

## Schedule 4

### PRICING

~~NOTE: updated 12<sup>th</sup> March following meetings on 11<sup>th</sup> & 12<sup>th</sup> March 2008~~

~~NOTE : This mark-up reflects recent agreements reached between tie and BBS in relation to Schedule 4 as amended as a consequence of discussions on 18/3/08.~~

Formatted: Justified

Formatted: Font: 14 pt

Formatted: Font: 14 pt

**SCHEDULE FOUR  
PRICING**

**CONTENTS**

- 1.0 Generally
- 2.0 Definitions used in this Schedule
- 3.0 Construction Works Price **NOTE:** Tramco and SDS TO BE ADDED
- 4.0 Provisional Sums
- 5.0 Value Engineering taken into firm price – but conditional
- 6.0 Further Value Engineering
- 7.0 Utilities Diversions to be carried out by Infracore
- 8.0 Schedules of Rates and Quantified Schedules of Rates
- 9.0 Phase 1B
- 10.0 Final Account Requirements

**Appendices**

- A Construction Works Price
- B Provisional Sums and the Mechanism for their Adjustment
- C Value Engineering taken into firm price – but conditional
- D Further Value Engineering
- E Utilities Diversions to be carried out by Infracore
- F Schedules of Rates and Quantified Schedules of Rates
- G Process for the agreement of Value of Variations
- H Base Date Design Drawings
- I

**1.0 GENERALLY**

- 1.1 The Infraco Construction Works Price is detailed in Appendix A to this Schedule 4.
- 1.2 The Construction Works Price is on a lump sum basis that is fixed until completion of the Infraco wWorks and not subject to variation except in accordance with the provisions of this Agreement.
- 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.
- 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.
- 1.5 References to clause numbers in 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 4 are exclusive of Value Added Tax and are in Pounds Sterling.

**2.0 DEFINITIONS USED IN THIS SCHEDULE**

- 2.1 **Archaeological Officer** means [●]
- 2.12.2 The "**Base Case Assumptions**" means the Base Date Design Information, the Base Tram Information, the Pricing Assumptions and the Specified Exclusions.
- 2.22.3 The "**Base Date Design Information**" means the by the design information drawings issued to Infraco up to and including the design information drop on 25<sup>th</sup> November 2007 listed in Appendix [●] to this Schedule Part 4 save for where design information has been superseded prior to the above date [as listed [●]].
- 2.32.4 The "**Base Tram Information**" means the information contained in CAF's technical response in relation to the Employer's Requirements and the Tram Supply Agreement. **CHECK** with Andy + Robert.

Formatted: Font: Bold  
Formatted: Line spacing: Double  
Formatted: Font color: Red  
Formatted: Bullets and Numbering

2.4 The “**Contract Price**” comprises the following:

	£
Construction Works Price	
SDS Price (as defined in the SDS Agreement and the Novation Agreement)	
Tram Supply Price (as defined in the Tram Supply Agreement)	
<b>Sub-total of capital expenditure</b>	
<b><u>ADD</u> revenue expenditure</b>	
Infraco Maintenance Price	
Tram Maintenance Price (as defined in the Tram Maintenance Agreement)	
<b>Contract Price</b>	
<b>NB</b> excluding Value Added Tax	

Formatted: Justified

2.5 “**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 allowance for programming, planning and pricing Preliminaries.

2.6 “**Issued for Construction**” shall have the meaning as used in the SDS Novation Agreement **CHECK**.

2.7 A “**Notified Departure**” is where now at any time the facts or circumstances differ in any way from the assumptions and exclusions set out in the that comprised the basis of the Base Case Assumptions are subsequently changed in a manner that results in a tie Change in accordance with this Agreement save to the extent caused by a breach of contract by the Infraco and not as a result of an Infraco Change or as a result of an Infraco Breach. Where Infraco or tie becomes aware of a Notified Departure they are to notify the other Party. **NOTE: tie** has accepted the principle of Notified Departure but

have kept matters simple and as a **tie** Change as per Richard Walker / Geoff Gilbert discussions – Pinsent Masons to check for consistency

2.8 **"Pricing Assumptions"** means the assumptions in respect of the ~~Contract~~ construction Works Price as noted in Section 3.4 below.

2.9 **"Ready for Construction"** means (**NOTE:** check any conflict or overlap with Issued for Construction Definition) that the design satisfies the following requirements:

- It has been prepared in accordance with and satisfies the requirements of the Employer's Requirements and the Third Party Agreements; and
- That the SDS Provider has procured that all Consents necessary to allow construction of the relevant part of the Infraco Works have been obtained including, without limitation, those necessary to satisfy the requirements of the Third Party Agreements.

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.

### 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 save only those items for which Provisional Sums are included within the Construction Works Price as noted in 4.0 below and excluding the Specified Exclusions listed in 3.3 below.~~

3.2 It is accepted ~~by tie~~ that certain Pricing Assumptions have been necessary and these assumptions are listed and defined in 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 that are to be undertaken by under MUDFA save for the Provisional Sums for those identified utilities diversions that are to be undertaken by Infraco.~~
- 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.

- 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 20<sup>th</sup> and 27<sup>th</sup> of November and 6<sup>th</sup> December 2007. Additionally 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. However the price for excavation and earthworks are inclusive of any differences between differing sub-soils that may prevail.
- d) Bernard Street public realm project [as information provided on 28<sup>th</sup> November 2007].

3.4 Pricing Assumptions in respect pricing of the Construction Works Price are:

a) Design

~~1 The design prepared by the SDS Provider will not (other Infracore Construction Works Price includes for any impact thereon) than amendments arising from the normal development and completion of designs) based on the design intent for the scheme as represented by Base Date Design Information.~~

**Formatted:** Indent: Left: 0 cm, Hanging: 1.27 cm  
**Formatted:** Bullets and Numbering  
**Formatted:** Indent: Left: 2.5 cm, Hanging: 1.25 cm

~~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.~~

• Subject to the above, the Design Prepared by the SDS Provider will not:

~~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),~~

**Formatted:** Indent: Left: 3.75 cm, Hanging: 1.25 cm  
**Formatted:** Bullets and Numbering

~~1.2 be amended from the drawings forming the Base Case Design Information Infracore Proposals as a consequence of any Third Party Agreement (except in connection with changes in respect of Provisional Sums identified in Appendix B) and~~

~~1.3 be amended from the drawings forming the Base Case Design Information Infracore 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.~~

~~2 Design delivery by the SDS Provider has been aligned with the Infracore construction delivery programme as noted in Schedule [15].~~

**Formatted:** Indent: Left: 2.5 cm, Hanging: 1.25 cm  
**Formatted:** Bullets and Numbering

~~3 That the nature and extent of the Infracore Works is as set out in the Base Case Design Information.~~

~~4 That the Design Delivery Programme (as defined in the SDS Agreement) shall not be amended from [version 26].~~

**Formatted:** Indent: Left: 2.5 cm, Hanging: 1.25 cm, Tab stops: 3.75 cm, List tab

~~5 That the design prepared by the SDS Provider shall be Issued for Construction to the Infracore in accordance with the [Design Delivery] Programme~~

b) Tram

**Formatted:** Indent: Left: 0 cm, Hanging: 1.27 cm  
**Formatted:** Bullets and Numbering

~~6~~ The tram fleet shall initially comprise 27 trams. **CHECK** this does not cut across the Employer's Requirements that the design generally and the implementation of the Traction Power Supply System (including substations, OLE and cabling) specifically shall be capable of accommodating addition trams to support an 8 + 8 trams per hour service + a 50% addition

**Formatted:** Indent: Left: 2.5 cm, Hanging: 1.25 cm

~~7~~ **NOTE:** BBS (Michael Flynn to provide further wording for agreement here in respect of power, DKE etc.

~~The price includes for all work necessary to enable the tram vehicles to operate and comprehensively integrate with the infrastructure designed and installed by Infracore.~~

~~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 vertical alignment of the track as compared against the alignment input into the [last simulation] needs to be settled by Andy + Robert

**Formatted:** Justified, Indent: Left: 2.5 cm, Hanging: 1.25 cm, No bullets or numbering

~~9~~ There shall be no Any material changes to the design resulting from the impact of the kinematic envelope of the CAF tram vehicle on the civils design. **NOTE:** to be deleted when the DKE issue is resolved

**Formatted:** Justified

**Formatted:** Indent: Left: 2.5 cm, Hanging: 1.25 cm

**Formatted:** Bullets and Numbering

~~10~~ that tThe Urban Traffic Controls (UTC) will allow and have no and have no adverse impact on the Tram operations including run time and punctuality of services as set out in the Employer's Requirements.

**Formatted:** Font color: Auto

**Formatted:** Font color: Auto

**Formatted:** Indent: Left: 2.5 cm, Hanging: 1.25 cm, No bullets or numbering

**Formatted:** Bullets and Numbering

c) Roads and pavings:

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 [●]) 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) 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 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.

Formatted: Indent: Left: 2.5 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

12 The track and vertical alignment in the design prepared by the SDS Provider will allow road construction to be carried out by planning the existing surface to underside of new surface course and laying the new surface course as provided for in the Infraco Proposals and there shall be no requirement for full depth reconstruction.

Formatted: Indent: Left: 2.5 cm, Hanging: 1.25 cm

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.

Formatted: Bullets and Numbering

14 Road construction shall be 40mm or 25mm HRA on 60mm DBM binder course on 100mm DBM base as shown on [●] NOTE: BBS (Scott McFadzen) to amplify

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

Formatted: Font color: Auto

17 In respect of footways, existing kerbs and flags can are to be re-used where available and minimal reinstatement behind kerb lines is required assumed. i.e. not wall to wall.

18 [Completing Full footway reconstruction in Leith Walk is not required beyond the allowance made in areas where kerb lines are being re-sited.]

d) Structures:

19 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

Formatted: Indent: Left: 2.5 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

shown in accordance with 's price is based on the scope as at the Base Date Design Information.

20 In respect of Morrison Supermarket the Infraco shall not be required to carry out any works in respect of the retaining wall Infraco's price assumes that it is not required to undertake.

Formatted: Indent: Left: 2.5 cm, Hanging: 1.25 cm

e) Depot:

Formatted: Indent: Left: 0 cm, Hanging: 1.27 cm

21 In respect of the Depot excavation works, the price is fixed [against the quantities advised by BBS to tie] and firm against the profile (to be defined) and on the assumption that the depot excavation will be handed over to Infraco [pumped dry with a firm sound foundation][with no major standing water and with any soil that may have been damaged by standing water being above formation level.]

Formatted: Indent: Left: 2.5 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

Network Rail pricing assumptions to be discussed and agreed to the extent that these are necessary as a consequence of recent discussions and agreement as to the approach to Immunisation Works.

Formatted Table

f) Network Rail immunisation: NOTE: as BBS letter dated 12<sup>th</sup> October 2007

Formatted: Indent: Left: 2.5 cm, Hanging: 1.25 cm, No bullets or numbering

Infraco will undertake all Network Rail immunisation including management of all associated works, programme and management of approvals.

Formatted: Bullets and Numbering

This is subject to Network Rail not unilaterally rejecting Infraco's immunisation strategy at the outset.

Formatted: Bullets and Numbering

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).

Formatted: Bullets and Numbering

If the costs are lower than the cap of £3million referred to above, then the benefits are to be shared 33% each to tie, Network Rail and Infraco.

Formatted: Bullets and Numbering

The strategy is based on Infraco carrying out the works and supplying all equipment.

Formatted: Bullets and Numbering

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.

Formatted: Bullets and Numbering

Infraco agree to carry out further Network Rail immunisation value engineering investigations jointly with tie.

Formatted: Bullets and Numbering

No Network Rail costs are included in the above figures.

Formatted: Bullets and Numbering

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

~~technically acceptable but Network Rail has applied discretion in its rejection then the responsibility lies with tie.~~

~~22g) The programme for delivery of Phase 1A is as Schedule [15]. CHECK: covers all issues to BBS and tie satisfaction.~~

~~23h) That work will be permitted outside the hours of working stated in the Code of Construction Practice where such a requirement is provided for in the Programme. will be followed by Infraco except where specifically stated otherwise in Schedule [15]. However tie acknowledges that minor amendments to the above may be required and will use its reasonable endeavours to obtain CEC's agreement to such amendments provided that they are consistent in overall terms; NOTE: BBS (Steve Sharp and Scott McFadzen to review)~~

Formatted: Justified

~~24i) That in relation to Utilities Works that the MUDFA Contractor and/or Utility shall have completed the diversion of any utilities Utilities Apparatus forming part of the MUDFA Works in accordance with the requirements of the Infraco Programme save for utilities diversions to be carried out by the under Infraco pursuant to the expenditure of under the Provisional Sums noted in Appendix B;~~

Formatted: Justified, Indent: Left: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

~~25) The Network Rail Possessions shall be as noted in the Programme Schedule [15];~~

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

~~26) Network Rail shall comply with its obligations under the Asset Protection Agreement;~~

Formatted: Justified

~~27) 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);~~

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

~~28) The depth (to sub-formation) of track slab and grass track construction is based on cross sections and soil bearing capacity shown on figs 4.6a and 4.6b in the document entitled "Trackform Technology Review V6" prepared by the SDS Provider and dated 1 March 2007;~~

Formatted: Justified

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

~~29) There shall be no special floating track measures required for noise or vibration; NOTE: rates to be insert in appendix~~

Formatted: Justified

Formatted: Bullets and Numbering

~~m) the price includes for all earthworks quantities within the earthworks outline;~~

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

~~30) 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];~~

Formatted: Font color: Black, Not Expanded by / Condensed by

~~31) The Archaeological Officer shall not delay or disrupt the Infraco Works.~~

Formatted: Justified, Indent: Left: 1.25 cm, No bullets or numbering

~~32) The programming assumptions set out in Schedule 15 are and remain accurate in all respects.~~

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

~~33) Third parties shall not carry out works which interfere with the Infraco Works.~~

Formatted: Justified

~~34) Stray current protection proposals as contained within the Infraco Proposals shall be approved by all relevant Approval Bodies except in respect of immunisation of~~

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

Network Rail which shall be dealt with in accordance with that noted in the Pricing Assumptions in [?] above and Infraco shall provide all management support and technical back-up to achieve the approvals;

p)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]; ~~NOTE: BBS to are to provide the specification for this to enable a decision to be made~~

q)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)

Alteration

- Old bus depot on Leith Walk (Plot 15), altered to accommodate new sub-station
- Murrayfield Wanderers, alterations to side of club house **NOTE:** check what allowed and is Infraco doing this work? Susan is checking, is yes do we need to add a provisional sum?

r)37 ~~The removal of Asbestos shall not be discovered or identified from in buildings to be demolished or altered is excluded (and if discovered or identified will be shall be adjusted in accordance with the provisions of Clause 80 (tie changes)).~~

s)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.

39 That compliance with the Infraco's obligation to give due a proper cognisance wo third party requirements (and similar obligations such as to have "sue and proper regard to such third party requirements) under the Third Party Agreements shall not

Formatted: Justified

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

Formatted: Justified

Formatted: Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering

Formatted: Bullets and Numbering

Formatted: Font: (Default) Arial

Formatted: Justified

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Times New Roman

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified, Indent: Left: 2.5 cm, No bullets or numbering

Formatted: Justified

Formatted: Font: (Default) Arial

Formatted: Justified

Formatted: Indent: Left: 2.5 cm

Formatted: Justified

Formatted: Bullets and Numbering

Formatted: Justified

Formatted: Bullets and Numbering

Formatted: Font color: Auto

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).

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.

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 the Infraco to [●] 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.

Formatted: Font color: Auto

Formatted: Justified

Formatted: Font color: Auto

Formatted: Font color: Auto

Formatted: Font color: Auto

Formatted: Font color: Auto

Formatted: Justified

**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 for which Infraco has deemed to have made allowance for programming, planning and pricing Preliminaries. The second table represents Undefined Provisional Sums for which Infraco has not deemed to have made allowance for programming, planning and pricing Preliminaries.

4.3 The procedure for the expenditure of the Provisional Sums is as set out in this section follows: **TO TIDY**

4.4 Provisional Sums requiring Instruction

4.4.1 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 applies

**Formatted:** Indent: Left: 1.5 cm

4.4.2 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.

**Formatted:** Indent: Left: 1.5 cm, Hanging: 1.5 cm

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.

**Formatted:** Indent: Left: 1.5 cm

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 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.

•tie shall in conjunction with Infraco and its designers/sub contractors prepare the defined requirements and specification for each Provisional Sum item.

**Formatted:** Bullets and Numbering

~~•Infraco shall prepare and submit initial proposals as to how the work will be designed, a design programme and an outline design to meet the requirements stated at 4.4 above to tie for agreement.~~

~~•Thereafter, and subject to satisfying the requirements of the Design Management Plan, Infraco shall prepare detailed proposals and a finally approved design.~~

~~•Provisional Sums will be omitted and the Construction Works Price shall be adjusted in accordance with the provisions of Clause 80 (tie changes) and formalized by the issue of an instruction by tie.~~

~~•NOTE: dates etc. — to be added~~

~~4.4 Within 60 Business Days of the execution of the Infraco Contract, tie and the Infraco will jointly agree the timescales for this process, failing which tie's Representative shall set the timescale.~~

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

Formatted: Justified

~~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.~~

Formatted: Bullets and Numbering

~~5.3 Subject to Clause 5.4, Infraco shall use reasonable endeavours to 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;~~

Formatted: Indent: Left: 1.5 cm

~~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~~

~~5.3.2 any other Key Qualification applying to the Value Engineering opportunity have been achieved.~~

~~5.5 Where 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~~

Formatted: Indent: Left: 1.5 cm

5.6 Where 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.

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 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 increase 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.

5.1 The parties have agreed Value Engineering opportunities / savings as noted in Appendix C:

Formatted: Indent: Left: 1.5 cm

~~5.2 These VE opportunities / savings are not simply targets but are fixed and firm reductions, save for conditions (Key Qualifications) noted in Appendix C.~~

Formatted: Bullets and Numbering

~~5.3 In the event that the Key Qualifications noted cannot be achieved, any adjustment to the Contract Sum will be made by applying the provisions of Clause 80 (*tie Changes*).~~

**6.0 FURTHER VALUE ENGINEERING (VE)**

Formatted: Justified

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*).

Formatted: Justified

**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:

- 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. **NOTE:** appendix to be developed / could be in Schedule 41

**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 H. 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 are inclusive 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 F 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.

## 9.0 PHASE 1B

- 9.1 Under Clause 85 of the Contract **tie** can instruct execution of the Phase 1B Works as an option.
- 9.2 The basis of the option is set out in Schedule [37].
- 9.3 **NOTE:** this section requires further development

## 10.0 FINAL ACCOUNT REQUIREMENTS

- 10.1 The final account for the Works and Services shall be prepared progressively though the duration of the Agreement and the Infraco shall provide all necessary information in support within two months of Service Commencement such that :
- a) the final account for the Construction Works is prepared within 3 months of Service Commencement
  - and
  - b) the final account for Maintenance Services delivered in respect of the foregoing Year is prepared within 3 months of the end of that Year.

**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 08		£3,000,000
7	Extra over for shell grip at junctions	01 August 08		£319,343
<b>Carried forward</b>				<b>£7,863,367</b>

Item	Description of Provision	Sum	trigger date	duration	£
	<b>Brought forward</b>				£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
<b>Total</b>					<b>£11,434,316</b>

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 bypass 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
<b>Total</b>			<b>£8,011,012</b>

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).

**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 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 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	
<b>Carried forward</b>			<b>-£825,006</b>	

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
	<b>Brought forward</b>		-£825,006	Formatted: Justified
9	Consolidated VE items including those which result from changes to initial design driven by proximity to BAA runway and EARL decision as follows: <ul style="list-style-type: none"> <li>• changes to initial Depot design driven by proximity to BAA runway (reduced bulk excavation)</li> <li>• reductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope)</li> <li>• reduction in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms, locker space, etc.)</li> <li>• reduction in fit out specification</li> <li>• reduction in domestic utility capacity (reduced building volume and accommodation provision)</li> </ul>		-£2,200,000	Formatted: Justified
10	Delete standby generator and substitute with hardstanding and power connection for portable generator		-£150,000	Formatted: Justified
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. Formatted: Justified
<b>Carried forward</b>			<b>-£3,675,006</b>	Formatted: Justified

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
<b>Brought forward</b>				Formatted: Justified
12	Reduce kerb and associated re-instatement of pavement		-£3,675,006	Level of saving is subject to adjustment of quantity of this item based on the final design. Formatted: Justified
			-£100,000	Formatted: Justified
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. Formatted: Justified
			-£100,000	Formatted: Justified
14	Rationalise specification for overhead contact system – switchgear is considered "quite onerous" – need to review this description for contract		-£160,000	Price change 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. Formatted: Justified
			-£160,000	Formatted: Justified
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. Formatted: Justified
			-£1,470,000	Formatted: Justified
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. Formatted: Justified
			-£85,000	Formatted: Justified
<b>Carried forward</b>				Formatted: Justified
				Formatted: Justified
				Formatted: Justified
<b>£5,590,006</b>				

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

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications
<b>Brought forward</b>			-£9,515,006	← Formatted: Justified
26	PM integration including shared resources and co-location			Subject to BB / 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 ← Formatted: Justified
			-£1,000,000	← Formatted: Justified
27	Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing			Subject to property owners' protests. ← Formatted: Justified
			-£50,000	← Formatted: Justified
28	Reduce ballasted track thickness from 300mm to 200mm			← Formatted: Justified
			-£200,000	← Formatted: Justified
29	Power supply (up to passenger operation) – possible over allowance in DFBC			Subject to demonstrating evidence. ← Formatted: Justified
			-£300,000	← Formatted: Justified
30	Spare			← Formatted: Justified
				← Formatted: Justified
<b>Total</b>			<b>-£11,065,006</b>	← Formatted: Justified
				← Formatted: Justified

**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 Formatted: Justified
2	SDS design scope economy, variation and reduction		-£500,000	Joint target Formatted: Justified
3	Tramstops – standard finishes to circa 20% - 30% of stops		-£500,000	Joint target Formatted: Justified
4	Picardy Place level flexing – MUDFA savings		-£500,000	tie led initiative Formatted: Justified
5	Picardy Place level flexing – construction savings		-£500,000	Joint initiative Formatted: Justified
6	Value engineer finishes on Edinburgh Park Viaduct and other structures		-£170,000	Subject approval of NEL / CEC Formatted: Justified
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 Formatted: Justified
8	Rationalize Depot Access Bridges		-£ ,000	Recently proposed item from BBS – saving to be agreed Formatted: Justified
9	Spare			Formatted: Justified
10	Spare			Formatted: Justified
<b>Total</b>			<b>-£2,670,000</b>	Formatted: Justified

**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.

**Formatted:** Indent: Left: 1.5 cm,  
First line: 0 cm

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.
- 4. Costs arising in respect of loss or damage except as provided for under the Agreement.

**Formatted:** Justified

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.

<b>Page 12: [1] Formatted</b>	<b>IFL</b>	<b>19/03/2008 15:11:00</b>
Justified, Indent: Left: 2.5 cm, No bullets or numbering		
<b>Page 12: [2] Formatted</b>	<b>IFL</b>	<b>19/03/2008 15:11:00</b>
Justified, Indent: Left: 2.5 cm, No bullets or numbering		
<b>Page 12: [3] Formatted</b>	<b>IFL</b>	<b>19/03/2008 15:13:00</b>
Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering		
<b>Page 12: [4] Formatted</b>	<b>IFL</b>	<b>19/03/2008 15:14:00</b>
Justified, Indent: Left: 1.25 cm, Hanging: 1.25 cm, No bullets or numbering		