

Schedule 4

PRICING

SCHEDULE FOUR PRICING

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- to tie
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1.0 GENERALLY

1.1 The Infraco Construction Works Price is detailed in Appendix A to this Schedule Part 4. Not provided to SDS

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1.2 The Construction Works Price is on a lump sum basis that is fixed until completion of the Infraco Works and not subject to variation except in accordance with the provisions of this Agreement. How can variations be calculated with any degree of realism is the Works Price is a Lump Sum?

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1.3 This Part 4 of the Schedule sets out the various categories of items that may be subject to change, together with a mechanism for adjustment of the Contract Price including the Construction Works Price. 'May' be subject to change?

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1.4 No provision within this Part 4 of the Schedule shall entitle the Infraco to more than one payment for any item or other entitlement under the Infraco Contract. Don't really understand reasoning, what about abortive work?

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1.5 References to clause numbers in Part 4 of this Schedule are to clauses in the Infraco Contract unless otherwise stated.

1.6 All rates, lump sums and the like contained in this Schedule Part 4 are exclusive of Value Added Tax and are in Pounds Sterling. Is any provision made for Exchange rates bearing in mind German content?

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2.0 DEFINITIONS USED IN THIS SCHEDULE

2.1 "Archaeological Officer" means the archaeological officer appointed by CEC from time to time.

2.2 The "Base Case Assumptions" means the Base Date Design Information, the Base Tram Information, the Pricing Assumptions and the Specified Exclusions.

2.3 The "Base Date Design Information" means the design information drawings issued to Infraco up to and including 25th November 2007 listed in Appendix H to this Schedule Part 4. SDS are aware that a number of the drawings referenced by BBS/Siemens have been superseded during the tender period and made available to tie but are not referenced by BBS/Siemens See also 2.2 above.

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2.4 The "Base Tram Information" means the information contained in Tram Supplier's technical response in relation to the Employer's Requirements and in the Tram Supply Agreement (including, for the avoidance of doubt Schedule 22 ([Tram Technical Information Data Version 10]). Is this the Tramco Contract which presumably reflects the outcome of all tender negotiations between tie and CAF etc?

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2.5 The "**Contract Price**" comprises the following: [tie preparing a new version of this table to be circulated 26/3] Note - **This document was received by SDS on 27.3.08**

	£
Construction Works Price	
SDS Price (as defined in the SDS Agreement and the Novation Agreement) and all subsequent changes?	
Tram Supply Price (as defined in the Tram Supply Agreement) See 2.4 above	
Sub-total of capital expenditure	
ADD revenue expenditure	
Infraco Maintenance Price ¹	
Tram Maintenance Price ² (as defined in the Tram Maintenance Agreement)	
Contract Price	
<u>If the maintenance is tied up with the construction contract what happens if tie wish to ditch the maintenance contractor for failure to perform. I had understood there where going to be two contracts one construction and one for maintenance?</u>	
NB excluding Value Added Tax	

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2.6 "**Defined Provisional Sum**" means a sum included in the Construction Works Price which is provisional but for which Infraco has deemed to have made a provisional

¹ To be confirmed

² To be confirmed

allowance for programming, planning and pricing Preliminaries. **Included in price but provisional. How does this work See also 1.2 above.**

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2.7 "Issued for Construction" shall have the meaning as used in Schedule Part 1 (Definitions and Interpretations).³ **Need to see these bearing in mind SDS provide a large number of them!**

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2.8 A "Notified Departure" is where now or at any time the facts or circumstances differ in any way from the Base Case Assumptions save to the extent caused by a breach of contract by the Infraco, or an Infraco Change or a Change in Law. **See 2.2 and 2.3 above**

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2.9 "Pricing Assumptions" means the assumptions in respect of the Contract Price as noted in Section 3.4 below. **Is this acceptable?**

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2.10 "Specified Exclusions" means items for which Infraco has made no allowance within the Construction Works Price as noted in Section 3.3 below.

2.11 An "Undefined Provisional Sum" means a sum included in the Construction Works Price which is provisional but for which Infraco has not deemed to have made due allowance for programming, planning and pricing Preliminaries. **So what are the potential implications of this statement – how long is a piece of string?**

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3.0 CONSTRUCTION WORKS PRICE

3.1 The Construction Works Price is a lump sum, fixed and firm price for all elements of work required as specified in the Employer's Requirements as Schedule 2 and the Infraco Proposals as Schedule [33] and is not subject to variation except in accordance with the provisions of this Agreement. **I trust Schedule 33 is sufficient specific in detail to advise tie what they are purchasing!**

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3.2 It is accepted by tie that certain Pricing Assumptions have been necessary and these are listed and defined in Section 3.4 below.

3.3 Specified Exclusions from the Construction Works Price are:

a) Utilities diversions (including both the diversion of Utilities and the diversion of any other utilities) and protective works associated with utilities save for the Provisional Sums for those utilities diversions that are to be undertaken by Infraco. **Does the Provisional Sum mentioned fully detail what it covers?**

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b) Work in connection with the St Andrew Square public realm project beyond the tram works. For the avoidance of doubt tramstops, trackform, track bed, OHLE, road surface refurbishing, associated systems and link works together with any other work shown on the Base Case Design Information are included. **What is meant by Tram Works - I thought the Infraco were doing all the Tram works**

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c) Ground conditions that require works that could not be reasonably foreseen by an experienced civil engineering contractor based on the ground conditions reports provided to BBS on 20th and 27th of November and 6th December 2007. Additionally

³ To be defined in the Infraco Contract

the BBS price does not include for dealing with replacement of any materials below the earthworks outline or below ground obstructions/voids, soft material or any contaminated materials. **What or who is defined as an experienced civil engineering contractor? In whose opinion?**~~However the price for excavation and earthworks are inclusive of any differences between differing sub-soils that may prevail.~~

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d) Bernard Street public realm project as information provided to Infracore on 28th November 2007.

3.3.1 In the event that the Infracore is required to carry out any of the Specified Exclusions, this shall be a Notified Departure.???

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3.4 Pricing Assumptions are:

- 1 The design prepared by the SDS Provider will not (other than amendments arising from the normal development and completion of designs):
 - 1.1 in terms of design principle, shape, form and/or specification be amended from the drawings forming the Base Date Design Information (except in respect of Value Engineering identified in Appendices C or D); See 2.2 and 2.3 above
 - 1.2 be amended from the drawings forming the Base Date Design Information and Infraco Proposals as a consequence of any Third Party Agreement (except in connection with changes in respect of Provisional Sums identified in Appendix B); and See 2.2 and 2.3 above – a number of the drawing which appear to form the Base Case are superseded.
 - 1.3 be amended from the drawings forming the Base Date Design Information and Infraco Proposals as a consequence of the requirements of any Approval Body.

For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification. I had understood SDS are providing Detail designs so why is there a reference to Preliminary? Are we not past that stage?

- 2 Design delivery by the SDS Provider has been aligned with the Infraco construction delivery programme as set out in part [•] of Schedule Part 15 (Programme).
- 3 NOT USED Don't understand
- 4 That the Design Delivery Programme (as defined in the SDS Agreement) shall not be amended from version 26. We are already on v28 as I understand it!
- 5 NOT USED
- 6 That the tram fleet shall comprise 27 Trams. But allowance for future extensions surely!
- 7 That the Trams meet the DKE parameters mentioned in the track alignment criteria document (ULE90130-SW-SPN-00001 v3⁴). Is this a tie issue or an Infraco Integration issue? I suggest tie should not award a contract for a tram that does not fit!

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⁴ Subject to provision to BBS of further CAF confirmation

- 8 There shall be no impact on the traction power supply system (as demonstrated by the power simulation modelling) as a consequence of a change to the input parameters used in the simulation at Appendix I.

Don't understand – I understood the principle was that the Infraco provide a system that will meet tie ER's which do ask for a fully operational system based around certain tram parameters

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- 9 Except for normal development and completion of designs (as defined in 1 above), there shall be no changes to the design resulting from the impact of the kinematic envelope of the Trams on the civils design. **See 8 above?**

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- 10 The Urban Traffic Controls (UTC) will allow and have no adverse impact on the Tram operations including run time and punctuality of services as set out in the Employer's Requirements.
- 11 That in carrying out the Infraco Works in accordance with this Agreement, it shall not be necessary to undertake any works outwith the "earthworks outline" (as defined in the Method of Measurement for Highways Works version [●]).⁵ The Infraco shall not encounter any below ground obstructions or voids, soft materials or any contamination (not including differing sub-soils within the earthworks outline) however the price for excavation and earthworks are inclusive of any differences between differing sub-soils that may prevail within the earthworks outline.
- 12 In respect of the highways work in Princes Street, Shandwick Place, Haymarket Junction and St Andrew Square, Infraco's price is based on planing back the existing road structure to a sound base at the underside of the new surface course and replacement suitable for purpose to suit the revised road surface profile. Full depth reconstruction as the current designs in this area is not included in the Price.
- 13 In respect of the Highways and Drainage works at Picardy Place, London Road and York Place and St Andrew Square, Infraco's price is based on the scope as at the Base Date Design Information.
- 14 Road construction shall be 35mm thin surface course on 55mm binder course on 110mm base course and 150mm type 1 sub-base as shown on [sketch]. ~~(NOTE: SUB-BASE DEPTH TO BE ADDED)~~⁶
- 15 The roads as reconstructed in accordance with the SDS design will be adopted by CEC and 'handed back' on or prior to Service Commencement and thereafter CEC shall undertake routine maintenance (sweeping, litter, salting, normal wear and tear and the like) at no cost to Infraco. However for the avoidance of doubt, Infraco remains responsible for any defects in design or construction.
- 16 Flexible footpath surfacing shall be 30mm HRA on 50mm DBM on 150mm Type 1 base.
- 17 In respect of footways provided the Infraco has used reasonable endeavours to protect existing kerbs and flags, during the carrying out of the Infraco Works, these existing kerbs and flags can be re-used where available and minimal reinstatement behind kerb lines is required i.e. not wall to wall.
- 18 Full footway reconstruction in Leith Walk is not required beyond the allowance made in areas where kerb lines are being re-sited.

⁵ tie to revert on definition of "earthworks outline"

⁶ tie to revert after discussion with CEC

- 19 That in respect of Tower Place Bridge, Victoria Dock Bridge and Lindsay Road retaining wall, Infraco shall only be obliged to carry out works to the extent shown in accordance with the Base Date Design Information.
- 20 That in respect of Morrison Supermarket [at Lindsay Road] the Infraco shall not be required to carry out any works in respect of the retaining wall.
- 21 That in respect of the Depot excavation works, (i) the price volume of excavation shall be 80,000m³ as advised by tie on 4 September 2007 is fixed against the quantities advised by BBS to tie and (ii) on the assumption that the depot excavation will be handed over to Infraco pumped dry with a firm sound formation.

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⁷Network Rail immunisation: ~~NOTE: as BBS letter dated 12th October 2007~~

- ~~• Infraco will undertake all Network Rail immunisation including management of all associated works, programme and management of approvals.~~
- ~~• This is subject to Network Rail not unilaterally rejecting Infraco's immunisation strategy at the outset.~~
- ~~• tie will pay 100% of Infraco's costs for Network Rail immunisation up to a cap of £3million for the total value (excluding Value Added Tax).~~
- ~~• If the costs are lower than the cap of £3million referred to above, then the benefits are to be shared 33⅓% each to tie, Network Rail and Infraco.~~
- ~~• The strategy is based on Infraco carrying out the works and supplying all equipment.~~
- ~~• In the event that Network Rail does not accept Infraco's strategy, tie will seek the direct input of CEC, Transport Scotland and the Scottish Executive / Government in order to gain acceptance.~~
- ~~• Infraco agree to carry out further Network Rail immunisation value engineering investigations jointly with tie.~~
- ~~• No Network Rail costs are included in the above figures.~~

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~~If Network Rail rejects Infraco's proposals due to technical reasons, the responsibility lies with Infraco. However if Infraco's proposals is otherwise~~

⁷ Principles agreed. To find an appropriate place in the contractual suite for this wording.

- ~~technically acceptable but Network Rail has applied discretion in its rejection then the responsibility lies with tie.~~
- 22 NOT USED
- 23 That the Code of Construction Practice will be followed by Infraco except where relaxations from the hours of working outside the hours specified in the Code of Construction Practice are specifically stated in part [●] of Schedule Part 15 (*Programme*) and that CEC shall grant such relaxations in circumstances where the Infraco has submitted a competent application in order to achieve such relaxation.⁸
- 24 That in relation to Utilities the MUDFA Contractor and/or Utility shall have completed the diversion of any utilities in accordance with the requirements of the Programme save for utilities diversions to be carried out by the Infraco pursuant to the expenditure of the Provisional Sums noted in Appendix B.
- 25 That the Network Rail Possessions shall be as noted in the Programme at Schedule Part 15 (*Programme*).
- 26 Network Rail shall comply with its obligations under the Asset Protection Agreement;⁹
- 27 ~~NOT USED. That the APA Works Commencement Date occurs on the date identified in the Programme (as such date shall be extended as a consequence of a breach by the Infraco of it's obligations under this Agreement);¹⁰~~
- 28 ~~Trackslab depth is 285mm with formation condition of 10% CBR. hat the depth (to sub-formation) of track slab and grass track construction is based on [NOTE: INSERT NUMBERS FROM UP-TO-DATE PROPOSALS]~~
- 29 That there shall be no special floating track measures required for vibration.
- 30 That no protective measures are required in relation to protected trees however new trees will be provided for any trees removed in accordance with the Environmental Management Plan.
- 31 That the Archaeological Officer shall not delay or disrupt the Infraco Works.
- 32 That the programming assumptions set out in Schedule Part 15 (*Programme*) remain true in all respects.
- 33 That third parties shall not carry out works which impact upon the Infraco Works.
- 34 That stray current protection proposals as contained within the Infraco Proposals shall be approved by all relevant Approval Bodies where the Infraco has made a competent application.

⁸ tie to revert after review of Schedule

⁹ BBS to revert after checking with NA

¹⁰ BBS to confirm delete on checking programming assumptions.

35 That Consent shall be obtained (within a reasonable time having regard to the progress of the Infraco Works) for the use of Railway Ballast from Markle Mains Quarry.

36 Demolition or alteration of existing buildings shall only be required as follows:

Demolition

- Caledonian Ale House (Plot 33)
- Redpath McLean Office Russell Road (Plot 68)
- Simloch Property Roseburn Street (Plot 75)
- Viking International Roseburn Street (Plot 79)
- JB McLean lean-to Roseburn Street (Plot 92)
- National Car Rental Roseburn Street (Plot 103)
- Busy Bee Catering Balgreen Road (Plot 130)
- ATC Hut Stenhouse Drive (plot 150)

37 Asbestos shall not be discovered or identified in buildings to be demolished or altered.

38 All CCTV cameras and other road equipment will be connected back to the nearest Open Transport Network (OTN) node in either a sub-station or Tramstop... ~~and onward to the Depot Control Room.~~¹¹

39 That compliance with the Infraco's obligation to give due a proper cognisance wto third party requirements (and similar obligations such as to have "sdue and proper regard to such third party requirements) under the Third Party Agreements shall not cause any delay or disruption to the carrying out of the Infraco Works (Infraco having used reasonable endeavours to mitigate the impact of such compliance).¹²

40 That any conditions attaching to any licence or similar arrangement entered into between tie and a third party pursuant to the Third Party Agreements shall not cause any delay or disruption to the carrying out of the Infraco Works.¹³

3.5 The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions noted herein. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory ~~tie~~ Change requiring ~~a the Infraco to~~ change to the Employer's Requirements and/or the Infraco Proposals or otherwise requiring the Infraco to take

¹¹ ~~Check with MF~~

¹² ~~tie to revert~~

¹³ ~~tie to revert~~

account of the Notified Departure in the Contract Price and/or Programme] ~~•~~¹⁴ in respect of which **tie** will be deemed to have issued a **tie** Change on the date that such Notified Departure is notified by either Party to the other. For the avoidance of doubt, tie shall pay to the Infraco, to the extent not taken account in the Estimate provided pursuant to Clause 80.24.1, any costs and expenses incurred as a consequence of the delay between the notification of the Notified Departure and the actual date (not the deemed date) that tie issue a tie Change.¹⁵

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¹⁴ For discussion

¹⁵ Note this drafting is as per Ian Laing's e-mail 26 March and is subject to tie review.

4.0 PROVISIONAL SUMS

- 4.1 Provisional Sums have been allowed for items listed in Appendix B.
- 4.2 These are in two tables. The first table represents Defined Provisional Sums. The second table represents Undefined Provisional Sums.
- 4.3 The procedure for the expenditure of the Provisional Sums is as set out in this section.
- 4.4 Provisional Sums requiring an instruction are those for which a "trigger date" has been identified in Tables 1 and 2. Where the "trigger date" is stated to be "not applicable", this is a Provisional Sum not requiring instruction.
- 4.4 Provisional Sums requiring Instruction
- 4.4.1 tie shall in conjunction with (where reasonably requested by tie)¹⁶ the Infraco and its designers/sub-contractors, prepare the defined requirements and specification for Provisional Sums which require an instruction sufficiently ahead of Programme so as to achieve the Notice of Change by the date shown as the trigger date in Tables 1 and 2 below.
- 4.4.2 Not later than the dates set out in column [] of the Provisional Sums Tables tie shall issue a tie Notice of Change instructing the works to which the Provisional Sums requiring Instruction apply, which tie Change shall be a Mandatory tie Change. Failure by tie to issue a tie Notice of Change in accordance with this paragraph shall be a Compensation Event to which Clause 65 applies¹⁷
- 4.4.32 After agreement or determination of a **tie** Change for works to which a Provisional Sum applies, the Provisional Sum and, in the case of Defined Provisional Sums the provisional allowance for programming, planning and pricing Preliminaries shall be removed from the Contract Price and Milestone Schedule and the Programme and shall be replaced by the value of the tie Change and programme adjustment determined in accordance with Clause 80.
- 4.5 Provisional Sums not requiring an Instruction
- 4.5.1 If any of the events or circumstances covered by Provisional Sums which are not Provisional Sums requiring Instruction occurs, such occurrence will be deemed to be a Notified Departure.
- 4.5.2 After agreement or determination of the **tie** Change resulting from a Notified Departure which is deemed to have occurred pursuant to paragraph 5.5.1, the Provisional Sum and, in the case of Defined Provisional Sums the provisional allowance for programming, planning and pricing Preliminaries shall be removed

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¹⁶ Note the insertion of "reasonably" here is to avoid another qualification ("where appropriate") in the originally agreed drafting which, on reflection, does not read correctly.

¹⁷ Subject to tie/BBS agreement

from the Contract Price and Milestone Schedule and the Programme and shall be replaced by the value of the tie Change and programme adjustment determined in accordance with Clause 80.

5.0 VALUE ENGINEERING (VE) THAT HAS BEEN TAKEN INTO FIRM PRICE¹⁸

5.1 The Parties have agreed Value Engineering opportunities / savings as noted in Appendix C.

5.2 Subject to the provisions applying to Value Engineering opportunities which are Design to Cost these VE opportunities / savings are not simply targets but are fixed and firm reductions which are reflected in the Contract Price as at the date of this Agreement.

5.3 Infraco shall implement a Value Engineering opportunity provided that:

5.3.1 where the implementation of the Value Engineering opportunity requires instruction by **tie**, **tie** have issued such instruction (which shall be a **tie** Change) sufficiently ahead of the Programme to allow the Value Engineering opportunity to be realised;

5.3.2 the Value Engineering opportunity is technically feasible;

5.3.3 any Consents required for the implementation of the Value Engineering opportunity are obtained and designs Issued for Construction by the date set out in the Programme

5.3.4 any other Key Qualification applying to the Value Engineering opportunity have been achieved.

5.5 ~~Where~~To the extent that a Value Engineering opportunity is implemented:

5.5.1 the Employer's Requirements and Infraco Proposals shall be amended to take into account the changes to the Infraco Works as a result of such implementation; and

5.6 ~~Where~~To the extent that a Value Engineering opportunity is not implemented:

5.6.1 Infraco shall carry out the Infraco Works without the amendment to the Employer's Requirements and Infraco Proposals which would have been made had the Value Engineering opportunity been implemented; and

5.6.2 Infraco and tie shall agree amendments to the Milestone Schedule to increase the Contract Price by the saving applying to the Value Engineering opportunity set out in Appendix [] and Infraco shall be entitled to include in its next Application for Payment and tie shall pay to Infraco the design costs incurred by Infraco in considering the Value Engineering opportunity up to a maximum amount of £25,000 per Value Engineering opportunity.

¹⁸ Agreed subject to Siemens confirmation.

- 5.7 Where a Key Condition to achieving a Value Engineering opportunity is "Design to Cost":
- 5.7.1 before implementing the Value Engineering opportunity and sufficiently ahead of Programme so as not to prejudice the delivery of the Value Engineering opportunity, Infraco shall deliver to tie an Estimate setting out the net cost or saving of implementing the Value Engineering opportunity (including design costs).;
- 5.7.2 tie shall confirm within 10 Business Days of receipt of the Estimate if tie wishes Infraco to proceed with the Value Engineering opportunity.
- 5.7.3 If tie confirms that it wishes Infraco to proceed with the Value Engineering opportunity,
- (a) the Employer's Requirements and Infraco Proposals shall be amended to take into account the changes to the Infraco Works as a result of such implementation; and
- (b) Infraco and tie shall agree amendments to the Milestone Schedule to amendincrease the Contract Price by the difference (if any) between the saving applying to the Value Engineering opportunity set out in Appendix [] and the actual saving set out in the Estimate provided to tie in accordance with paragraph [] ~~(where the actual saving is less than the saving set out in the Appendix)~~ and Infraco shall be entitled to claim in its next Application for Payment and tie shall pay to Infraco the design costs incurred by Infraco in considering the Value Engineering opportunity up to a maximum amount of £25,000 per Value Engineering opportunity.
- 5.7.4 If tie confirms that it does not wish Infraco to proceed with the Value Engineering opportunity paragraph 5.6 shall apply. tie shall be deemed not to wish Infraco to proceed with a Value Engineering opportunity which is design to cost if it fails to respond to an Estimate in accordance with Clause 5.7.2;
- 5.7.5 Infraco shall use reasonable endeavours to achieve the savings for each Value Engineering opportunity.

6.0 FURTHER VALUE ENGINEERING (VE)

- 6.1 Further Value Engineering opportunities / savings as noted in Appendix D
- 6.2 This further VE represents that which either one or both Parties is unable to commit to at this stage and will still be considered as a potential target. There are two sub-categories, those with an estimated saving carried to the summary and those as an unspecified item.
- 6.3 These will be adjusted by applying the provisions of Clause 80 (*tie Changes*). For the avoidance of doubt, no VE that has already be considered by the Parties or that may subsequently be proposed by **tie** will be considered as a shared saving under Clause 81.3 (*Infraco Changes*).

7.0 UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO

7.1 Although **tie** has let the MUDFA Contract [Multiple Utilities Diversion Framework Arrangement] to carry out the diversion of utility apparatus in the path of the proposed tram route prior to Infraco Works, it will be necessary for some of these works to be delivered by Infraco for the following reasons such as:

- they may be unrecorded and not discovered until the Infraco Works are commenced
- they may be discovered under MUDFA but left to avoid a programme overlap or other technical reason
- they may be intrinsically linked to the Infraco Works
- they may require such significant reinstatement work that to carry out under MUDFA may result in significant abortive works

7.2 Where Infraco has been advised of the existence of utility apparatus in advance, whether identified to date or following discovery by MUDFA, any adjustment to the Contract Sum will be made by applying the provisions of Clause 80 (**tie Changes**).

7.3 Those identified to date are noted in Appendix F.

8.0 SCHEDULES OF RATES AND QUANTIFIED SCHEDULES OF RATES

8.1 Rates for certain items have been established for determining the value of **tie Changes** as noted in Appendix FH. These include:

- Rates for utilities diversions
- Rates for Additional Trams and other items related to the Trams

8.2 The rates contained in the appendix E are inclusive¹⁹ of overheads and profit are to be used for the purpose of agreeing changes (positive and negative) noted in Clause 1.2 of this Schedule 4.

8.3 The Quantified Schedules of Rates are also contained in Appendix F and they are included for reference only in determining the value of changes as outlined in Appendix ? herein. For the avoidance of doubt the quantities have not been prepared in accordance with any Standard Method of Measurement, are not re-measurable and any errors or omissions contained therein are entirely at the risk of Infraco.

8.4 Rates for SDS are as noted in the SDS Agreement / SDS Novation Agreement which also set out the mechanism that shall apply in respect of any design associated with **tie Changes**.

¹⁹ BBS to confirm

**APPENDIX A
CONSTRUCTION WORKS PRICE ANALYSIS**

**A1 CONSTRUCTION WORKS PRICE ANALYSIS
A2 DETAILED SUMMARY OF CONSTRUCTION WORKS PRICE**

**APPENDIX B
PROVISIONAL SUMS AND THE MECHANISM FOR THEIR ADJUSTMENT**

1.0 Summary of Provisional Sums

- 1.1 The following tables summarises the Provisional Sums included within the Infraco Works:
- 1.2 Table 1 notes the Defined Provisional Sums for which Infraco has deemed to have made allowance for programming, planning and pricing Preliminaries.
- 1.3 Table 2 notes the Undefined Provisional Sums for which Infraco has not deemed to have made allowance for programming, planning and pricing Preliminaries.

2.0 Table 1 – Defined Provisional Sums

Item	Description of Provision Sum	trigger date	duration	£
1	Pumped surface water outfall at A8 underpass (by depot)	01 June 08		£100,000
2	Scottish Power connections to the Depot and Ingliston Park & Ride	not applicable		£750,000
4	Relocation of Ancient Monuments – this relates to those monuments noted on the route [SDS drawings ULE 90130-01-HRL 0003B, 6B, 7B, 10B, 12B, 13B, 14B, 15B & 24B refer] – it does not include cleaning and/or restoration	20 Business Day after BBS raise any queries in respect of issued information		£53,700
4	Additional cost of Network Rail compliant ballast	20 Business Day after BBS provide spec.		£300,000
5	Extra over for revised alignment to Picardy Place, York Place and London Road junctions (see also next item)	01 January 08		£3,340,324
6	Extra over for major utility diversions Picardy Place, York Place and London Road junctions	01 January 098		£3,000,000
7	Extra over for shell grip at junctions	01 August 098		£319,343
Carried forward				£7,863,367

Item	Description of Provision	Sum	trigger date	duration	£
	Brought forward				£7,863,367
8	Allowance for Scottish Power connections to new street lights and new traffic signals		not applicable		£115,287
9	Allowance for demolition of existing Leith Walk substation (if required) [SDS drawings ULE 90130-01-SUB- 00023 rev 2, 00046 rev 1,00047 rev 1 and 00051 rev 1 refer]		20 Business Day after BBS raise any queries in respect of issued information		£55,662
10	Urban Traffic Controls [UTC] associated with the delivery of the alignment		01 August 08		£2,500,000
11	Scottish Power connections to Phase 1a sub-stations (8nr x £50,000)		not applicable		£400,000
12	Various Forth Ports requirements including the revised alignment of track at Casino Square, relocated tramstop, junction amendments and removal of 'kink' in alignment from Constitution Street, footpath on south side of Tower Place Bridge and Victoria Dock Bridge		01 October 08		£150,000
13	Forth Ports requirements at Ocean Terminal amendments		01 October 08		£350,000
Total					£11,434,316

3.0 Table 2 – Undefined Provisional Sums

Item	Description of Provision Sum	Trigger date	£
1	Accommodation Works	not applicable	£1,000,000
2	Allowance for minor utility diversions	01 October 08	£750,000
3	PICOPS / COSS / Possession Protection Staff support when undertaking works adjacent or over the railway – see also 4b) below	not applicable	£755,307
4	Archaeological Officer – impact on productivity	not applicable	£405,755
5	Additional Crew Relief Facilities at Haymarket [SDS drawings ULE 90130-02-STP-000126 REV 1 and 000127 rev 1 refer]	20 Business Day after BBS raise any queries in respect of issued information	£49,950
6	Urban Traffic Controls [UTC] associated with the wider area impacts	01 January 10	£2,500,000
7	Forth Ports requirements for design and construction of by-pass road to adoptable standard	01 October 08	£400,000
8	Forth Ports requirements for Lindsay Road amendments	01 October 08	£1,750,000
9	Royal Bank of Scotland requirement for enhancement of Gogarburn Tramstop	01 October 08	£400,000
Total			£8,011,012

4.0 Basis

- a) Relocation of Ancient Monuments applies to those on the route only. Any works in respect of ancient monuments in George Street are undefined.

- b) Any costs in connection with PICOPS / COSS / Possession Protection Staff as Network Rail possession support when undertaking works adjacent or over the railway in respect of item 3 of Table 2 above shall relate solely to the possessions planned at signature of the Infraco Contract. This possession support will be adjusted in the event that Network Rail varies the requirement for PICOPS / COSS or otherwise amends the possession arrangement. However if the possession is amended or extended due to Infraco over-running then any additional possession support will not be recoverable.

5.0 Requirement to co-operate

5.1 Infraco shall co-operate with **tie** in the provision of design and pricing information required to satisfy the requirements of the Forth Ports Agreement.

5.2 Infraco shall co-operate with **tie** in the provision of pricing information required to satisfy the requirements of the Royal Bank of Scotland Agreement in connection with Gogarburn Tramstop (outline design provided by others).

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**APPENDIX C
IDENTIFIED VALUE ENGINEERING [VE]**

1.0 The following table summarises the agreed identified VE opportunities / savings which are fixed and firm reductions, save for the Key Qualifications noted: 'Designed to cost' added where this was agreed but this is to be clarified / defined

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
1	Delete depot pumping station / storm tanks by utilizing existing gravity system		-£193,526	If a small pump is needed then this to be added as a tie Change.
2	Build part of Depot now with provision to expand in the future / reduce size of car park facilities		-£230,000	Agreed initial supply is 100 car park spaces.
3	Delete under floor lift plant to Depot and utilize mobile jacks (including mobile future proofing)		-£250,000	
4	Delete split vehicle accommodation system at Depot - requirement dependant on tram vehicle selection – don't we know this firm one way or the other?		-£27,500	Accommodation bogies are in CAF sub-contract.
5	Rationalise scope requirement Track Maintenance Equipment at Depot and consider renting		-£27,500	
6	Deletion of one pavement (inner) to Depot		-£36,000	As shown on SDS drawing insert.
7	Delete requirement for concrete apron to security fence at Depot		-£6,080	
8	Delete compressed air system to Depot and utilize 1 or 2 local / mobile compressors		-£54,400	
Carried forward			-£825,006	

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
	Brought forward		-£825,006	
9	<p>Consolidated VE items including those which result from changes to initial design driven by proximity to BAA runway and EARL decision as follows:</p> <ul style="list-style-type: none"> • changes to initial Depot design driven by proximity to BAA runway (reduced bulk excavation) • reductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope) • reduction in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms, locker space, etc.) • reduction in fit out specification • reduction in domestic utility capacity (reduced building volume and accommodation provision) 		-£2,200,000	
10	Delete standby generator and substitute with hardstanding and power connection for portable generator		-£150,000	
11	Material recovery and reprocessing (Infracore); 2 options - reconstituted planings & Type 1R		-£500,000	Level of saving is subject to adjustment of quantity of this item based on the final design.
Carried forward			-£3,675,006	

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
Brought forward			-£3,675,006	
12	Reduce kerb and associated re-instatement of pavement		-£100,000	Level of saving is subject to adjustment of quantity of this item based on the final design.
13	Reduce drainage run from guideway		-£100,000	Level of saving is subject to adjustment of quantity of this item based on the final design.
14	Rationalise specification for overhead contact system – switchgear is considered "quite onerous" – need to review this description for contract		-£160,000	Price changes requested for manual, three position cubicle mounted isolators throughout, with exception of the Depot where they can be pole mounted. Status of isolator to be shown via SCADA.
15	Edinburgh Park Viaduct 7 spans reduced to 2 with steel beams utilized in lieu of concrete		-£1,470,000	Subject to approval of NEL / CEC and being Designed to Cost
16	Carricknowe Bridge parapet – downgrade from P6 / P5 to N2 (reduce cost of parapet plus knock on effect on deck design / cost) Is this now firm?		-£85,000	Subject to approval of design by Network Rail
Carried forward			-£5,590,006	

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
Brought forward			-£5,590,006	
17	A8 Underpass – various initiatives		-£850,000	Change to a contiguous piled wall / leaner design.
18	Roseburn Street Viaduct – various initiatives		-£1,375,000	Subject to approval of stakeholders – Network Rail and SRU and being Designed to Cost.
19	Water of Leith initiatives		-£150,000	Subject to being Designed to Cost
20	Eight maintenance walkway structures – delete or reduce		-£250,000	Subject to being Designed to Cost
21	Class 7 material conversion		-£300,000	Level of saving is subject to adjustment of quantity of fill required by the final design.
22	Optimize the work site lengths wherever practical to ensure efficient construction outputs		-£300,000	
23	Accept more disruption over shorter period to maximize efficiency of construction operations		-£100,000	
24	Option to lease UPS provision from supplier rather than purchase		-£300,000	Subject to agreement of Operator / TEL
25	Rationalizing spares supplied with the Infracore bid		-£300,000	Subject to agreement of Operator / TEL
Carried forward			-£9,515,006	

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
	Brought forward		-£9,515,006	
26	PM integration including shared resources and co-location		-£1,000,000	Subject to BBS / tie agreeing savings in resources and facilities items from BBS and tie costs. – NOTE: a detailed preliminaries build up will be needed to verify this
27	Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing		-£50,000	Subject to property owners' protests.
28	Reduce ballasted track thickness from 300mm to 200mm		-£200,000	
29	Power supply (up to passenger operation) – possible over allowance in DFBC		-£300,000	Subject to tie demonstrating evidence.
30	Spare			
Total			-£11,065,006	

**APPENDIX D
FURTHER VALUE ENGINEERING [VE]**

1.0 The following table summarises provisional further VE opportunities / savings:

Item	Description of Identified VE Saving	trigger date		£	Comments
1	Further project management integration over 3 years			-£500,000	Joint target
2	SDS design scope economy, variation and reduction			-£500,000	Joint target
3	Tramstops – standard finishes to circa 20% - 30% of stops			-£500,000	Joint target
4	Picardy Place level flexing – MUDFA savings			-£500,000	tie led initiative
5	Picardy Place level flexing – construction savings			-£500,000	Joint initiative
6	Value engineer finishes on Edinburgh Park Viaduct and other structures			-£170,000	Subject to approval of NEL / CEC
7	Omission of crossover at Ocean Terminal and associated savings through reductions to OLE, signalling etc.			-£ ,000	Recently proposed item from tie – saving to be agreed
8	Rationalize Depot Access Bridges			-£ ,000	Recently proposed item from BBS – saving to be agreed
9	Spare				
10	Spare				
Total				-£2,670,000	

**APPENDIX E
UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO**

NOTE: information to be inserted by Val

**APPENDIX F
SCHEDULE OF RATES AND QUANTIFIED SCHEDULE OF RATES**

**APPENDIX G
PROCESS FOR AGREEMENT OF VALUE OF VARIATIONS**

1.0 Generally

1.1 The **tie** Representative shall value the Variations in accordance with the following principles:

- (a) Where the Works or Services performed are of similar character and executed under similar conditions to that reflected by the unit rates in this Schedule then such Works or Services shall be valued at the unit rates contained therein as applicable.
- (b) Where Works or Services are not of a similar character, are not executed under similar conditions or involve asset quantities significantly different from those reflected by this Schedule then such Works or Services shall be valued using such Rates contained therein as the basis for valuation so far as this may be reasonable.
- (c) Where the principles of (a) and (b) are considered inappropriate by the **tie** Representative the Services shall be valued on the basis of Actual Cost where possible or estimated Actual Cost, failing which a fair valuation shall be made.

1.2 In respect of a valuation of any work under 1.1(c) the **tie** Representative shall apply head office overheads and profit percentages to the appropriate elements of Actual Cost as follows:

- | | | |
|-----|-------------------------|-----|
| (a) | Civil Engineering works | 10% |
| (b) | Systems and Track works | 17% |

For the avoidance of doubt the percentages above do not include site related overhead which shall payable by tie.²⁰

1.3 The amount of the overheads and profit percentage calculated as part of the valuation of Variations shall be added in the case where the valuation results in an addition and shall be deducted where the valuation results in an omission.

1.4 Where 1.1(c) above is the basis of the valuation of variations or Changes then the following items shall not be included as Actual Costs under the Infraco Contract.

- 1. Costs not justified by the Infraco's accounts and records.
- 2. Costs not payable under the Infraco Contract.
- 3. Costs arising from the Infraco's Design errors.

²⁰ tie/BBS to discuss

4. Costs arising in respect of loss or damage except as provided for under the Agreement.
5. Costs which should have not been paid to a sub-contractor in accordance with the relevant sub-contract.
6. Costs arising from people who are part of the Head Office Overhead.