25.1.201/BOc/1265

<sup>43</sup> Tie letter ref: INF CORR 656

<sup>44</sup> Infraco letter ref: 25.1.201/BOc/1481

<sup>45</sup> Tie letter ref: INF CORR 723



6.2.1.18 Consequently the Infraco responded to the foregoing on the 23/02/2009<sup>46</sup> and stated that it would be unable to establish the construction scope (and therefore, the subsequent Estimate) until the SDS completed the design for this work.

6.2.1.19 On the 28/08/2009<sup>47</sup> tie stated that it had still not received the “construction element” of the Estimate for these works and that “it is unacceptable that a period of 1 year has passed without submission of an Estimate.” It also requested confirmation of when this Estimate can be expected.

6.2.1.20 The Infraco responded to the aforementioned in its letter dated 16/10/2009<sup>48</sup>, the following summarised its position in this regard:-

- i) That the instruction given by tie (INF CORR 122 refers) was not given in compliance with clause 80.2 and was of insufficient detail to provide an Estimate;
- ii) tie authorised the design work on the 29/01/2009;
- iii) IFC design was received by the Infraco on the 26/02/2009;
- iv) A meeting between tie, BSC and SDS convened on the 03/03/2009 due to the acknowledgment by all Parties that the scope of the instruction still required clarification. Clarification in this meeting would enable an Estimate to be submitted in accordance with clause 80.4;
- v) Noting several changes between the BDDI to IFC drawings, the Infraco provided a single Estimate encapsulating all changes (including any works pertaining to the ‘construction element’ of INTC 078) to the retaining walls under a different INTC, namely INTC 155;
- vi) The Estimate for INTC 155 was provided on 23/06/2009<sup>49</sup>. The Infraco therefore avers that tie was in possession of sufficient information to evaluate and authorise the works associated with both INTC 78 and 155 at this time.

**Comment [JQ17]:** If this is the case how can INTC 155 (BDDI to IFC) drawings be issued on the 16/10/2008?

6.2.1.21 Consequent to the above, tie responded in its letter dated 24/11/2009<sup>50</sup> and stated that the incorporation of INTC 078 was not noted in the Infraco submission of INTC 155. tie averred that since INTC 078 and INTC 155 are separate issues, they should not be combined into a single INTC Estimate. This letter also stated that the retaining walls north of Eastfield Avenue are currently under design review as a result of their impact on the Gogar Burn. On conclusion of same tie requested that the Estimates be resubmitted as two separate Estimates.

**Comment [JQ18]:** Why did the Parties not discuss this sooner? Why was tie not aware of this incorporation see letter dated 24/11/2008?

<sup>46</sup> Infraco letter ref: 25.1.201/MRH/1700

<sup>47</sup> Tie letter ref: INF CORR 2164/GMcG

<sup>48</sup> Infraco letter ref: 25.201/BOc/3785

<sup>49</sup> Infraco letter ref: 25.1.201/IO/2908

<sup>50</sup> Tie letter ref: INF CORR 2867/GMcG





- 6.2.1.22 In what appears to be the latest correspondence attaching to INTC 078, tie in its letter dated 25/11/2009 stated that it had completed its review of the Infraco Estimate for retaining walls W14A, W15A, W15B and W15C and requested a meeting to discuss same.
- 6.2.1.23 It is notable that further correspondence attaching to the 'construction element' for all of the Gogarburn Retaining Walls is subsumed within INTC 155 (paragraph xx below refers).
- 6.2.1.24 Pending further clarification, it would appear that as at the 29/03/2011, INTC 078 includes the 'Design Only' element to the Gogarburn Retaining Walls.
- 6.2.1.25 Observations on INTC 78
- 6.2.1.26 To date, it would appear that although tie has issued a letter to proceed with the Design of the Gogarburn Retaining Walls (paragraph xx above refers), it has yet to issue a tie Change Order for same. Notwithstanding the above, it would appear that this has not been an impediment to the commencement of the design works, which are now complete.
- 6.2.1.27 We have been advised that there remains the possibility that both the 'Design' element (for 'all' of the Gogarburn Retaining Wall structures detailed in INTC 078) and the 'Construction' element (specifically for retaining wall W14C) may be combined and dealt with under one tie Change Order.

**INTC 80: Gogarburn Retaining Wall Finish – [DESIGN ONLY?]**

- 6.2.1.28 INTC 80 was issued by the Infraco on the 09/09/2008<sup>51</sup> (circa 31 calendar days before the planned release of the IFC drawing issue and circa 178 calendar days before actual IFC drawing release).
- 6.2.1.29 This INTC was based on an SDS letter to the Infraco dated 03/09/2008<sup>52</sup> which stated that, with regard to the finish of the retaining wall, "CEC considers Fair Face concrete more in keeping with character of area than Yorkstone Block...SDS amended the design to suit and the technical approval has since been submitted on this basis".
- 6.2.1.30 After various exchanges between the Parties and consequent to the above, the Infraco notified tie in its letter dated 18/12/2008<sup>53</sup> of its revised Estimate for the 'Design Only' element, for the changes to the Gogarburn Retaining Wall Finishes in the sum of **£4,998.89**.
- 6.2.1.31 In light of the foregoing, tie in its letter dated 13/01/2009<sup>54</sup> duly authorised the Infraco to proceed with the design works in the validated SDS Design Change Estimate detailed above, with the exception of the SDS Estimate Preparation costs which are unsubstantiated and not allowed.

**Comment [JQ19]:** tie management are of the opinion that the valuation of this Estimate is yet to be agreed.

<sup>51</sup> Infraco letter ref: 25.1.201/JHi/467.

<sup>52</sup> SDS letter ref: ULE90130-07-LET-00369.

<sup>53</sup> Infraco letter ref: 25.1.201/JHi/1198.

<sup>54</sup> Infraco letter ref: INF CORR 583.





6.2.1.32 In response to the aforementioned, the Infraco in its letter dated 20/01/2009<sup>55</sup> stated that although it does not agree that the SDS Estimate Preparation costs are not allowed, it will nonetheless proceed with the design works in order to secure progress of the works.

Observations on INTC 80

6.2.1.33 As at 04/03/2011, it would appear there still exists a minor dispute between the Parties for the SDS Estimate Preparation costs in the sum of £380. However this has not held up the design changes required by the CEC in this regard.

6.2.1.34 We have been advised that there remains the possibility that the both the 'Design' element for the change to the wall finishes of the retaining wall and the 'Construction' element (if any) may be combined and dealt with under the same tie Change Order as detailed in paragraph xx above.

6.2.2 INTC 155 (c): BDDI to IFC changes to the Gogarburn Retaining Walls

6.2.2.1 INTC 155 was issued by the Infraco on the 16/10/2008 (circa 8 calendar days after the planned release of the IFC drawing issue and circa 134 calendar days **before** actual IFC drawing release).

6.2.2.2 This INTC was issued by the Infraco for drawing changes it averred were outwith normal design development. Due to the complexity of the changes, the Infraco also requested a reasonable extension of time to the contract requirement of 18 business days to provide an Estimate.

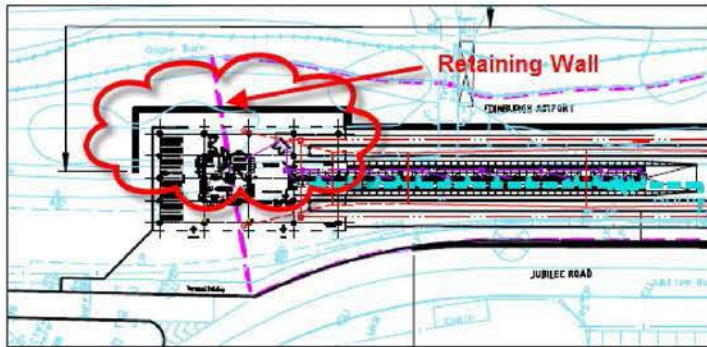
6.2.2.3 It is noted that although tie were in receipt of INTC 155 on or around the 16/10/2008 it appears that tie did not actually receive the IFC drawings until 26/02/2009<sup>56</sup> (141 calendar days after the original / planned IFC release date). **[To be expanded if required]**

6.2.2.4 It is notable that the design of the retaining wall (W14C) in the IFC drawings (as at 26/02/2009) consisted of the following:-

- a) A reinforced concrete gravity wall;
- b) An excerpt from the location plan drawing ULE90130-07-RTW-0031 rev 2, below, details the retaining wall with a "kink" (clouded in red) which protrudes eastwards towards the Gogarburn.

<sup>55</sup> Infraco letter ref: 25.1.201/BOc/1304

<sup>56</sup> SDS Document Transmittal Numbers ULE90130-SW-DTF-04638 revisions 1 and 2.



6.2.2.5 After various exchanges between the Parties, the Infraco, in its letter dated 23/06/2009<sup>57</sup>, submitted its Estimate for the BDDI to IFC drawing changes for the Gogarburn Retaining Walls in the sum of **£1,146,619.68**. It is noted that this Estimate was issued circa **251** calendar days later than the INTC was raised.

6.2.2.6 Consequently tie responded in its letter dated 03/08/2009<sup>58</sup> and stated that notwithstanding that it did not (at this time) accept that the INTC represented a change under the Contract, it nonetheless attached a review of the “*measurement and rates*” within the Estimate. tie’s review valued the BDDI to IFC drawing changes at **£830,598.70**.

6.2.2.7 Subsequent to the above and following further correspondence between the Parties (where tie remained of the opinion that INTC 155 did not constitute a change) the Infraco confirmed in its letter dated 16/10/2009<sup>59</sup> that the “*construction element*” of INTC 078<sup>60</sup> had been subsumed within INTC 155.

6.2.2.8 In its letter dated 24/11/2009<sup>61</sup> tie responded to the Infraco letter ref 25.1.201/MRH/3541 (see paragraph xx above) and proposed that as the walls north of Eastfield Avenue (i.e. W14B, W14C, W14D and W15D using IFC references) were under design review; the Parties should (in the first instance) deal with the retaining walls south of Eastfield Avenue namely W14A, W15A, W15B and W15C. Consequent to the above tie stated that it was in the process of reviewing the Infraco Estimate for the aforementioned structures south of Eastfield Avenue.

**Comment [JQ20]:** Why did this Estimate take so long to be produced if the Infraco released the BDDI to IFC change notification in October 2008, but did not submit the Estimate until June 2009?

**Comment [JQ21]:** Why did tie review the Estimate if it did not think any changes between the drawings existed? Discuss with AS.

**Comment [JQ22]:** Note W15D is not north of Eastfield Avenue (probably not significant) Error?

<sup>57</sup> Infraco letter ref: 25.1.201/IO/2908.

<sup>58</sup> Tie letter ref: INF CORR 1903/SJ.

<sup>59</sup> Infraco letter ref: 25.1.201/BOc/3785.

<sup>60</sup> INTC 78 - Alterations to Edinburgh Airport Tramstop/Retaining Wall.

<sup>61</sup> Tie letter ref: INF CORR 2868/GmcG.



6.2.2.9 In light of the foregoing, tie subsequently issued a tie Change Order (Nr 127) for the 'construction element' of the following Gogarburn Retaining Walls namely; W14A, W15A, W15B and W15C in its letter dated 22/12/2009<sup>62</sup> for the sum of **£141,188.67**.

6.2.2.10 Subsequent to the above, the Infraco in its letter dated 03/03/2010 detailed its intention to split INTC 155 into 3 separate elements (the table below refers):-

1	2	3
INTC 155a	INTC 155b	INTC 155c
W14A	W14B	W14C
W15A	W15D	W14D
W15B		
W15C		

6.2.2.11 In addition to the aforementioned, tie in its letter dated 18/06/2010<sup>63</sup> issued a further tie Change Order (Nr 166) for changes to the following Gogarburn Retaining Walls namely W14B and W15D for the sum of **£12,464.28** (INTC 155b refers).

6.2.2.12 It is relevant to note that on the 25/03/2010 the Infraco submitted a revised Approval in Principal document (version 6), which provided details of a proposed re-design to retaining wall W14C. It would appear that this re-design was as a consequence of the migration of the Gogar Burn and its eroding effects upon the adjacent embankments.

**Comment [JQ23]:** Doc Reference? Need to get a copy of this document.

**Comment [JQ24]:** RBB Draft report page 103 refers.

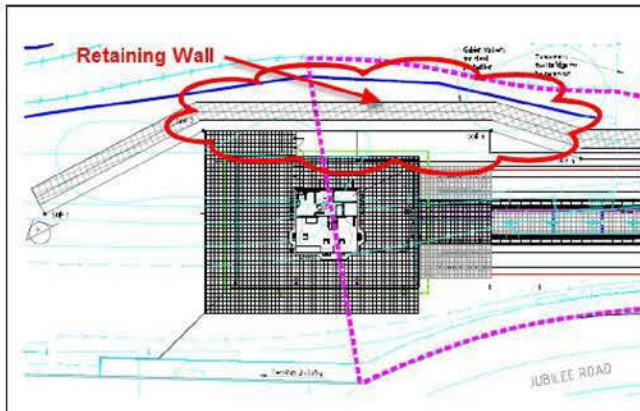
6.2.2.13 In light of the foregoing a revised design for the retaining walls was issued by the Infraco 'for External Approval' to tie on the 23/04/10. The revised design consisted of the following (in lieu of the original IFC drawings (paragraph xx above refers):-

- a) Steel Sheet Piles faced in reinforced concrete, restrained by a waling beam and horizontal ties, each terminating at a concrete anchor block. The west bank of the Gogar Burn was to be reformed and a scour mattress and wall was created using gabions baskets;
- b) An excerpt from the general arrangement plan drawing ULE90130-07-RTW-0034 rev 5, below, details the retaining wall with a "reduced kink" (clouded in red) which protrudes eastwards towards the Gogar Burn.

<sup>62</sup> Tie letter ref: 22/12/2009

<sup>63</sup> Tie letter ref: INF CORR 5370/GMcG





6.2.2.14 This revised design was approved by the CEC on 12/07/2010.

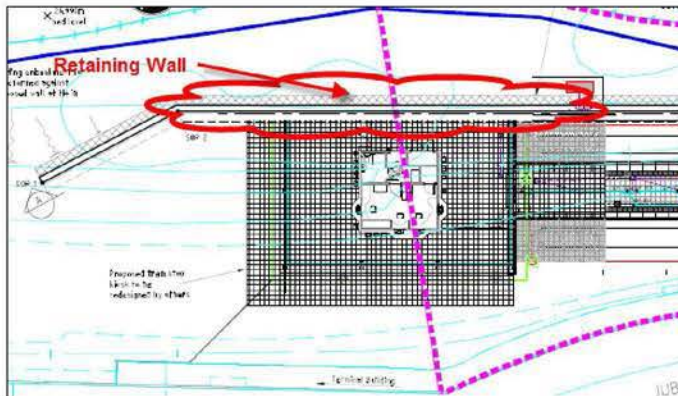
6.2.2.15 Subsequent to the above, on the 15/10/2010 the SDS submitted an Addendum Nr 1 to the AIP documentation for the Gogarburn Retaining Wall W14C to tie and CEC for review.

6.2.2.16 This Addendum detailed a further redesign to retaining wall (W14C), changing the construction from steel sheet piles, faced in reinforced concrete (restrained by a waling beam and horizontal ties) to a reinforced concrete wall and pile cap on 880mm diameter secant piles.

6.2.2.17 Notwithstanding the various piling designs for the retaining wall discussed at paragraphs xx to xx above, the Infracore subsequently realigned the retaining wall W14C and detailed same on drawing number ULE90130-07-RTW-00034 rev 9 dated 15/10/2010 (issued to tie on the xx/xx/xx). An excerpt taken from that drawing below, shows the retaining wall W14C straightened out with the “kink” removed (clouded in red):-

**Comment [JQ25]:** AS to provide AIP information. Information taken from RBB Draft Report.

**Comment [JQ26]:** Check reference when received.





6.2.2.18 As detailed at paragraph XX above, the revised IFC drawings for retaining wall (W14C) were issued by the Infraco on the XX<sup>64</sup>.

6.2.2.19 In light of the foregoing this revised design was approved by the CEC on the XX.

Comment [JQ27]: AS to provide details

Observations on INTC 155

6.2.2.20 As at 29/03/2011, the Estimates for INTC 155c (retaining wall 14C) remain outstanding.

6.2.2.21 We have been advised that the Estimate for INTC155c and the 'Design' Estimates for INTC 078 and INTC 80 respectively may be subsumed within one tie Change Order. **[To be confirmed]**

6.2.2.22 It would appear that the requirement to design a "kink" in the retaining wall (W14C) arose, to accommodate the introduction of a 'maintenance strip' to the Edinburgh Tram Stop. Consequently, it is relevant / important to understand why this requirement arose, and who initiated same.

6.2.2.23 This matter was discussed during the BAA interface meeting dated 10/06/2008 and recorded at item 4 of the minutes of same as follows:-

*"SDS confirm that the maintenance area at the back of the kiosk required to be 2m. This is what SDS will assume moving forward, unless advised otherwise (i.e. BAA have assumed that the Burnside Road Diversion will be in place before the footbridge and walkway alongside the current road will be made redundant, if not, the space may need to be up to 3m)"*

6.2.2.24 **[EXPAND on above]**

6.2.2.25 *The straightening / realignment of the retaining wall (W14C) and the amendments to the Edinburgh Tram Stop have been combined into one Planning Application. We are advised that the drawings for same are to be revised and resubmitted on the 09/03/2011 (a detailed explanation will be included in INTC 682 at paragraph xx below). [Expand and reword].*

**6.2.3 INTC 682: Impact of Tram Infrastructure on Flood Risk in the Gogar Burn**

6.2.3.1 INTC 682 was issued by the Infraco on the 22/09/2010<sup>65</sup> (circa 714 calendar days after the planned release of the IFC drawing issue and circa 574 calendar days after actual IFC drawing release).

6.2.3.2 INTC 682 was issued by the Infraco on the 22/09/2010<sup>66</sup> (circa 714 calendar days after the planned release of the IFC drawing issue and circa 574 calendar days after actual IFC drawing release).

6.2.3.3 This INTC was predicated on the Infraco's opinion that additional measures (required by EAL) to reduce the impact of the Tram infrastructure on flood risks to the Gogarburn Burn constituted a change. Potential solutions centred on following:-

<sup>64</sup> Insert letter and drawing references.

<sup>65</sup> Infraco letter ref: 25.1.201/SN/6782

<sup>66</sup> Infraco letter ref: 25.1.201/SN/6782



- i) dredging the channel;
- ii) increasing the storage capacity by amending the cross section on the east bank; and/or
- iii) raising the level of flood defences on the east bank.

6.2.3.4 In addition to the above, the Infraco letter also stated that tie had requested that the Infraco carry out a further remodelling exercise to take account of these proposed amendments to the tram infrastructure design and their impact on the Gogar Burn.

6.2.3.5 The historical background and the various exchanges attaching to the potential flooding issues which may affect the Gogar Burn, as a consequence of the construction of the Gogarburn Retaining Walls has been well documented between the Parties. **RBB draft report includes considerable detail re same.**

**Comment [JQ28]:** Including various consultant inputs.

6.2.3.6 As such (and at this juncture) it would perhaps not be the most efficient (or indeed beneficial) use of time to simply recount the historical background of the Flood Risks associated with the introduction of the Gogarburn retaining walls in detail, when this exercise has already (to some extent) been carried out. **[expand this section if required]**

**Comment [JQ29]:** The Historical Background can of course be revisited (and commented upon) if it is found that there is a requirement for same.

6.2.3.7 Consequently, the following correspondence summarises the Parties opinions in this regard:-

- i) **tie RTN 10:** tie letter ref - INF CORR 682 dated 12/10/2010;
- ii) **Infraco response to RTN 10:** Infraco letter ref - 25.1.201/KDR/7500 dated 22/11/2010;
- iii) **William J Marshall & Partners Preliminary [DRAFT] Report on the Management of the Design Process:** Section 6 titled - Analysis – Gogarburn Retaining Walls W14C and W14D.<sup>67</sup>
- iv) **INTC 682:** Infraco letter ref: 25.1.201/SN/7674 dated 15/12/2010;
- v) **Infraco Notification of a Compensation Event:** Infraco letter ref: 25.1.201/MRH/7696 dated 15/12/2010;
- vi) **Infraco letter ref:** 25.1.201/SN/7806 dated 11/01/2011;
- vii) **tie letter ref:** INF CORR 7179/AS dated 21/01/2011;
- viii) **Infraco letter ref:** 25.1.201/SN/7984 dated 02/02/2011;
- ix) **tie letter ref:** INF CORR 7277/AS dated 04/02/2011.

<sup>67</sup> DRAFT B: Ref 5080\rpt\23. Dated 14/01/2011





6.2.3.8 Notwithstanding the 'historical' relevance of the matters discussed at paragraph xx above, the contemporaneous matters still outstanding for INTC 682 (and capable of remediation by the Infraco) are discussed at paragraph xx below.

Observations on INTC 682

6.2.3.9 Recent meetings with tie staff (held on the 16/03/2011) have confirmed that EAL has removed the 'Flood Objections' attaching to INTC 682.

6.2.3.10 It is noted however that there still remains the potential for 'residual flood issues' attaching to the design of the Gogarburn Retaining Wall (W14C) and its impact on Burnside Road Bridge (paragraph xx above refers). To date it is unclear whether these matters will require the Infraco to raise an additional INTC for same.

**6.2.4 INTC's Affecting the Edinburgh Airport Tramstop**

6.2.5 As discussed at paragraph xx above the following table details the INTC's which will have a bearing on the carrying out and/or completion of the Infraco Works to the Edinburgh Airport Tram Stop.

1	2
INTC	Description
182	Edinburgh Airport Kiosk
275	EAL Tramstop: BAA Interface (DCR0135)
277	Design of Canopy and Boundary Treatment at Airport Kiosk
465	Redesign of Drainage at BAA/CCRC Interface DCR0205
541	Edinburgh Airport CEC changes DCR0234
682	Impact of Tram Infrastructure on Flood Risk in the Gogar Burn



## Section 7 Assessment of ‘material and adverse’ impact of Infraco Default

### 7.1 Generally

7.1.1 It is significant to note that both Parties appear to agree that the delay to the completion of the Design for the Gogarburn Retaining Walls (W14C), could materially and adversely affect the carrying out and/or completion of the Infraco works.

7.1.2 tie, in its Remediable Termination Notice letter dated 12/10/10 stated that:-

*“Individually and cumulatively, these breaches materially and adversely affect the carrying out and completion of the Infraco Works”*

7.1.3 In its response to the aforementioned, the Infraco (amongst other things) agreed with tie’s position and stated:-

*“Insofar as there is a delay in completion of the Design for the Gogarburn Retaining Walls W14C and W14D, it is accepted that this delay could materially and adversely affect the carrying out and/or completion of the Infraco Works as a whole.”*

7.1.4 *Note: When arguing that delays to the Gogarburn Retaining Wall (W14) will materially and adversely affect the carrying out and/or completion of the Infraco Works, tie will also have to consider the following:-*

- i) *It will be difficult/problematic for tie to illustrate (on a programme) how the delays to the Gogarburn Retaining Wall will affect the Section C completion date, if there are outstanding issues (for which tie is culpable) still attaching to the Edinburgh Airport Tramstop.*

*By way of explanation, the construction works to the Edinburgh Airport Tramstop cannot commence until the retaining wall construction is complete. In light of the foregoing, if the retaining wall construction is constructed, but works cannot commence to the Tramstop due to issues for which tie are culpable, it may be argued by the Infraco that the Section C completion date would have been late in any event.*

Comment [JQ30]: Rework

### 7.2 Observations on the impact of ‘material and adverse’ Infraco default

7.2.1 Demonstration of the cumulative / consolidated ‘material and adverse’ impact of Infraco default across the Gogarburn Retaining Walls.

7.2.2 The following list summarises the **potential ‘contemporaneous’ Infraco defaults** which may have a ‘material and adverse’ impact on the commencement / progress of the works at the Gogarburn Retaining Wall (W14C):

Comment [JQ31]: These will be expanded in due course. Need consensus that all the issues listed are indeed Infraco Defaults.



- i) The Infraco has failed to manage the SDS to provide a timeous workable design capable of CEC and EAL approvals for the Gogarburn Retaining Wall (W14C).

*To complete – see RBB draft report*

- ii) A CAR license for the works attaching to the Gogarburn Retaining Wall (W14C) is yet to be obtained (i.e. SEPA Approvals). **[Expand pending further information from AS]**. This is a matter for which the Infraco is responsible.
- iii) An Otter Holt/Disturbance License is required to relocate an Otter Holt within the LOD and proximate to the Gogarburn Retaining Walls. **[Expand pending further information from AS]**. This is a matter for which the Infraco is responsible.
- iv) Confirmation pending that the Infraco has provided a solution which allows the outstanding EAL ‘Flood Objections’ to be removed **[when confirmed this default can be removed]**.

*Note: If the ‘Flood Objections’ are lifted (with no further input from the Infraco, then tie may be culpable for certain delays attaching to the time taken from EAL receiving the information and subsequently approving it. This appears to relate only to recent issues re Flood objections (not the full period of delay)*

- v) Confirmation pending that Planning Permission for Gogarburn Retaining Wall (W14C) has been approved **[when confirmed this default can be removed]**

*(why did the Infraco choose to submit a joint application for the northern section of the retaining wall in combination with the Edinburgh Airport Tram Stop?) A workable design (capable of approval) for retaining wall (W14C) should have been established and submitted to planning shortly after the SDS design release promise date of the 18/03/2009 (paragraph xx above refers) at the latest.*

*The fact that the Planning Application for the Edinburgh Airport Tramstop and the retaining walls is now combined, artificially creates an interdependence on these structures when in fact a robust workable design for the retaining walls could have been submitted in isolation, well in advance of delays (introduced by tie and CEC) attributable to the Edinburgh Tram Stop.*

- vi) Confirmation pending that the IFC Drawings for Gogarburn Retaining Wall (W14C) have been released. **[when confirmed this default can be removed]**

*(should these be released immediately after planning approvals what is a realistic timescale for IFC to be released?);*

**Comment [RB32]:** Need to understand whether EAL have been unreasonable in dealings with Infraco. RBB draft report indicates EAL have not been unreasonable.

**Comment [JQ33]:** Perhaps more relevant for a retrospective analysis that the Remediable Termination Process.

**Comment [JQ34]:** Question to AS: It is paramount that it can be clarified that the Infraco were aware of any changes to the Tramstop before these dates and that any subsequent design changes to the tram stop would have no impact on the retaining walls.

**Comment [JQ35]:** We have been advised that these may now be released. This matter will be raised at next weeks meeting with AS and CN.





- vii) The Estimate for the ‘construction element’ (INTC 155c) of the Gogarburn Retaining Wall (W14C) is also currently outstanding (*it will be imperative that the valuation of this Estimate is resolved between the Parties are soon as possible post IFC release. It would be expected that collation / drafting of this Estimate would have been progressed by the Infraco during the planning process*);
- viii) The Infraco states that it not required to carry out works which are the subject of an INTC in advance of a tie Change Order or an agree Estimate.

**Comment [RB36]:** When could / should this have been issued? This may only be a recent issue

### 7.3 Observations on (potential) tie culpability affecting the Infraco’s ability to commence / progress the works at the Gogarburn Retaining Walls

7.3.1.1 The following lists summarises the **potential ‘contemporaneous’ tie culpability** which may affect the Infraco’s ability to commence/progress at the Gogarburn Retaining Wall (W14C):

- i) tie’s culpability (or otherwise) in relation to EAL’s ‘Flood Objections **[when confirmation of EAL flood objections is removed this default can be deleted]**
- ii) Planning Permission for Gogarburn Retaining Wall (W14C) is currently outstanding **[when planning approval confirmed this default can be removed]** (*tie must ensure that its responsibilities (i.e. its role in facilitating the planning process) are dealt with expeditiously*);
- iii) The Estimate for the ‘construction element’ (INTC 155c) of the Gogarburn Retaining Wall (W14C) is also currently outstanding and will require a swift resolution (*it will be imperative that the valuation of this Estimate is resolved between the Parties are soon as possible - post IFC release*);
- iv) The Land Agreement between tie and EAL, for the works to be undertaken outwith the LOD has yet to be concluded. **[AS to revert pending discussions with A Sim.]**
- v) We have been advised that there may be residual flood issues attaching to Burnside Road Bridge. **[AS to provide documentation on this matter]**
- vi) In its letter dated 15/12/2010 (25.1.201/SN/7647) the Infraco stated the following:-  
“We record at the meeting on the 16/09/2011 tie instructed Infraco to straighten the Gogarburn Retaining Wall W14C and investigate other options outwith the Limits of Deviation (LOD).” If this is the case then tie may be culpable for delays associated with the closure of issues surrounding the realignment of W14C. **[Discuss with AS]**
- vii) **tie have yet to provide the Infraco with tie Change Orders for the Design works attaching to the changes to the retaining walls (many of these changes were initiated**

**Comment [JQ37]:** These will be expanded in due course.

**Comment [JQ38]:** Possibly remove this item but it would be useful to discuss the flood objections further with AS and CN before we are confident that tie is not culpable for this issue.



by tie/CEC). Where appropriate for completeness this matter should be closed out (it does not appear however to have delayed the actual progress of design).

- viii) tie have yet to provide the Infraco with tie Change Orders for the Design works attaching to the changes to the Edinburgh Tram Stop (many of these changes were initiated by tie/CEC). Where appropriate this matter should be closed out (see comments above).

**Note for discussion with tie:** Can it be confirmed that EAL flood objections have been reasonable (eyes of a third party) and that the Parties haven't spent time (2-3 years) improving and approving a design which is actually unrealistically "overdesigned". Alternatively if EAL had been more reasonable, could the original design for the Retaining Walls have been approved (much) earlier. **[RBB Draft report would suggest that the EAL have not been unreasonable]**

**Comment [JQ39]:** Was the original design competent?

- 7.3.2 Demonstration of the cumulative / consolidated impact of (potential) tie culpability on the Infraco's ability to commence / progress the works across the Section 5A priority structures.

#### 7.4 Collation / summary of unresolved issues attaching to the Gogarburn Retaining Walls.

- 7.4.1 The table below provides a summary of the main issues currently identified as 'unresolved', which will affect the meaningful commencement of the works to the Gogarburn Retaining Walls (W14C). These have been prioritised as follows:-

**Comment [JQ40]:** This table will need to be reviewed and updated. Discuss with RB/JH and AS.

**tie Limited, Edinburgh Tram Network**  
**Section 7A – Gogarburn Retaining Walls detailed review of generic RTN10 issues**  
**Assessment of ‘material and adverse’ impact of Infraco Default**

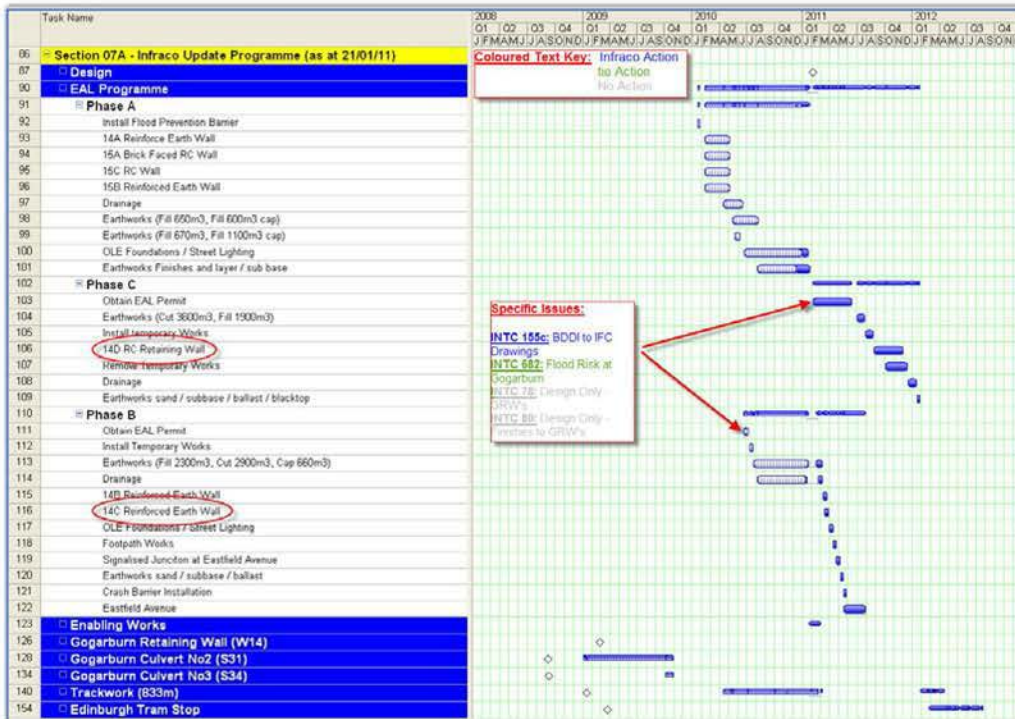


1	2	3	4	5	6	7	8
No.	Section	Code/INTC Nr	Description	Outstanding Action	Action on	Rationale for Prioritisation	Section 7A - Priority Issues
1	07A	Land	Land Agreement	Land Agreement with EAL to be concluded	tie to liaise with EAL	This Agreement must be concluded before works can commence to retaining wall W14C.	1
2	07A	CAR	CAR License	CAR License to be obtained from SEPA	Infraco to obtain license	License must be in place before works can commence to retaining wall W14C.	2
3	07A	Otter	Otter Holt License	Otter Holt License to be obtained from SNH	Infraco to obtain license	License must be in place before works can commence to retaining wall W14C.	3
4	07A	BRB	EAL residual flood concerns attaching to the Burnside Rd Bridge	Clarification required to determine if this issue is significant	tie to liaise with EAL	We have been advised that this matter be of minor significance however it will require resolution pending commencement to retaining wall (W14C)	4
5	07A	155	BDDI to IFC changes for Gogarburn Retaining Walls 14D, 15A and 15C.	Planning Permission for W14C still outstanding. Estimate for recent release of IFC drawings still outstanding.	Infraco to resubmit drawings for planning approval. W estimate still outstanding.	Confirmation is required that IFC drawings (recently released) are now FINAL. This will allow the planning application to be revised and an Estimate to be produced. It is unclear whether this INTC will subsume all outstanding design and construction costs attaching to the Gogarburn Retaining Walls. <b>[tie to confirm]</b> .	5
6	07A	682	Impact of Tram Infrastructure on Flood Risk in the Gogar Burn	EAL have removed flood objections. It would appear that no further action is necessary (on either Party)	n/a	It is our understanding that EAL have removed the flood objections attaching to INTC 682. Closure of this matter will be required before INTC 155 can be resolved (BDDI to IFC issues).	
7	07A	78	Alerations to Edinburgh Airport Tram Stop / Retaining Wall	It would appear that no further action is necessary (on either Party)	n/a	This INTC concerns the 'design only' element for changes to the Gogarburn Retaining Walls. Although tie have issued a letter of approval to proceed, no TCO has been issued. However the absence of a TCO has not been a block to the Infraco proceeding with the design.	
8	07A	80	Gogarburn Retaining Wall Finishes	It would appear that no further action is necessary (on either Party)	n/a	This INTC concerns the 'design only' element for changes to the finish of the Gogarburn Retaining Walls. The construction element of the works is still outstanding, however it is possible that this may be subsumed within INTC 155c.	

7.4.2 Describe table above.

7.4.3 For ease of reference and understanding, the excerpt from the Infraco’s ‘Updated Programme’ below contains a graphical representation of the matters outstanding aligned to the Infraco’s current programme intentions.





7.4.4 Conclusions arising from same Appendix 06 can be summarised as follows (in order of importance):-

Specific Issues:

7.4.5 INTC 155c: – Infraco action; XXXX

**7.5 Relevant legal advice sought / obtained / required**

7.5.1 Roll up priority legal issues/questions.

**7.5.2 Legal response to advice sought as at 28 January 2011.**

**7.5.3**

**7.5.4 Legal advice yet to be drafted**

7.5.5 Discuss with RB and JH the various ways in which “materiality” can be evidenced [conclusions on same may require legal input]

**7.6 Infraco Default in respect of contractual obligations**

7.6.1 See also Section 5.



## Section 8 Conclusions / Recommendations [DRAFT – to be weighted in terms of materiality and criticality]

### 8.1 Concluding objective Acutus view on the foregoing.

8.1.1 On our analysis of the factual matrix surrounding the Gogarburn Retaining Walls xx

*Note: Amongst other things, with regard to the Infraco's management of the 'Design Process' our conclusions should review how the factual matrix compliments / supports the conclusions of RBB's draft Report.*

*Discuss with RB and JH the various ways in which materiality can be evidenced (may result in further legal questions to McGrigors – see section 5)*



**List of Key Witnesses in respect of Section 7A – Gogarburn Retaining Walls:-**

1. **Colin Neil** – all of the issues identified below;
2. **Andy Scott** – technical and construction issues;
3. **Sharon Bateman** – INTC process/Estimates (Mike Paterson was originally identified as the key contact for these issues but is presently off work);
4. **Graeme McGrory** – Commercial Issues relevant to Section 07A.
5. **Damian Sharp** – IFC / design process;
6. **Willie Biggins** – Network Rail Form C; Track Monitoring; WPP;
7. **Sheena Smith** – point of contact for data concerning ground contamination.

**List of Key Documents:-**

*Being collated*



Section	Item	Page	Document Reference	Hard Copy in Folder	Summary of Content
RTN 10	1	1	INF CORR 6422	Y	On 12 October 2010 tie issued a Remediable Termination Notice (RTN) to the infraco in respect of an (alleged) infraco default relating to Clauses 7.1, 7.2, 11.3 and 11.4
	2	2	25.1.201/KDR/7500	Y	The infraco responded to that RTN on 22 November 2010 disputing the validity of same and invited tie to withdraw the RTN
	3	4	ULE90130-05-REP-XXXX	N	CEC AIP documentation (yet to be received from tie PM)
	4	5	Contract Programme Updated for V31 & Mitigation dated 14/08/2008	Y	Original Contract Programme
	5	6	Period Report No 3-10 & 3-11, to 29 January 2011	N	Period Report
	6	6	Programme Revision 1 tracked for V66 Design Programme and Progress to 21 January 2011 and the infraco's "Update Programme updated for V66 Design Programme and Progress to 21 January 2011	N	Programmes from infraco Period Report 3-10 & 3-11 dated 29 January 2011
	7	6	INF CORR - ??	N	tie letter rejecting the infraco Rev 03 Programme. Do not have letter.
	8	6	25.1.201/KDR/6791	N	The infraco letter states that this is the programme on which they are recording progress.
	9	8	Robin Blois Brooke Draft Report on Gogarburn Retaining Walls, Section 6 Draft B.	N	Analysis of Gogarburn Retaining Walls W14C and W14D
	10	9	INF CORR 5414/AS	Y	tie management letter which states that retaining wall W14B is to be constructed in Phase B of the programme and retaining walls W14C and W14D are to be constructed in Phase C. T
	11	11	SOS Design Delivery Programme V31	N	The "issue Construction Drawings" dates included within the Rev.1 programme are derived from the SOS Design Delivery Programme V31.
	12	12	Appendices 2 & 5 to the BSC IDC / DAS procedure	N	BSC IDC / DAS procedure
	13	12	Appendix A to the BSC Design Management Plan	N	BSC Design Management Plan
	14	13	SOS Document Transmittal: Numbers ULE90130-SW-DTF-04638 revisions 1 and 2	Y	The Rev 1 programme the planned date for the issue of the IFC against Gogarburn Retaining Wall (W14C) as being 09/10/2008; the actual issue date was 26/02/2009. Issued in said SOS Doc Transmittal.
	15	14	tie Drawing Register (as at 25 January 2011)	N	tie Drawing Register
	16	14	ULE90130-07-RTW-00034 rev4	N	IFC drawing was issued against the Gogarburn Retaining Walls, namely ULE90130-07-RTW-00034 rev4 (on the 31/03/10)
	17	14	ULE90130-07-RTW-00036 rev4	N	IFC drawing was issued against the Gogarburn Retaining Walls, namely ULE90130-07-RTW-00036 rev4 on the 01/04/09
	18	14	ULE90130-07-RTW-00034, 35, 36, 37, 38, 44, 45, 50, and 51	N	IFC Drawings submitted by the infraco in Feb 2011.
	19	14	Planning Application No. 11/00061/FUL	Y	The Planning Application was finally approved by CEC on the 10 March 2011
	20	15	ULE90130-07-LET-00344	Y	SOS letter to the infraco dated 19/06/2008 stated that, as a result of same "there is an alteration to the retaining wall design at Jubilee Road along the Gogar Burn at the rear of the airport kiosk".
	21	15	25.1.201/HI/261	Y	The infraco in its letter dated 04/07/2008 (which attached the aforementioned SOS letter), reiterated the SOS position that, alterations to the retaining wall at the Jubilee Road along the Gogar Burn would be required in light of the recent workshop meeting.
	22	15	Schedule 44, Appendix 3 of the Contract.	Y	The proximity of these works to Edinburgh Airport creates an obligation on the infraco, pursuant to Schedule 44, Appendix 3 of the Contract
	23	15	EAL letter ref. KJ/D1.1.	Y	EAL finally lifted its "Flood Objections" in its letter dated 09/03/2011
	24	15	EAL letter ref. KJ/D1.2.	Y	EAL in its letter dated 09/03/2011 have raised further concerns, that the current design of retaining wall W14C "may" present a potential flood risk to the Burnside Road Bridge.
	25	15	INF CORR 2470/AS	Y	tie letter dated 01/10/2009 which states (amongst other things) that "the completion dates for services diversion works is 30th October 2009 and Burnside Road Relocation is 8th January 2010."
	26	15	INF CORR 3165/AS	Y	MUDFA Utility As-Built drawings were submitted to the infraco under cover of tie's letter dated 15/01/2010
	27	17	EAL/TRAM/KJ	Y	The drawings, also formed part of the EAL Reviewable Tram Works Data, and EAL confirmed that there were no objections to same in its letter dated 09/03/2011
	28	18	License Agreement between EAL and CEC (December 2007)	Y	License Agreement between EAL and CEC (December 2007)
	29	25	PD.CORR.05758/JS	Y	With the exception of tie's instruction to the infraco dated the 23/04/2008 subsequent tie changes to the Edinburgh Tramstop do not affect the physical construction of Gogarburn Retaining Wall (W14C)
	30	26	25.1.201/HI/444	Y	INTC 78 was issued by the infraco on the 02/09/2008
	31	27	ULE90130-07-LET-00363.	Y	INTC 078 attached the SOS letter dated 20/08/2008, explaining the changes
	32	27	INF CORR 184	N	tie acknowledged receipt of this Estimate on the 25/09/2008
	33	27	25.1.201/80c/1265	Y	The infraco revised its "Design Only" Estimate for INTC 078 on the 09/01/2009
	34	27	INF CORR 656	Y	In response to the aforementioned tie, in its letter dated 29/01/2009 authorised the infraco to proceed with the design works detailed in the validated SOS Design Change Estimate titled "Gogarburn Retaining Wall - Design Only".
	35	27	25.1.201/80c/1481	Y	The infraco in its letter dated 05/07/2009, stated that it would proceed with the design works detailed in the corresponding validated SOS Design Change Estimate, in order to secure progress of the works.
	36	27	INF CORR 723	Y	In its letter dated 09/02/2009 tie responded to the above and stated that it has yet to receive the "construction element" of the Estimate.
	37	27	INF CORR 122	Y	tie instruct the infraco to implement its design for the Airport Kiosk.
	38	28	25.1.201/MRH/1700	Y	The infraco responded to the foregoing on the 23/02/2009 and stated that it would be unable to establish the construction scope (and therefore, the subsequent Estimate) until the SOS completed the design for this work.
	39	28	INF CORR 2164/GMcG	Y	On the 28/08/2009 tie stated that it had still not received the "construction element" of the Estimate for these works and that "it is unacceptable that a period of 1 year has passed without submission of an Estimate."
	40	28	25.201/80c/3785	Y	The infraco responded to the aforementioned in its letter dated 16/10/2009 summarising its position
	41	28	25.1.201/0/2908	Y	The Estimate for INTC 155 was provided on 23/06/2009
	42	28	INF CORR 2867/GMcG	Y	tie responded in its letter dated 24/11/2009 and stated that the incorporation of INTC 078 was not noted in the infraco submission of INTC 155.
	43	29	25.1.201/HI/467	Y	INTC 80 was issued by the infraco on the 09/09/2008
	44	29	ULE90130-07-LET-00369	Y	This INTC was based on an SOS letter to the infraco dated 03/09/2008, which stated that, with regard to the finish of the retaining wall, "CEC considers Fair Face concrete more in keeping with character of area than Yorkstone Block...SOS amended the design to suit and the technical approval has since been submitted on this basis".
	45	29	25.1.201/HI/1198	Y	The infraco notified tie in its letter dated 18/12/2008 its revised Estimate for the "Design Only" element, for the changes to the Gogarburn Retaining Wall Finishes in the sum of £4,998.89.
	46	29	INF CORR 583.	Y	tie in its letter dated 13/01/2009 duly authorised the infraco to proceed with the design works in the validated SOS Design Change Estimate detailed above.
	47	30	25.1.201/80c/1304	Y	The infraco in its letter dated 20/01/2009 stated that although it does not agree that the SOS Estimate Preparation costs are not allowed, it will nonetheless proceed with the design works in order to secure progress of the works.
	48	31	INF CORR 1903/JS	Y	tie responded to infraco Estimate in its letter dated 03/08/2009 and stated that notwithstanding that it did not (at this time) accept that the INTC represented a change under the Contract, it nonetheless attached a review of the "measurement and rates" within the Estimate. tie's review valued the BODI to IFC drawing changes at £830,598.20.
	49	31	25.1.201/80c/3785.	Y	The infraco confirmed in its letter dated 16/10/2009 that the "construction element" of INTC 078 had been submitted within INTC 155
	50	31	INF CORR 2868/GMcG	Y	Refer to Item 40 above
	51	31	25.1.201/MRH/3541	Y	The infraco letter states the reasons why a Notified Departure has occurred.
	52	32	INF CORR 4074 (dated 22/12/2009)	Y	tie subsequently issued a tie Change Order (Nr 127) for the "construction element" of the following Gogarburn Retaining Walls namely; W14A, W15A, W15B and W15C in its letter dated 22/12/2009. Footnote (62) shows the date only.
	53	32	INF CORR 5370/GMcG	Y	tie in its letter dated 18/06/2010 issued a further tie Change Order (Nr 166) for changes to the following Gogarburn Retaining Walls namely W14B and W15D for the sum of £12,464.28 (INTC 155b refers).
	54	33	Revised CEC AIP approvals	N	Revised design was approved by the CEC on 12/07/2010 A5 to provide AIP information. Information taken from R88 Draft Report.
	55	34	Further revisions to the CEC AIP procedure	N	Further revision to CEC AIP.
	56	34	25.1.201/5N/6782	Y	INTC 682 was issued by the infraco on the 22/09/2010
	57	35	25.1.201/5N/7674	Y	infraco update on "Flood Issues" dated 15/12/2010
	58	35	25.1.201/MRH/7696	Y	infraco Notification of a Compensation Event
	59	35	25.1.201/5N/7806	Y	infraco letter stating that following discussions with CEC, it confirmed that it cannot sign off the AIP for DITW until tie decide on an option (With Accompanying Email)
	60	35	INF CORR 7179/AS	Y	tie update the infraco on EAL Flood Position, and confirm CEC AIP approvals.
	61	35	25.1.201/5N/7984	Y	infraco response to tie position with regard to the Flood Objections at Gogarburn
	62	35	INF CORR 7277/AS	Y	tie position on the Flood Objection at Gogarburn as at 04/02/2011. (including accompanying email)