

AGREEMENT

FOR

CONTRACT PRICE

FOR

PHASE 1A

Dated 20 December 2007

CEC02085660_0002

1.0 Introduction

1.1 This document sets out the agreement reached between BBS and tie on 20 December 2007 in respect of the price for the delivery of Phase 1A of the Edinburgh Tram Network.

1.2 Contents

Details of the Agreement

Appendix A1 – Infraco Negotiation Summary Position

Appendix A2 – Detailed Summary Of Contract Price

Appendix A3 – Value Engineering Opportunities Register

Appendix A4 – Provisional Sums

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DETAILS OF THE AGREEMENT

2.0 Negotiated Price

- 2.1 The negotiated price for Phase 1a is £218,262,426. Details of the build-up to this price are set out in Appendix A.
- 2.2 The agreed Value Engineering items included in the price are set out in Appendix A3. These sums are fixed reductions save for the conditions listed in Appendix A3 under 'Key Qualifications'.
- 2.3 Provisional sums (previously normalisations) included within the price are as set out in Appendix A4. These allowances are provisional sums for the work described.
- 2.4 All other prices are fixed and firm, based on the Basis of the Price as set out below.

3.0 Basis of the Price

- 3.1 The price is based on the following:
 - 3.2 Employers Requirements Version 3.1 as qualified by the BBS Compliance Matrix contained within BBS's Email dated 12 December 2007, save for:-
 - In respect of Prior Approvals and other consents the allocation of risk and responsibility is as set out in tie (G Gilbert) email dated 12 December 2007) – Appendix B1
 - OLE – fixed termination system for all on street sections, from Haymarket to Newhaven and within Edinburgh Park and catenary system from Haymarket to Edinburgh Airport. Stepped poles will be adopted throughout.
 - Trackform will be as the RHEDA City system (types C, D and G) except where ballasted track will be adopted as agreed.
 - Maintenance requirements as discussed and as per Email of 12th December and 13th December 2007 – Appendix B2

The Parties acknowledge that the final Employer's Requirements will be subject to quality assurance of the final accepted consolidated version.

- 3.3 The BBS price for civils works includes for any impact on construction cost arising from the normal development and completion of designs based on the design intent for the scheme as represented by the design information drawings issued to BBS up to and including the design information drop on 25th November 2007. The price excludes:-

- a) Items designated as provisional in the Appendix A4.
- b) Any material changes to the design resulting from the impact of the kinematic envelope of the CAF tram vehicle on the civils design.
- c) Excluded items, to the extent described in 3.4 below.

In respect of footways, full reuse of existing kerbs and flags and minimal reinstatement behind kerb lines is assumed. i.e. not wall to wall. Design must be delivered by the SDS in line with our construction delivery programme previously submitted.

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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

3.4 The BBS price for systems works is fixed save for:-

- a) Items designated as provisional in the Appendix A4.
- b) Any agreed material impact of the CAF tram vehicle specification on the traction power supply system as demonstrated by power simulation modelling.

c) *In the event of any conflict between the obligations in the SDS design the obligations in the Employers Requirements shall prevail.*

3.5 In all other respects the BBS price is fixed

3.6 Excluded items are:-

- a) Utilities Diversions, except the £3m provisional sum included in the allowance for Picardy Place, York Place and London Road and £0.75m provisional sum for minor utilities diversion as shown in Appendix A4.
- b) Work at St Andrew Square beyond the tram alignment works – tramstops, trackform, track bed, OHLE, road surface refurbishing and associated systems and link works.
- c) The cost of the following within the Forth Ports Area:
 - Road surface finishes, pavings, tramstop finishes and drainage.
 - Work to Tower Place and Victoria Dock bridges.
 - Lindsay Road Retaining Wall and associated highway works.which is extra over the scope included in BBS's price as at selection of BBS as preferred bidder.
- d) The Cost of the Highways and Drainage works at Picardy Place, London Road and York Place that is extra over the scope included in BBS's price as at selection of BBS as preferred bidder.
- e) 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 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.
- f) Bernard Street additional road works as drawing provided.
- g) Completing full footway reconstruction in Leith Walk beyond the allowance made where kerb lines are being re-sited.

3.7 In respect of the Depot excavation works, the price is fixed against the quantities advised to BBS by tie and on the assumption that the depot excavation will be handed over to us pumped dry with a firm sound foundation.

3.8 The price excludes any scope required by Third Parties which is not included within the designs issued up to and including 25th November 2007. BBS and tie will consult with Third Parties prior to contract award to agree local Codes

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of Construction Practice. The price will be adjusted for any changes to constraints and additional scope which arises out of these agreements.

- 3.9 In respect of the highways work in Princes Street, Shandwick Place and Haymarket Junction, BBS's price is based on planing back the existing road structure to a sound base and replacement with an acceptable roads construction 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.
- 3.10 The programme for delivery of Phase 1A is:-
- as represented by the programme provided by BBS dated 11th December 2007 which shows a completion of 8th August 2011 (sent to tie on 13th December 2007 – Appendix B3),
 - based on the contents and assumptions set out in BBS email (Steve Sharpe) dated 13th December 2007 – Appendix B4, BBS and tie will work to deliver completion of Phase 1a by 11th Feb 2011 and
 - based on the constraints and methodologies as agreed between BBS, tie, TEL and CEC.
- It is agreed that all parties must work together to achieve the rationalisation of city centre constraints to achieve programme delivery. BBS have not allowed in the Price for completion beyond March 2011.
- 3.11 Contract terms as represented by the negotiations up to 14th Dec 2007 and for the avoidance of doubt:-
- a) Consents as set out in tie email (Geoff Gilbert) to BBS dated 12th December 2007 – Appendix B1.
 - b) Third Party Agreement and Third Party obligations as set out in BBS email (M Flynn) dated 12th December 2007 – Appendix B5.
 - c) The novation of SDS to Infraco as set out in the Novation Plan.
 - d) The novation of Tramco to Infraco at the date of Infraco Contract Award.
 - e) The terms negotiated and under negotiation prevail over statement in respect of contract issues stated in the technical information submitted by BBS.

- 3.12 In all other respects the conditions of the Preferred Bidder Agreement apply.

4.0 Agreement

- 4.1 This document is agreed as a record of the outcome of the negotiations:-

for and on behalf of tie LIMITED

on the 20th December 2007

Authorised signatory:

Full name: WILLIAM GALLAGHER

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EXECUTED for and on behalf of BBS

on the December 2007

Authorised signatory: [REDACTED]

Full name: R F Wacker. Beawyer Bdyer

Authorised Signatory

[REDACTED] 201207

Full Name. S. Seawat
Stenous.

APPENDIX A

CEC02085660_0012

APPENDIX B1

CEC02085660_0014

APPENDIX B2

CEC02085660_0016

APPENDIX B3

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APPENDIX B4

CEC02085660_0020

APPENDIX B5

CEC02085660_0022

INFRACO NEGOTIATION SUMMARY POSITION

Date:- 18/12/07

	Current £m	Comments
Fixed Elements		See Appendix A2 for further details
Core contract sum - firm price	211,910,342	
Provisional elements taken into firm	0	All previously provisional items taken to firm
VE taken into firm price	-83,000	
VE taken into firm price - but conditional	-11,065,006	See conditions referred to in Appendix A3
Premium for current provisional items	8,000,000	Negotiated sum for firming up all elements
Total firm price	208,762,336	94%
Provisional Sums	12,170,090	Previous normalisations which are still relevant - See Appendix A4 plus £2m provisional sum for SDS design post novation (See RW Email 11/10/07)
Total Provisional	12,170,090	
Sub total	220,932,426	
Remaining Identified VE	-2,670,000	To be stated in contract with rules for adjustment of price and commitments for both parties work to deliver these items
Anticipated Infraco Contract Sum (Final Deal)	218,262,426	

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DETAILED SUMMARY OF CONTRACT PRICE																		
Item	Prelims	Trackform - System	Depot	Structures - Superstructure	Highways	Tramstops	Buildings	Supervisory & Comms	OLE	Tramstop Equipment	Trams	Reduction as BBS letter 11/10/07	Reduction for taking CAF into BBS Consortia	Traction Power	Power for commissioning	System Wide	Network Rail	Total
Base																		
Firm	75,437,757	43,918,161	18,686,351	31,415,121	11,893,955	3,270,376	3,275,180	5,296,482	14,974,462	1,513,587	1,018,910	-1,000,000			1,330,000	-120,000	3,000,000	211,910,342
Provisional	2,000,000															8,000,000		2,000,000
Firm price addition																		8,000,000
Sub-total Base	75,437,757	43,918,161	18,686,351	31,415,121	11,893,955	3,270,376	3,275,180	5,296,482	14,974,462	1,513,587	1,018,910	-1,000,000	0	0	1,330,000	7,880,000	3,000,000	211,910,342
Provisional (See Appendix A4 for details)																		
Provision of pumped surface water outfall system at A8 underpass																		
Spares not included in Price																		
Scottish Power Connections to Depot and IPR																		
Relocation of Ancient Monuments																		
Allowance for minor utility diversions																		
Archaeological Officer - impact on productivity																		
Ballast																		
Picardy Place, York Place and London Road junction																		
E/O Shell Grip																		
Mains Power Connection to street lights and traffic signals																		
Adjust for Network Rail Possessions support																		
Leith Walk substation demolition																		
Additional Crew Relief Facilities at Heymarket																		
Sub-total - Provisional Normalisation	53,700	1,455,755	100,000	860,919	6,774,955	0	0	0	924,762	0	0	0	0	0	0	0	0	10,170,090
Value Engineering																		
Firm																		
NR Immunisation. NOW IN FIRM PRICE - SEE ABOVE																		0
Signalling & Comms - fewer CCTV cameras																		
Reduced to 55Nr . (Tramstops 45Nr, Depot 10Nr)																		-33,000
UPS - reduce capacity from 4hrs to 3hrs																		-50,000
Sub-total - Firm Value Engineering	0	0	0	0	0	0	0	-83,000	0	0	0	0	0	0	0	0	0	-83,000
Firm with conditions																		
Delete depot pumping station/storm tanks by utilising existing gravity system.																		-193,526
Depot - Build part now with provision to expand in the future/reduce size of car park facilities																		-230,000
Delete under floor lift plant and utilise mobile jacks. incl mobile future proofing.																		-250,000
Depot - delete split vehicle accommodation system - requirement dependant on tram vehicle selection																		-27,500
Depot - Track Maintenance Equipment - rationalise scope requirement and consider renting.																		-27,500
Depot - deletion of one pavement (inner) .																		-36,000
Depot - delete requirement for concrete apron to security fence																		-6,080
Depot - delete compressed air system, utilise 1 or 2 local/mobile compressors																		-54,400
Consolidated VE items 7, 10, 11, 19 which results from changes to initial Depot design driven by proximity to BAA runway and EARL decision.																		-2,200,000
Delete standby generator and substitute with hardstanding and power connection for portable generator.																		-150,000
Material recovery and reprocessing (Infraco); 2 options - reconstituted planings & Type 1R																		-500,000
Reduce Kerb and associated re-instatement of pavement																		-100,000
Reduce drainage run from guideway																		-100,000
Overhead Contact system - Switchgear - rationalise specification - considered "quite onerous"																		-160,000
Edinburgh Park Bridge - 7 span to 2 , utilise steel beams in lieu of concrete Edinburgh Park Viaduct																		-1,470,000
Carricknowe Bridge Parapet - down grade from P8 / P5 to N2 (reduced cost of parapet plus knock on effect on deck design/cost)																		-85,000
A8 Underpass various initiatives																		-850,000
Roseburn Street viaduct various initiatives																		-1,375,000

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APPENDIX A2

Item	DETAILED SUMMARY OF CONTRACT PRICE															System Wide	Network Rail	Total
	Prelims	Trackform - System	Depot	Structures - Superstructure	Highways	Tramstops	Buildings	Supervisory & Comms	OLE	Tramstop Equipment	Trams	Reduction as BBS letter 11/10/07	Reduction for taking CAF into BBS Consortia	Traction Power	Power for commissioning			
Water of Leith various initiatives Eight maintenance walkway structures - delete or reduce Class 7 material conversion -				-150,000 -250,000														-150,000 -250,000
Optimise the work site lengths wherever practical to ensure efficient construction outputs Accept more disruption over shorter period to maximise efficiency of construction operations - Option to lease UPS provision from Supplier rather than purchase Rationalising spares supplied with the Infraco bid				-300,000														-300,000 -300,000 -100,000 -300,000
PM Integration including shared resources and co-location. Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing Reduce ballasted track thickness from 300 to 200mm Power Supply (up to passenger operation) - possible over allowance in DFBC				-50,000 -200,000														-300,000 -1,000,000 -50,000 -200,000 -300,000
Sub-total - Provisional Value Engineering	0	-250,000	-3,175,006	-4,490,000	-700,000	0	0	0	-160,000	0	0	0	-300,000	0	-2,000,000	0	-11,065,006	
Further project management integration over 3 years SDS design scope economy, variation and reduction Tramstops, standard finishes to circa 20-30% of stops Picardy place level flexing - MUDFA savings Picardy place level flexing - construction savings Siemens agreement to reduce fixed price on item 49 above by £10,000. Now included in item 49 above. Siemens agreement to reduce fixed price on item 145 above by £200,000. Now included in item 145 above. Value engineer finishes on EPV and other structures Other unidentified VE items					-500,000 -500,000					-500,000							-500,000 -500,000 -500,000 -500,000 -500,000 0 0 -170,000 0 0	
Sub-total - Provisional Value Engineering	0	0	0	-170,000	-1,000,000	0	0	0	0	-500,000	0	0	0	0	-1,000,000	0	-2,670,000	
Total Anticipated Value	75,491,457	45,373,916	18,786,351	32,106,040	17,668,910	3,270,376	3,275,180	5,213,482	15,899,224	1,013,687	1,018,910	-1,000,000	0	0	1,330,000	6,880,000	3,000,000	218,282,426

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71214 Single VE List v31 agreed bbs tie v1

VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE		NOTES	Key Qualifications
			Target	Agreed BBS position		
	BUILDINGS					
					The 2 sub-station items have been rejected by BBS.	
	BUILDINGS TOTAL		£0	£0		
	DEPOT					
8	Delete depot pumping station/storm tanks by utilising existing gravity system.	Depot	£193,526	£193,526	tie may need to add in cost of a small pump	tie's carries specification/acceptance risk and cost of additional pump
9	Depot - Build part now with provision to expand in the future/reduce size of car park facilities	Depot	£230,000	£230,000	Initial supply of 100 car park places agreed.	tie's carries specification/acceptance risk
14	Delete under floor lift plant and utilise mobile jacks. Incl mobile future proofing.	Depot	£250,000	£250,000		tie's carries specification/acceptance risk
16	Depot - delete split vehicle accommodation system - requirement dependant on tram vehicle selection	Depot	£27,500	£27,500	Accommodation bogies are in CAF offer	tie's carries specification/acceptance risk
17	Depot - Track Maintenance Equipment - rationalise scope requirement and consider renting.	Depot	£27,500	£27,500		tie's carries specification/acceptance risk
20	Depot - deletion of one pavement (inner) .	Depot	£36,000	£36,000	Shown on latest site plan drawings.	tie's carries specification/acceptance risk
24	Depot - delete requirement for concrete apron to security fence	Depot	£6,080	£6,080		tie's carries specification/acceptance risk
129	Depot - delete compressed air system, utilise 1 or 2 local /mobile compressors	Depot	£54,400	£54,400		tie's carries specification/acceptance risk
145	Consolidated VE items 7, 10, 11, 19 which results from changes to initial Depot design driven by proximity to BAA runway and EARL decision.	Depot	£3,181,264	2,000,000	Includes reductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope), reductions in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms, locke	DTC but compliant with current technical /design info. Subsequent saving of £200,000 added see below.
New	Delete standby generator and substitute with hardstanding and power connection for portable generator.	Depot	£250,000	150,000		tie's carries specification/acceptance risk

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71214 Single VE List v31 agreed bbs tie v1

VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE	NOTES	Key Qualifications
	DEPOT TOTAL		£4,256,270	£2,975,006	
	HIGHWAYS				
36b	Material recovery and reprocessing (Infraco); 2 options - reconstituted planings & Type 1R	Highways	£500,000	£500,000	Subject to confirmation from SDS; level of saving subject to adjustment of quantity of this item based on the final design
152	Reduce Kerb and associated re-instatement of pavement	Highways	£100,000	£100,000	Subject to confirmation from SDS; level of saving subject to adjustment of quantity of this item based on the final design
153	Reduce drainage run from guideway	Highways	£100,000	£100,000	Subject to confirmation from SDS; level of saving subject to adjustment of quantity of this item based on the final design
	HIGHWAYS TOTAL		£700,000	£700,000	
	NETWORK RAIL				
42	NR Immunisation - ensure design of immunisation is based on minimum safe propagation distance (e.g. <100m). Project budget previously very conservative.	NR	£4,700,000	4,700,000	Original proposal work by BBS suggests a target of less <50m may be achievable.
	NETWORK RAIL TOTAL		£4,700,000	£4,700,000	
	OLE				
49	Overhead Contact system - Switchgear - rationalise specification - considered "quite onerous"	OLE	£336,000	150,000	Price change requested for manual, three position cubicle mounted line isolators throughout, with the exception of the depot where they can be pole mounted. Status of isolator to be shown via SCADA.
135	OLE - Catenary opportunity in Sections 5 to 7 - replace trolley wire with catenary on segregated sections.	OLE		0	Detailed price change requested for: catenary with 3-step poles Haymarket Yard-Russell Road (Russell Road-Airport already catenary); fixed termination Haymarket Yards-Newhaven; Tapered Poles Haymarket-Newhaven.
149	Provision of combined incoming and return cabinet.	OLE	£42,000	0	tie proven to be incompatible with SP feeder arrangements.
	OLE TOTAL		£378,000	£150,000	
	STRUCTURES				
54	Value Engineering/ de-risked pricing approach developed for the final designs for all structures, particularly substructures and foundations (where not covered below)	Structures	£2,000,000	0	Unable to commit
55	Edinburgh Park Viaduct various savings including use of cross heads to eliminate temp works, steel or concrete beams.	Structures	£1,470,000	1,470,000	This assumes continuation with 7 span structure. Subject to approval of design by NEL/ CEC and subject to SDS designing to cost

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71214 Single VE List v31 agreed bbs tie v1

VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE		NOTES	Key Qualifications
56	Carricknowe Bridge Parapet - down grade from P6 / P5 to N2 (reduced cost of parapet plus knock on effect on deck design/cost)	Structures	£85,000	85,000		Subject to approval of design by Network Rail
57	A8 Underpass various initiatives	Structures	£850,000	850,000	Changing to a contiguous piled wall/ leaner designs	Subject to being able to design to cost
New	Roseburn Street viaduct various initiatives	Structures	£1,375,000	£1,375,000		Subject to approval by stakeholders - SRU and Network Rail
New	Water of Leith various initiatives	Structures	£150,000	150,000		Subject to being able to design to cost
New	Eight maintenance walkway structures - delete or reduce	Structures	£250,000	250,000	Unlikely to yield net savings unless structure needs to be redesigned for other purposes.	Subject to being able to design to cost; and tie taking approvals risk
New	Russel rd Bridge piling changes	Structures	£100,000	0		Subject to being able to design to cost
154	Class 7 material conversion -	Structures	£300,000	£300,000		Subject to confirmation of SDS agreeing to principle; level of saving subject to adjustment of quantity of fill required by the final design
STRUCTURES TOTAL			£6,580,000	£4,480,000		
SUPERVISORY & COMMS						
65	Signalling & Comms - fewer CCTV cameras . Reduced to 55Nr . (Tramstops 45Nr, Depot 10Nr)	Supervisory & Comms	£100,000	33,000	Price requested for 55 off for Phase 1a	
69	Signalling & Comms - rationalise fibre optic ring. More economic architecture that performs the same function could be employed	Supervisory & Comms	£100,000	0	Ensure separation 1a and 1b costs	
73	Signalling & Comms - Current requirement for location and interface of the SCADA and Points controllers etc is unnecessarily complex.	Supervisory & Comms	£50,000	0	A simpler solution e.g. as in Nottingham, would be cheaper and more user friendly.	
74	Signalling & Comms - rationalise loop quantities by combining some loop functions	Supervisory & Comms	£87,500	0		
75	Signalling & Comms - Remove ambient noise sensing on the passenger announcement system	Supervisory & Comms	£7,000	0	Price change requested.	
163	UPS - reduce capacity from 4hrs to 3hrs	Supervisory & Comms	£50,000	50,000	Would be included in financial advantage for proposal to outsource UPS provision to Chloride.	
165	Reduce nr of Signalised Pedestrian Xings.	Supervisory & Comms	?	0	From review of latest road layouts there is a significant increase in qtys. May need to challenge CEC (c.£50k/crossing)	
SUPERVISORY & COMMS TOTAL			£394,500	£83,000	BBS have agreed to review Phase 1a/1b split. Still outstanding.	
SYSTEM WIDE						
77	Optimise the work site lengths wherever practical to ensure efficient construction outputs	System Wide	£300,000	300,000	Linked to other discussions e.g. Rhaeda City trackform (see 138 too)	Subject to further Programme development with CEC, confirm by 9th January.
80	Accept more disruption over shorter period to maximise efficiency of construction operations -	System Wide	£100,000	100,000	Initial discussions suggests CEC are likely to be flexible	Subject to further Programme development with CEC, confirm by 9th January.

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VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE		NOTES	Key Qualifications
148	Remove spare capacity from OTN (linked to item 69)	System Wide	£180,000	0		
150	Option to lease UPS provision from Supplier rather than purchase	System Wide	£300,000	300,000	Originally BBS proposal	Subject to agreement of operator
151	Rationalising spares supplied with the Infraco bid	System Wide	£300,000	300,000	Originally BBS proposal	Subject to agreement of operator
160	PM Integration including shared resources and co-location.	System wide	£1,000,000	1,000,000	Late BBS VE proposal	Subject to BBS /tie agreeing savings in resources and facilities items from BBS and tie costs
SYSTEM WIDE TOTAL			£2,180,000	£2,000,000		
TRACK FORM						
100	Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing	Trackform	£50,000	50,000	Also a timing issue, because we would not necessarily install during construction but await reaction if any.	Subject to property owner claims
138	Trackform - changing embedded to ballast rail. Ballasted track adjacent to NwkRail	Trackform	£2,000,000	0	Awaiting a formal technical and financial proposal for Rhaeda City trackform for both embedded and grass and a validated construction programme.	Unlikely to yield savings because of short distance. Plus maintenance implications.
156	Track installation install in strips.	Trackform	£0	0	Would need very strong justification.	Unacceptable
164	Reduce ballasted track thickness from 300 to 200mm	Trackform	£300,000	200,000		Design to cost.
TRACK FORM TOTAL			£2,350,000	£250,000		
TRACTION POWER						
103	11kV Traction Power feeds to sub stations including any network reinforcement required (separate VE 104).	Traction Power	?	0	Dialogue needed with tie to incorporate SP negotiated savings into BBS proposal.	Defer until SP current phase of negotiations is complete.
109	Power supply - Russell Rd TPH - equipment for future upgrade to substation to be supplied when needed i.e. don't supply transformer rectifier now.	Traction Power	?	0	BBS have been instructed to assume that for Ph 1a on its own nothing at all will be required at Russell Road. Separate discussion re Phase 1b still continuing.	BBS to check equipment included and advise. ASAP
158	Power Supply (up to passenger operation) - possible over allowance in DFBC	Traction Power	£300,000	300,000		Subject to tie demonstrating evidence.
TRACTION POWER TOTAL			£300,000	£300,000		
New	Other unidentified VE items	Other	£1,000,000	£0		Need specifics for BBS commitment therefore zero.
UNIDENTIFIED VE TOTAL			£1,000,000	£0		Need specifics for BBS commitment therefore zero.
NEW INITIATIVES AGREED AFTER MAIN MEETING						

CEC02085660_0036

71214 Single VE List v31 agreed bbs tie v1

VALUE ENGINEERING OPPORTUNITIES REGISTER

REF	ITEM	FILTER	VALUE	NOTES	Key Qualifications
New	Further project management integration over 3 years		£500,000		Joint target
New	SDS design scope economy, variation and reduction		£500,000		Joint target
New	Tramstops, standard finishes to circa 20-30% of stops		£500,000		Joint target
New	Picardy place level flexing - MUDFA savings		£500,000		tie led initiative
New	Picardy place level flexing - construction savings		£500,000		Joint target
NOTE	BB agreement to reduce fixed price £120,000		£120,000	for the record only (not part of VE savings)	BB risk
NOTE	Siemens agreement to reduce fixed price on item 49 above by £10,000		£10,000		Siemens risk
NOTE	Siemens agreement to reduce fixed price on item 145 above by £200,000		£200,000		Siemens risk
New	Value engineer finishes on EPV and other structures	Structures	£170,000		Subject to approval by NEL/CEC
NEW VE INITIATIVES TOTAL		£0	£3,000,000		
	TOTAL			18,638,006	

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PROVISIONAL SUMS

APPENDIX A4

Description	BBS 3		
	1A	1B	Total
34 . Provision of pumped surface water outfall system at A8 underpass	100	-	100
62 . Spares not included in Price	175	100	275
70 . Scottish Power Connections to Depot and IPR	750	-	750
71 . Relocation of Ancient Monuments	54	-	54
63 . CCTV cameras		313	313
8 . E/O carrier drains	-	1,645	1,645
16 . Allowance for minor utility diversions	750	250	1,000
23 . Archaeological Officer - impact on productivity	406	-	406
64 . Ballast	300	-	300
50 . Gogarburn Tram Stop By RBS		-	-
Sub Total Infraco Normalisation exc. Highways & Structures	2,534	2,307	4,842
3 . Piccadilly Place, York Place and London Road junction	6,340	-	6,340
4 . Extent of road refinishing in critical on street areas		-	-
22 . E/O Shell Grip	319	126	445
27 . Mains Power Connection to street lights and traffic signals	115	29	144
Sub Total Highways	6,775	154	6,929
19 . Adjust for Network Rail Possessions support	755	-	755
20 . Balgreen Road - new structure reqd		-	-
26 . S23 Carrick Knowe Widening		-	-
28 . Leith Walk substation demolition	56	-	56
31 . Additional Crew Relief Facilities at Haymarket	50	-	50
32 . Structure S18 allowance for anticipated works		-	-
61 . Roseburn corridor retaining wall align assumptions	-	3,228	3,228
Sub Total Structures	861	3,228	4,089
Total	10,170	5,690	15,860

CEC02085660_0040

APPENDIX A

CEC02085660_0042

APPENDIX B1

CEC02085660_0044

Geoff Gilbert

From: Geoff Gilbert
Sent: 12 December 2007 21:00
To: flynn.michael@siemens.com
Cc: Tom.Murray@bilfinger.co.uk; 'Scott.McFadzen@bilfinger.co.uk'; Richard.Walker@bilfinger.co.uk; Bob Dawson; Valerie Clementson
Subject: Draft Consents Paper GG 121207
Attachments: Draft Consents Paper GG 121207.doc

Michael

Simplified proposal from us on consents enclosed. Can we discuss tomorrow morning.

Regards

Geoff Gilbert - Project Commercial Director

TRAM Project

tie Limited

Citypoint

65 Haymarket Terrace

Edinburgh EH12 5HD

tel [REDACTED]

mob [REDACTED]

CEC02085660_0046

tie Limited

**Edinburgh TRAM Project
(Commercial In Confidence)**

Subject : Infraco Contract Terms Clarifications

Review area : Consents

Date : 12th December 2007

1.0 Principles

2.1 The allocation of responsibility for consents in the contract will be as follows:-

- The following consents will be the responsibility of tie to obtain
 - TROs for the permanent scheme
 - TTROs to enable the scheme to be constructed, with BBS support (tie have already applied for blanket TTRO's)
 - Network Rail possessions – tie book these based on BBS programme dates (note these are already booked now wrong dates – need to be re-booked to comply with revised Infraco Contract)
- BBS provides relevant support to tie to obtain these consents.
- SDS obtain other consents required to fulfil their contract obligations. Agreed consents being obtained by SDS will be clarified in the novation agreement with a list of consents stating the status of consents at Novation. The list of consents being obtained by SDS is set out in Appendix A.
- BBS obtain all other consents, those required for construction activities and also those required to commission the system and enable it to open for passenger carrying operation. Support is provided by SDS where relevant.
- Tie will provide support to BBS to assist them in obtaining consents from third parties where they are not co-operating, provided BBS has provided the requisite information to obtain the consent and comply with the consent authorities timescales.
- Where consents are not put in place by SDS to meet the BBS programme in the Infraco Proposals then the impact on programme will be a CE, subject to certain provisos as set out later in this paper.

Tie will consider a CE where BBS are unable to obtain consents. To enable tie to assess whether it is prepared to do this SDS is to advise tie of the specific consents that it is concerned about. Tie will not agree to a blanket CE for all consents to be obtained by Infraco. Where tie agrees to a CE where BBS are unable to obtain consents this will be subject to the provisos listed below in 9 below.

2.0 Traffic Regulation Orders [TROs]

- 2.1 The TROs are to be obtained by tie with relevant technical support and programme information being provided by BBS.
- 2.2 If BBS action or inaction delays this process and to the extent that this delays completion of the scheme will not be a CE.

3.0 Temporary Traffic Regulation Orders [TTROs]

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**Edinburgh TRAM Project
(Commercial In Confidence)**

- 3.1 The TTROs are to be obtained by tie but based on the programme and technical information being provided by BBS, including traffic management proposals. This will in essence be the implementation of the On Street Construction Works Methodology which is to contain all the details necessary for tie to draw down a TTRO, including traffic management arrangements proposed by BBS.
- 3.2 If BBS action or inaction delays this process and to the extent that this delays completion of the scheme will not be a CE.

4.0 Network Rail

- 4.1 Possessions have already been booked by tie in accordance with BBS's requirements. Possessions need to be re-booked to suit revised Infraco Contract.
- 4.2 BBS (including providing design and technical information where necessary) will prepare and provide to tie all necessary paperwork to enable tie to make an application for possessions to Network Rail.
- 4.3 The responsibility for payment for these possessions will rest with tie but any changes to possessions as a result of BBS being in culpable delay will then rest with BBS.
- 4.4 Any changes to possessions as a result of Network Rail will, subject to usual tests, lead to a Compensation Event for BBS.

5.0 Discharge Consents (water)

- 5.1 There are two situations here, namely:
 - Temporary Discharge Consents
 - Permanent Discharge Consents
- 5.2 Clearly BBS has to be responsible for temporary discharge consents as these will relate to their method of working or other preliminaries items such as their site set up.
- 5.3 With regard to the permanent discharge consents BBS want these to be in place prior to novation of SDS. If this can be achieved then it would be the preferred position. BBS to check SDS programme to determine whether these are in place.
- 5.4 It is logical that BBS are responsible for obtaining the permanent discharge consents as SDS will be their consultant not tie's for this element of the work. Permanent discharge consents are required prior to commencement of the relevant drainage works. If these are refused due to SDS errors it will be a matter for BBS to resolve with SDS (subject to the SDS having obtained a permanent discharge consent and designed an agreed outfall arrangement for the Depot?). However if refused or made conditional upon works being

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undertaken e.g. betterment, upgrading, new or renewal requirements for other reasons outside of BBS/SDS control then it is suggested that this becomes a tie change.

6.0 Building Warrants

6.1 The Building Warrants relate to compliance with technical standards and thus it is appropriate that this rests with BBS (SDS providing this to BBS other than where BBS have or are to undertake the design).

7.0 Building Fixing Agreements (for overhead line)

7.1 SDS have a responsibility to obtain Building Fixing Agreement and thus under the novation arrangement this will rest with BBS.

7.2 However tie has already acknowledged that obtaining a Building Fixing Agreement is not necessarily guaranteed. Heritable Proprietors (owners) have the right to object and quite probably most will. Thereafter CEC/tie determines whether to take the matter to the Sheriff Court.

7.3 Although Building Fixings Agreements remain as the preferred solution, SDS is also progressing the approval of poles to support the overhead line.

7.4 If Building Fixing Agreement is not obtained in a particular location, then within limits of being technically feasible and programme constraints for a new request, alternative locations for a Building Fixing are to be sought.

7.5 Where it is not technically feasible to use an alternative location for a Building Fixing or the programme constraints are insufficient for a new request, then the 'fall-back position' of the use of a pole becomes a tie Change.

7.6 Where there is uncertainty of likely outcome, consideration will be given to a dual approach of seeking Building Fixings and also installing foundations for a pole (as a tie Change).

8.0 Other consents related to design

10.1 All other consents related to design will rest with BBS.

9.0 Compensation Event where consents are not obtained or are delayed by SDS

11.1 BBS will be entitled to a CE where a consent is not provided by the authority providing the consent by the date that it is shown as required on the programme included in the Infraco Proposals provided that:

- It relates to a consent that SDS are due to obtain in accordance with their contract (excluding any additional consents that Infraco may have instructed SDS to obtain after novation)
- Infraco explains the reasons given by the consenting authority as to why they will not or have not provided consent within the agreed period (with supporting documentation)

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**Edinburgh TRAM Project
(Commercial In Confidence)**

- Infraco advises tie immediately that it becomes aware that a consent may not be obtained by the due date. In such circumstances Infraco will afford tie the opportunity to meet with the authority providing the consent with a view to resolving the situation and Infraco attends the meeting with tie and supports tie in this respect.
- Infraco demonstrates that:-
 - Not receiving the consent has had or will have a material impact on the progress of the works
 - Infraco have taken all reasonable steps to obtain the consent
 - Infraco has provided all information necessary to obtain the consent within the timescales agreed with the authority providing the consent
 - the failure by the authority required to provide the consent has not been brought about by Infraco reprogramming the works or reprogramming or reprioritising the design programme such that a timescale agreed with the authority providing the consent cannot now be achieved
 - the authority providing the consent has not responded within the agreed timescales
 - Infraco has undertaken or plans to undertake mitigation actions in a timely manner to avoid or mitigate the impact of any delay in obtaining consent.
 - The failure in obtaining a consent is not due to a failure on the part of SDS to deliver the obligations of their contract.

CEC02085660_0054

CONSENTS
(Commercial In Confidence)

Railways and Aviation	HMRI	HMRI	Ongoing process with HMRI
	Network Rail	Network Rail	Ongoing negotiations with NR
	BAA/Aviation Consents	BAACAA/NATS	Ongoing negotiations with BAA
	Listed Building Consent	CEC Planning Authority	
	Prior Approval	CEC Planning Authority	
Planning	Planning Permission	CEC Planning Authority	
	Conservation Area Consent	CEC Planning Authority	Not applicable within LoD
	Scheduled Monument Consent	Scottish Executive & Historic Scotland	
	Advertisement Consent	CEC Planning Authority	Information signs "deemed consent"
Traffic Management	Road Construction Consent	CEC Roads Authority	
	Badger Licence	Scottish Natural Heritage	Environmental Team
Environment Ecological	Otter Holt/disturbance licence	Scottish Natural Heritage	
	Bat Licence	Scottish Natural Heritage	
	Appropriate Assessment	Competent Authority	
	CAR General Binding Rules	SEPA	
Drainage CAR	CAR Registration	SEPA	
	CAR License	SEPA	
	Water/ Wastewater Connection	Scottish Water	
Construction	Technical Approval	CEC Bridges/ CEC Roads	
	Building Warrant	CEC Building Standards	
Radio	OFCOM license	OFCOM	
Design Consultation	Third Party Design Consultation		
Undertakings	Undertakings to Parliament	n/a	Undertakings and Agreements to Parliament and with 3rd parties that must be met
Agreements	Agreements with 3rd Parties	n/a	
Letter of Comfort	Letter of comfort	n/a	
Letter of Closure	Letter of Closure	n/a	

CEC02085660_0056

APPENDIX B2

CEC02085660_0058

Geoff Gilbert

From: Alastair Richards - TEL
Sent: 20 December 2007 18:27
To: Geoff Gilbert
Subject: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section
Attachments: ERs - Maintenance - Draft 3 03 for Informal Issue ONLY_rev20071211.pdf

From: Brauns, Bernhard [mailto:bernhard.brauns@siemens.com]
Sent: Wed 12/12/2007 7:23 PM
To: Alastair Richards - TEL
Cc: scott.mcfadzen@bilfinger.de; Brueckmann, Roland
Subject: AW: Employer's Requirements - 3.03 (draft) - Maintenance Section

Hello Alastair,

please find attached the ER with my comments (directly in the pdf document).

In case you can't see the comments, please give me a ring - I'd then have to convert the pdf into a Word document.

With best regards,
Bernhard Brauns

Siemens AG
Transportation Systems
Integrated Services
TS IS S12
Sieboldstr. 16
91052 Erlangen, Germany
Tel.: +49 [REDACTED]
Fax: +49 [REDACTED]
Mobile: + [REDACTED]
<mailto:bernhard.brauns@siemens.com>

Siemens Aktiengesellschaft: Chairman of the Supervisory Board: Gerhard Cromme; Managing Board: Peter Loescher, Chairman, President and Chief Executive Officer; Heinrich Hiesinger, Joe Kaeser, Rudi Lamprecht, Eduardo Montes, Juergen Radomski, Erich R. Reinhardt, Hermann Requardt, Uriel J. Sharef, Peter Y. Solmssen, Klaus Wucherer; Registered offices: Berlin and Munich; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684; WEEE-Reg.-No. DE 23691322

Von: Alastair Richards - TEL [mailto:Alastair.Richards@tie.ltd.uk]
Gesendet: Freitag, 7. Dezember 2007 18:52
An: Brauns, Bernhard
Betreff: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section
Wichtigkeit: Hoch

Bernhard,

following our meeting, I have updated the Maintenance section and attached it for your informal review. We are finalising the reissue of the consolidated ER's early next week and any feedback would be helpful.

Regards,

20/12/2007

CEC02085660_0059

CEC02085660_0060

Alastair

From: Glen Aitken
Sent: Fri 12/7/2007 4:51 PM
To: Alastair Richards - TEL
Subject: Employer's Requirements - 3.03 (draft) - Maintenance Section

Alastair,

As requested, Please find attached the prospective (draft) 3.03 version of the Maintenance Section of the Employer's Requirements.

Have a great weekend.

With kind regards,

Glen

Glen Aitken
Engineering Project Administrator

tie limited
Citypoint
65 Haymarket Terrace
Edinburgh EH12 5HD

tel. +44 (0)

email. Glen.Aitken@tie.ltd.uk
web. www.tie.ltd.uk

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CEC02085660_0062

Geoff Gilbert

From: Alastair Richards - TEL
Sent: 20 December 2007 18:23
To: Geoff Gilbert
Subject: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section

As requested

From: Alastair Richards - TEL
Sent: Wed 12/12/2007 7:52 PM
To: Brauns, Bernhard
Cc: scott.mcfadzen@bilfinger.de; Brueckmann, Roland
Subject: RE: Employer's Requirements - 3.03 (draft) - Maintenance Section

Berhard,

thanks for this, I can see the comments, they seem to be mainly clustered in Table 92 Fault Corrective Requirements. Probably best if we discuss these specifically on the telephone tomorrow one by one to find a resolution. How would 10:30 your time suit you?

Regards,

Alastair

From: Brauns, Bernhard [mailto:bernhard.brauns@siemens.com]
Sent: Wed 12/12/2007 7:23 PM
To: Alastair Richards - TEL
Cc: scott.mcfadzen@bilfinger.de; Brueckmann, Roland
Subject: AW: Employer's Requirements - 3.03 (draft) - Maintenance Section

Hello Alastair,

please find attached the ER with my comments (directly in the pdf document).

In case you can't see the comments, please give me a ring - I'd then have to convert the pdf into a Word document.

With best regards,
Bernhard Brauns

Siemens AG
Transportation Systems
Integrated Services
TS IS S12
Sieboldstr. 16
91052 Erlangen, Germany
Tel.: +49 [REDACTED]
Fax: +49 [REDACTED]
Mobile: + [REDACTED]
<mailto:bernhard.brauns@siemens.com>

Siemens Aktiengesellschaft: Chairman of the Supervisory Board: Gerhard Cromme; Managing Board: Peter Loescher, Chairman, President and Chief Executive Officer; Heinrich Hlesinger, Joe Kaeser, Rudi Lamprecht, Eduardo Montes, Juergen Radomski, Erich R. Reinhardt, Hermann Requardt, Uriel J. Sharef, Peter Y. Solmssen, Klaus Wucherer; Registered offices: Berlin and Munich; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684; WEEE-Reg.-No. DE 23691322

CEC02085660_0064

Von: Alastair Richards - TEL [mailto:Alastair.Richards@tie.ltd.uk]
Gesendet: Freitag, 7. Dezember 2007 18:52
An: Brauns, Bernhard
Betreff: FW: Employer's Requirements - 3.03 (draft) - Maintenance Section
Wichtigkeit: Hoch

Bernhard,

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Regards,

Alastair

From: Glen Aitken
Sent: Fri 12/7/2007 4:51 PM
To: Alastair Richards - TEL
Subject: Employer's Requirements - 3.03 (draft) - Maintenance Section

Alastair,

As requested, Please find attached the prospective (draft) 3.03 version of the Maintenance Section of the Employer's Requirements.

Have a great weekend.

With kind regards,

Glen

Glen Aitken
Engineering Project Administrator

tie limited
Citypoint
65 Haymarket Terrace
Edinburgh EH12 5HD

tel. +

email. Glen.Aitken@tie.ltd.uk
web. www.tie.ltd.uk

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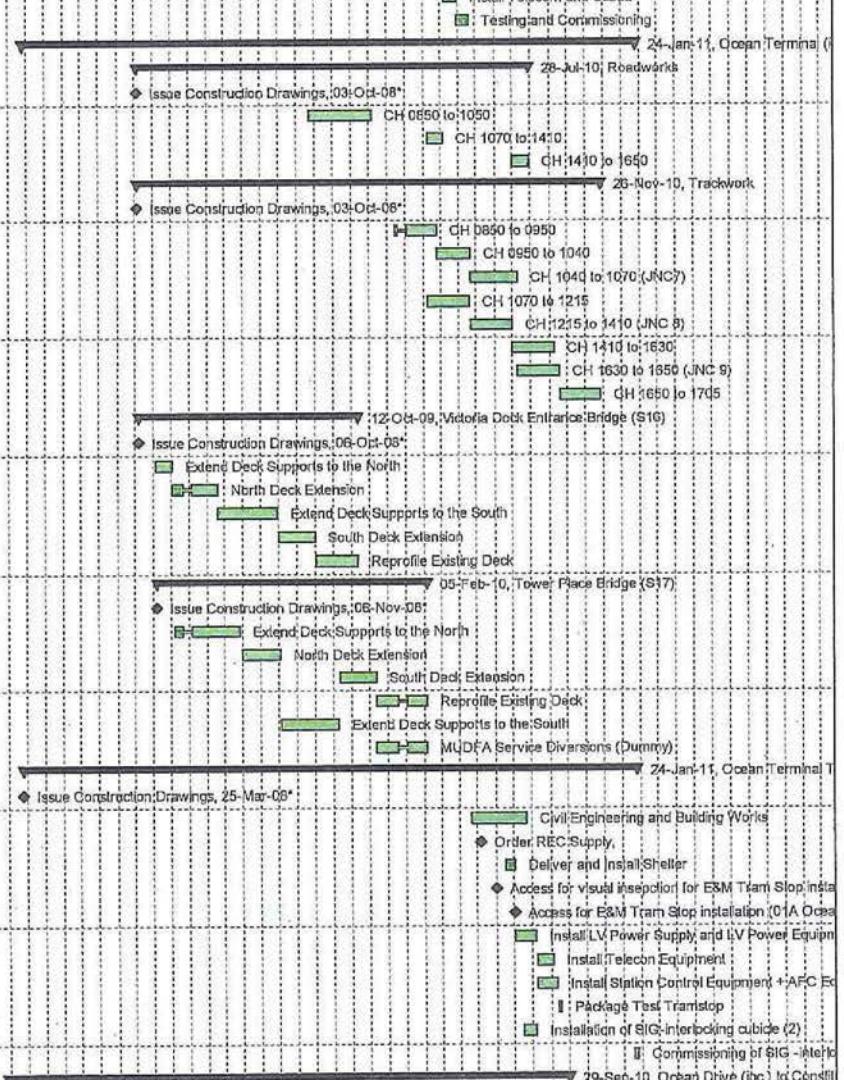
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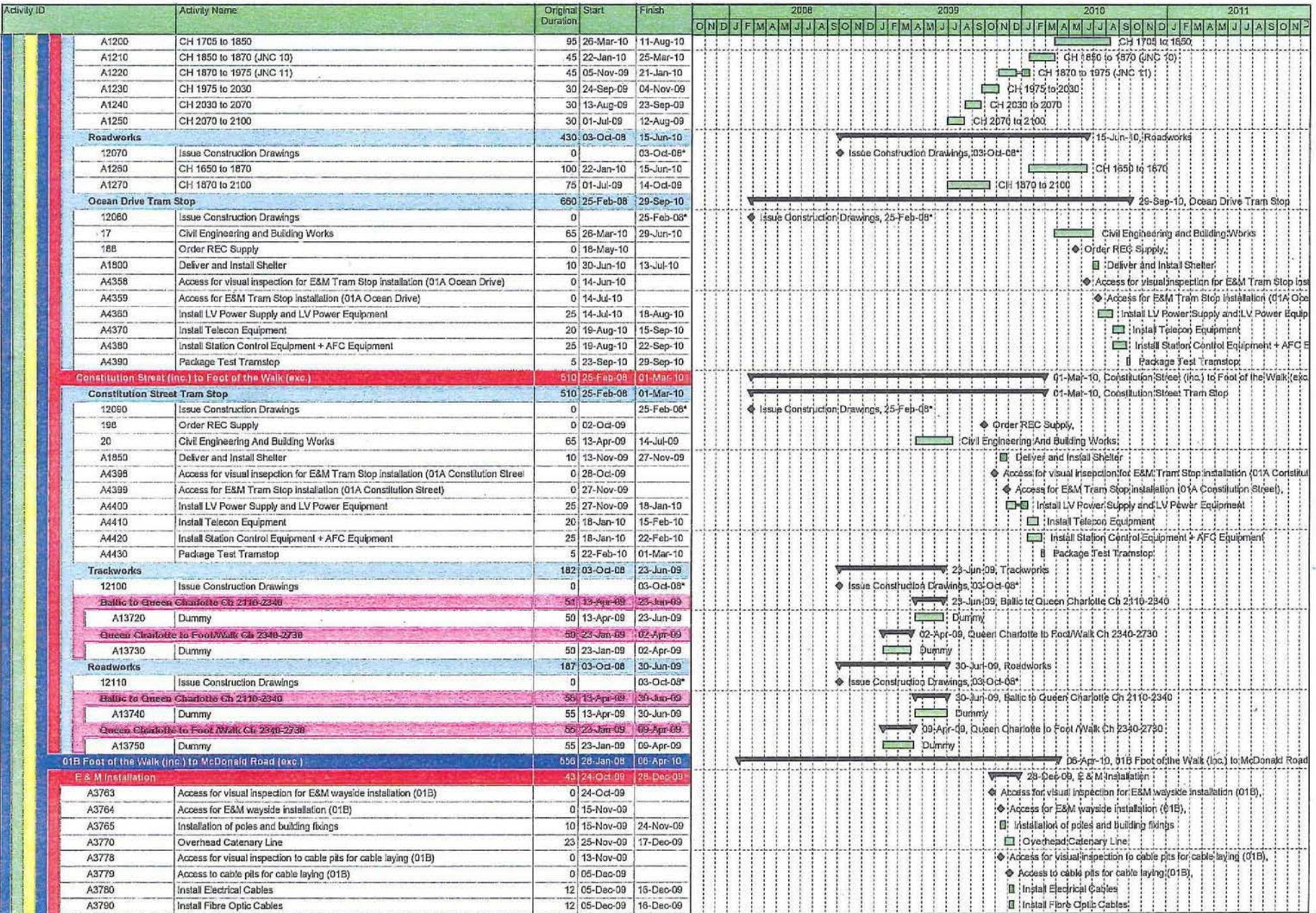
APPENDIX B3

CEC02085660_0070

Edinburgh Tram Tender (updated 11 December 2007)			EDINBURGH TRAM									Bilfinger Berger Siemens Joint Venture								
Activity ID	Activity Name	Original Duration	Start	Finish	2008			2009			2010			2011						
		O N D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N	D J F M A M J J A S O N			
	Edinburgh Tram Tender (updated 11 December 2007)	1077	28-Sep-07	19-Dec-11																
	Advanced Works Contract	104	01-Oct-07	28-Feb-08																
161	Award Advanced Works/Mobilisation Contract	0	01-Oct-07*																	
161.1	Advanced Works Design and Planning	150	01-Oct-07*	28-Feb-08																
161.2	Advanced Works Procurement of Long Lead Items	150	01-Oct-07*	28-Feb-08																
		932	01-Feb-08	19-Dec-11																
	Key Dates																			
170	AWARD CONTRACT	0	01-Feb-09*																	
270	Mobilisation	20	01-Feb-08	28-Feb-08																
280	Commence Phase 1a	0	01-Feb-08																	
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0		30-Aug-10																
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0		27-Feb-11																
311	Construction Completion Phase 1a Haymarket to Newhaven	0		09-Feb-11																
312.8	Commencement of Revenue Service Phase 1a Haymarket to Newhaven	0		08-Aug-11																
320	Commence Phase 1b	0	06-Jul-09*																	
330	Construction Completion Phase 1b	0		22-Jun-11																
350	Commencement of Revenue Service Phase 1b	0		19-Dec-11																
	Commissioning Phase 1a Edinburgh Airport to Haymarket	167	01-Jul-10	27-Feb-11																
295	Latest date for first tram on site available for commissioning	0		01-Jul-10																
300	System Integration Test; Phase 1a Edinburgh Airport to Haymarket	30	31-Aug-10	29-Sep-10																
301	Test Running and Driver Familiarisation; Phase 1a Edinburgh Airport to Haymarket	30	30-Sep-10	29-Oct-10																
302	T1 Post Commissioning Test completed; Phase 1a Edinburgh Airport to Haymarket	0		29-Oct-10																
302.1	Test Running and Driver familiarisation performance ramp up 1a Airport to Haymark	30	30-Oct-10	28-Nov-10																
302.2	T2 Performance Test completed; Phase 1a Edinburgh Airport to Haymarket	0		28-Nov-10																
302.3	Approval of HMR; Phase 1a Edinburgh Airport to Haymarket	0		28-Nov-10																
302.4	Shadow running; Phase 1a Edinburgh Airport to Haymarket	90	29-Nov-10	27-Feb-11																
302.5	T3 Pre-Operations Test Completed; Phase 1a Edinburgh Airport to Haymarket	0		27-Feb-11																
	Commissioning Phase 1a Haymarket to Newhaven	128	10-Feb-11	08-Aug-11																
312	System Integration Test; Phase 1a Haymarket to Newhaven	30	10-Feb-11	11-Mar-11																
312.1	Test Running and Driver Familiarisation; Phase 1a Haymarket to Newhaven	30	12-Mar-11	10-Apr-11																
312.2	T1 Post Commissioning Test completed; Phase 1a Haymarket to Newhaven	0		10-Apr-11																
312.3	Test Running and Driver familiarisation performance ramp up 1a Haymarket to Ne	30	11-Apr-11	10-May-11																
312.4	T2 Performance Test completed; Phase 1a Haymarket to Newhaven	0		10-May-11																
312.5	Approval of HMR; Phase 1a Haymarket to Newhaven	0		10-May-11																
312.6	Shadow running; Phase 1a Haymarket to Newhaven	90	11-May-11	08-Aug-11																
312.7	T3 Pre-Operations Test Completed; Phase 1a Haymarket to Newhaven	0		08-Aug-11																
	Commissioning Phase 1b	128	23-Jun-11	19-Dec-11																
340	System Integration Test; Phase 1b	30	23-Jun-11	22-Jul-11																
340.1	Test Running and Driver Familiarisation; Phase 1b	30	23-Jul-11	21-Aug-11																
340.2	T1 Post Commissioning Test completed; Phase 1b	0		21-Aug-11																
340.3	Test Running and Driver familiarisation performance ramp up	30	22-Aug-11	20-Sep-11																
340.4	T2 Performance Test completed; Phase 1b	0		20-Sep-11																
340.5	Approval of HMR; Phase 1b	0		20-Sep-11																
340.6	Shadow running; Phase 1b	90	21-Sep-11	19-Dec-11																
340.7	T3 Pre-Operations Test Completed; Phase 1b	0		19-Dec-11																
	M & E Design	148	01-Feb-08	29-Aug-08																
740	M & E Requirement Definition Phase Complete	0		01-Feb-08*																
750	M & E Preliminary Design Phase	60	01-Feb-08	01-Apr-08																
760	M & E Review of Preliminary Design	30	01-Apr-08	01-May-08																
770	M & E Detail Design Phase	90	01-May-08	30-Jul-08																
780	M & E Review of Detailed Design	30	30-Jul-08	29-Aug-08																

Activity ID	Activity Name	Original Duration	Start	Finish	2008			2009			2010			2011														
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
6	Civil Engineering and Building Works	65	19-Oct-08	01-Feb-10																								
A5480	Power Infeed from Public Net available inc HV cable	0	02-Feb-10																									
A5483	Access for visual inspection for E&M Substation installation (01A Leith Sands)	0	18-Dec-09																									
A5484	Access for E&M Substation installation (01A Leith Sands)	0	02-Feb-10																									
A5490	Install LV Power Supply and LV Power Equipment	15	02-Feb-10	22-Feb-10																								
A5500	Installation of TPS Equipment	30	16-Feb-10	29-Mar-10																								
A5510	Install Telecom and Scada	15	09-Mar-10	29-Mar-10																								
A5520	Testing and Commissioning	14	30-Mar-10	19-Apr-10																								
Ocean Terminal (inc) to Ocean Drive (exc.)					719	25-Mar-08	24-Jan-11																					
Roadworks					460	03-Oct-08	28-Jul-10																					
12010	Issue Construction Drawings	0	03-Oct-08*																									
A1170	CH 0850 to 1050	75	24-Jul-09	06-Nov-09																								
A1180	CH 1070 to 1410	20	06-Feb-10	05-Mar-10																								
A1190	CH 1410 to 1650	20	01-Jul-10	28-Jul-10																								
Trackwork					544	03-Oct-08	26-Nov-10																					
12020	Issue Construction Drawings	0	03-Oct-08*																									
A1080	CH 0850 to 0950	40	15-Dec-09	22-Feb-10																								
A1070	CH 0950 to 1040	40	23-Feb-10	20-Apr-10																								
A1080	CH 1040 to 1070 (JNC7)	55	21-Apr-10	08-Jul-10																								
A1120	CH 1070 to 1215	50	08-Feb-10	19-Apr-10																								
A1130	CH 1215 to 1410 (JNC 8)	50	20-Apr-10	30-Jun-10																								
A1140	CH 1410 to 1630	50	01-Jul-10	09-Sep-10																								
A1150	CH 1630 to 1850 (JNC 9)	50	09-Jul-10	17-Sep-10																								
A1160	CH 1650 to 1705	50	20-Sep-10	26-Nov-10																								
Victoria Dock Entrance Bridge (S16)					258	06-Oct-08	12-Oct-09																					
12030	Issue Construction Drawings	0	06-Oct-08*																									
131	Extend Deck Supports to the North	20	04-Nov-08	02-Dec-08																								
171	North Deck Extension	45	03-Dec-08	17-Feb-09																								
181	Extend Deck Supports to the South	70	18-Feb-09	29-May-09																								
A1780	South Deck Extension	45	01-Jun-09	31-Jul-09																								
A1790	Reprofile Existing Deck	50	04-Aug-09	12-Oct-09																								
Tower Place Bridge (S17)					315	06-Nov-08	05-Feb-10																					
12040	Issue Construction Drawings	0	05-Nov-08*																									
A101	Extend Deck Supports to the North	70	08-Dec-08	27-Mar-09																								
A11	North Deck Extension	45	30-Mar-09	03-Jun-09																								
A1760	South Deck Extension	45	11-Sep-09	12-Nov-09																								
A1770	Reprofile Existing Deck	50	13-Nov-09	05-Feb-10																								
A31	Extend Deck Supports to the South	70	04-Jun-09	10-Sep-09																								
A32	MUDFA Service Diversions (Dummy)	50	13-Nov-09	05-Feb-10																								
Ocean Terminal Tram Stop					719	25-Mar-08	24-Jan-11																					
12050	Issue Construction Drawings	0	25-Mar-08*																									
14	Civil Engineering and Building Works	65	21-Apr-10	22-Jul-10																								
178	Order REC Supply	0	05-May-10																									
A1720	Deliver and Install Shelter	10	18-Jun-10	01-Jul-10																								
A4318	Access for visual inspection for E&M Tram Stop installation (01A Ocean Terminal)	0	02-Jun-10																									
A4319	Access for E&M Tram Stop installation (01A Ocean Terminal)	0	02-Jul-10																									
A4320	Install LV Power Supply and LV Power Equipment	25	02-Jul-10	06-Aug-10																								
A4330	Install Telecom Equipment	20	09-Aug-10	03-Sep-10																								
A4340	Install Station Control Equipment + AFC Equipment	25	09-Aug-10	10-Sep-10																								
A4350	Package Test Tramstop	5	13-Sep-10	17-Sep-10																								
A6090	Installation of SIG-Interlocking cubicle (2)	15	16-Jul-10	06-Aug-10																								
A6100	Commissioning of SIG -Interlocking cubicle	5	18-Jan-11	24-Jan-11																								
Ocean Drive (inc) to Constitution Street (exc.)					680	25-Feb-08	29-Sep-10																					
Trackworks					470	03-Oct-08	11-Aug-10																					
12060	Issue Construction Drawings	0	03-Oct-08*																									





Activity ID	Activity Name	Original Duration	Start	Finish	2008	2009	2010	2011			
					O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D	2008	2009	2010	2011		
A3800	Install Signalling Wayside Equipment	12	17-Dec-08	28-Dec-08							
Foot of the walk (inc.) to Balfour Street (exc.)		444	25-Feb-09	23-Nov-09							
Foot of the Walk Tram Stop		444	25-Feb-09	23-Nov-09							
12120	Issue Construction Drawings	0		25-Feb-09*							
528	Order REC Supply	0	10-Jul-09								
Construction		330	06-Aug-08	23-Nov-09							
50	Civil Engineering And Building Works	65	06-Aug-08	04-Nov-08							
A2560	Deliver and Install Shelter	10	24-Aug-09	07-Sep-09							
A4438	Access for visual inspection for E&M Tram Stop installation (01B Foot of the Walk)	0	05-Aug-09								
A4439	Access for E&M Tram Stop installation (01B Foot of the Walk)	0	07-Sep-09								
A4440	Install LV Power Supply and LV Power Equipment	25	07-Sep-09	12-Oct-09							
A4450	Install Telecom Equipment	20	12-Oct-09	09-Nov-09							
A4450	Install Station Control Equipment + AFC Equipment	25	12-Oct-09	16-Nov-09							
A4470	Package Test Tramstop	5	16-Nov-09	23-Nov-09							
Leith Walk Substation		141	15-Jul-08	03-Feb-09							
146	Order REC supply from Scottish Power	0	15-Jul-08								
176	Civil Engineering and Building Works	65	06-Aug-08	04-Nov-08							
A2638	Access for visual inspection for E&M Substation installation (01B Leith Walk)	0	05-Oct-08								
A2639	Access for E&M Substation installation (01B Leith Walk)	0	05-Nov-08								
A5530	Power Infeed from Public Net available inc HV cable,	0	05-Nov-08								
A5540	Install LV Power Supply and LV Power Equipment	15	05-Nov-08	25-Nov-08							
A5550	Installation of TPS Equipment	30	19-Nov-08	14-Jan-09							
A5560	Install Telecom and Scada	15	11-Dec-08	14-Jan-09							
A5570	Testing and Commissioning	14	15-Jan-09	03-Feb-09							
Trackwork		330	28-Mar-08	16-Jul-09							
12130	Issue Construction Drawings	0		28-Mar-09*							
Foot of the Walk Ch 0-100		68	12-Dec-08	19-Mar-09							
Phase 1		28	12-Dec-08	22-Jan-09							
A12450	Establish Traffic Management & Temp. Fencing	2	12-Dec-08	15-Dec-08							
A12460	Excavate box	2	16-Dec-08	17-Dec-08							
A12470	Excavate, lay and concrete ducts	3	18-Dec-08	05-Jan-09							
A12480	Excavate and construct OLE bases	3	18-Dec-08	05-Jan-09							
A12490	Place Lower concrete and cure	3	06-Jan-09	08-Jan-09							
A12500	Set Track (50m)	1	09-Jan-09	09-Jan-09							
A12510	Place upper concrete and cure	5	12-Jan-09	16-Jan-09							
A12520	Street Surface finishes	3	19-Jan-09	21-Jan-09							
A13510	Remove fencing and Traffic Management	1	22-Jan-09	22-Jan-09							
Phase 2		20	23-Jan-09	19-Feb-09							
A12530	Establish Traffic Management & Temp. Fencing	2	23-Jan-09	26-Jan-09							
A12540	Excavate box	2	27-Jan-09	28-Jan-09							
A12550	Excavate, lay and concrete ducts	3	29-Jan-09	02-Feb-09							
A12560	Excavate and construct OLE bases	3	29-Jan-09	02-Feb-09							
A12570	Place Lower concrete and cure	3	03-Feb-09	05-Feb-09							
A12580	Set Track (50m)	1	06-Feb-09	06-Feb-09							
A12590	Place upper concrete and cure	5	09-Feb-09	13-Feb-09							
A12600	Street Surface finishes	3	16-Feb-09	18-Feb-09							
A13500	Remove fencing and Traffic Management	1	19-Feb-09	19-Feb-09							
Phase 3		20	20-Feb-09	19-Mar-09							
A12610	Establish Traffic Management & Temp. Fencing	2	20-Feb-09	23-Feb-09							
A12620	Excavate box	2	24-Feb-09	25-Feb-09							
A12630	Excavate, lay and concrete ducts	3	26-Feb-09	02-Mar-09							
A12640	Excavate and construct OLE bases	3	26-Feb-09	02-Mar-09							
A12850	Place Lower concrete and cure	3	03-Mar-09	05-Mar-09							
A12660	Set Track (50m)	1	06-Mar-09	06-Mar-09							
A12670	Place upper concrete and cure	5	09-Mar-09	13-Mar-09							

Activity ID	Activity Name	Original Duration	Start	Finish	2008					2009					2010					2011								
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
	McDonald / Brunswick Road Ch 850-1250	41	14-Sep-09	09-Nov-09																								
	1st half				21	14-Sep-09	12-Oct-09																					
A13010	Establish Traffic Management & Temp. Fencing	2	14-Sep-09	15-Sep-09																								
A13020	Excavate box	2	16-Sep-09	17-Sep-09																								
A13030	Excavate, lay and concrete ducts	3	18-Sep-09	22-Sep-09																								
A13040	Excavate and construct OLE bases	3	18-Sep-09	22-Sep-09																								
A13050	Place Lower concrete and cure	3	23-Sep-09	25-Sep-09																								
A13060	Set Track (300m)	3	28-Sep-09	30-Sep-09																								
A13070	Place upper concrete and cure	5	01-Oct-09	07-Oct-09																								
A13080	Street Surface finishes	3	09-Oct-09	12-Oct-09																								
	2nd half	20	13-Oct-09	09-Nov-09																								
A13410	Excavate box	2	13-Oct-09	14-Oct-09																								
A13420	Excavate, lay and concrete ducts	3	15-Oct-09	19-Oct-09																								
A13430	Excavate and construct OLE bases	3	15-Oct-09	19-Oct-09																								
A13440	Place Lower concrete and cure	3	20-Oct-09	22-Oct-09																								
A13450	Set Track	3	23-Oct-09	27-Oct-09																								
A13460	Place upper concrete and cure	5	28-Oct-09	03-Nov-09																								
A13470	Street Surface finishes	3	04-Nov-09	06-Nov-09																								
A13480	Remove fencing and Traffic Management	1	09-Nov-09	09-Nov-09																								
	Leith Walk Railway Bridge (S18)	0	16-Jul-09	16-Jul-09																								
26	Existing Structure	0	16-Jul-09	16-Jul-09																								
	Roadworks	287	28-Mar-08	14-May-09																								
12160	Issue Construction Drawings	0	28-Mar-08*	28-Mar-08*																								
	Balfour Street Ch 850-855	39	12-Dec-08	08-Feb-09																								
A12130	Establish Traffic Management & Temp. Fencing	2	12-Dec-08	15-Dec-08																								
A12140	Excavate for new channel and kerb line / remove existing kerbs	10	16-Dec-08	12-Jan-09																								
A12150	Construct Kerb lines	13	19-Dec-08	20-Jan-09																								
A12160	Reset Gullies	13	09-Jan-09	27-Jan-09																								
A12170	Surface new channel	6	28-Jan-09	04-Feb-09																								
A12180	Pavement Works	12	21-Jan-09	05-Feb-09																								
A12190	Street Lighting / Traffic Signals / Road Signs	7	21-Jan-09	29-Jan-09																								
A12200	Remove fencing and Traffic Management	1	05-Feb-09	06-Feb-09																								
	Parig / Iona Street Ch 850-850	31	09-Feb-09	23-Mar-09																								
A12210	Establish Traffic Management & Temp. Fencing	2	09-Feb-09	10-Feb-09																								
A12220	Excavate for new channel and kerb line / remove existing kerbs	10	11-Feb-09	24-Feb-09																								
A12230	Construct Kerb lines	13	15-Feb-09	04-Mar-09																								
A12240	Reset Gullies	13	23-Feb-09	11-Mar-09																								
A12250	Surface new channel	6	12-Mar-09	19-Mar-09																								
A12260	Pavement Works	12	05-Mar-09	20-Mar-09																								
A12270	Street Lighting / Traffic Signals / Road Signs	7	05-Mar-09	13-Mar-09																								
A12280	Remove fencing and Traffic Management	1	23-Mar-09	23-Mar-09																								
	McDonald / Brunswick Road Ch 950-1250	38	24-Mar-09	14-May-09																								
A12290	Establish Traffic Management & Temp. Fencing	2	24-Mar-09	25-Mar-09																								
A12300	Excavate for new channel and kerb line / remove existing kerbs	12	26-Mar-09	13-Apr-09																								
A12310	Construct Kerb lines	15	31-Mar-09	21-Apr-09																								
A12320	Reset Gullies	15	07-Apr-09	28-Apr-09																								
A12330	Surface new channel	9	29-Apr-09	12-May-09																								
A12340	Pavement Works	15	22-Apr-09	13-May-09																								
A12350	Street Lighting / Traffic Signals / Road Signs	7	22-Apr-09	30-Apr-09																								
A12360	Remove fencing and Traffic Management	1	14-May-09	14-May-09																								
	Balfour Street Tram Stop	556	28-Jan-09	05-Apr-10																								
12170	Issue Construction Drawings	0	28-Jan-09*	28-Jan-09*																								
538	Order REC Supply	0	06-Nov-09																									
	Construction	223	19-May-09	05-Apr-10																								
590	Civil Engineering And Building Works	65	19-May-09	19-Aug-09																								

09-Nov-09; McDonald / Brunswick Road Ch 950-1250

12-Oct-09; 1st half

Establish Traffic Management & Temp. Fencing

Excavate box

Excavate, lay and concrete ducts

Excavate and construct OLE bases

Place Lower concrete and cure

Set Track (300m)

Place upper concrete and cure

Street Surface finishes

Remove fencing and Traffic Management

16-Jul-09; Leith Walk Railway Bridge (S18)

Existing Structure, 16-Jul-09

14-May-09; Roadworks

Issue Construction Drawings, 28-Mar-08*

06-Feb-09; Balfour Street Ch 850-850

Establish Traffic Management & Temp. Fencing

Excavate for new channel and kerb line / remove existing kerbs

Construct Kerb lines

Reset Gullies

Surface new channel

Pavement Works

Street Lighting / Traffic Signals / Road Signs

Remove fencing and Traffic Management

14-May-09; McDonald / Brunswick Road Ch 950-1250

Establish Traffic Management & Temp. Fencing

Excavate for new channel and kerb line / remove existing kerbs

Construct Kerb lines

Reset Gullies

Surface new channel

Pavement Works

Street Lighting / Traffic Signals / Road Signs

Remove fencing and Traffic Management

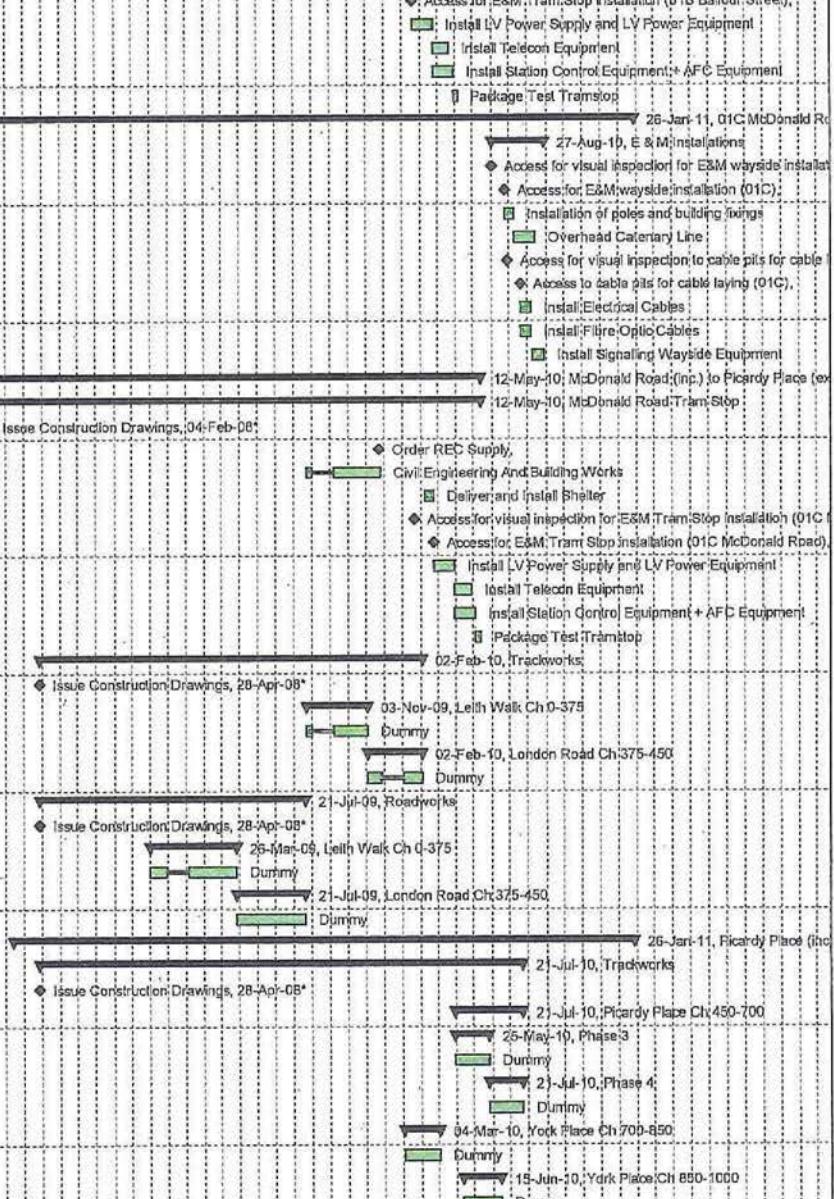
Issue Construction Drawings, 28-Jan-09*

Order REC Supply,

14-May-10; Balfour Street Tram Stop

Civil Engineering And Building Works

Activity ID	Activity Name	Original Duration	Start	Finish	2008			2009			2010			2011															
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O
	A2600	Deliver and Install Shelter	10	04-Jan-10	18-Jan-10																								
	A4478	Access for visual inspection for E&M Tram Stop installation (01B Balfour Street)	0	17-Dec-09																									
	A4479	Access for E&M Tram Stop installation (01B Balfour Street)	0	18-Jan-10																									
	A4480	Install LV Power Supply and LV Power Equipment	25	18-Jan-10	22-Feb-10																								
	A4490	Install Telecom Equipment	20	22-Feb-10	22-Mar-10																								
	A4500	Install Station Control Equipment + AFC Equipment	25	22-Feb-10	29-Mar-10																								
	A4510	Package Test Tramstop	5	29-Mar-10	08-Apr-10																								
01C McDonald Road (inc.) to Princess Street West (exc.)			757	04-Feb-08	28-Jan-11																								
E & M Installations			82	02-Jun-10	27-Aug-10																								
	A3843	Access for visual inspection for E&M wayside installation (01C)	0	02-Jun-10																									
	A3844	Access for E&M wayside installation (01C)	0	24-Jun-10																									
	A3845	Installation of poles and building fixings	15	24-Jun-10	08-Jul-10																								
	A3850	Overhead Catenary Line	36	09-Jul-10	13-Aug-10																								
	A3858	Access for visual inspection to cable pits for cable laying (01C)	0	27-Jun-10																									
	A3859	Access to cable pits for cable laying (01C)	0	19-Jul-10																									
	A3860	Install Electrical Cables	20	19-Jul-10	07-Aug-10																								
	A3870	Install Fibre Optic Cables	20	19-Jul-10	07-Aug-10																								
	A3880	Install Signalling Wayside Equipment	20	08-Aug-10	27-Aug-10																								
McDonald Road (inc.) to Picardy Place (exc.)			577	04-Feb-08	12-May-10																								
McDonald Road Tram Stop			577	04-Feb-08	12-May-10																								
	12180	Issue Construction Drawings	0		04-Feb-08*																								
	548	Order REC Supply	0		23-Nov-09																								
	600	Civil Engineering And Building Works	65	22-Jul-09	24-Nov-09																								
	A2660	Deliver and Install Shelter	10	08-Feb-10	22-Feb-10																								
	A2668	Access for visual inspection for E&M Tram Stop installation (01C McDonald Road)	0	21-Jan-10																									
	A2669	Access for E&M Tram Stop installation (01C McDonald Road)	0	22-Feb-10																									
	A2670	Install LV Power Supply and LV Power Equipment	25	22-Feb-10	29-Mar-10																								
	A2673	Install Telecom Equipment	20	29-Mar-10	27-Apr-10																								
	A2675	Install Station Control Equipment + AFC Equipment	25	29-Mar-10	05-May-10																								
	A2680	Package Test Tramstop	5	05-May-10	12-May-10																								
Trackworks			447	28-Apr-08	02-Feb-10																								
	12190	Issue Construction Drawings	0		28-Apr-08*																								
	Leith Walk Ch 0-375		74	22-Jul-09	03-Nov-09																								
	A13550	Dummy	50	22-Jul-09	03-Nov-09																								
	London Road Ch 375-450		61	04-Nov-09	02-Feb-10																								
	A13560	Dummy	40	04-Nov-09	02-Feb-10																								
Roadworks			312	28-Apr-08	21-Jul-09																								
	12200	Issue Construction Drawings	0		28-Apr-08*																								
	Leith Walk Ch 0-375		161	31-Oct-08	26-Mar-09																								
	A13540	Dummy	80	31-Oct-08	26-Mar-09																								
	London Road Ch 375-450		81	27-Mar-09	21-Jul-09																								
	A13570	Dummy	80	27-Mar-09	21-Jul-09																								
Picardy Place (inc.) to St. Andrews Square (exc.)			728	14-Mar-08	26-Jan-11																								
Trackworks			566	28-Apr-08	21-Jul-10																								
	12210	Issue Construction Drawings	0		28-Apr-08*																								
	Picardy Place Ch 450-700		81	29-Mar-10	21-Jul-10																								
	Phase 3		42	29-Mar-10	25-May-10																								
	A13640	Dummy	40	29-Mar-10	25-May-10																								
	Phase 4		39	26-May-10	21-Jul-10																								
	A13650	Dummy	40	26-May-10	21-Jul-10																								
	York Place Ch 700-850		44	04-Jan-10	04-Mar-10																								
	A13660	Dummy	44	04-Jan-10	04-Mar-10																								
	York Place Ch 850-1000		45	13-Apr-10	15-Jun-10																								
	A13670	Dummy	44	13-Apr-10	15-Jun-10																								
Picardy Place Tram Stop			623	14-Mar-08	26-Aug-10																								



Activity ID	Activity Name	Original Duration	Start	Finish	2008	2009	2010	2011
			O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N					
12220	Issue Construction Drawings	0	14-Mar-08*		◆ Issue Construction Drawings; 14-Mar-08*			
558	Order REC Supply	0	13-Apr-10					◆ Order REC Supply,
610	Civil Engineering And Building Works	65	29-Mar-10	30-Jun-10				Civil Engineering And Building Works
A2720	Deliver and Install Shelter	10	26-May-10	09-Jun-10				■ Deliver and Instl Shelter
A4518	Access for visual inspection for E&M Tram Stop installation (01C Picardy Place)	0	11-May-10					◆ Access for visual inspection for E&M Tram Stop install
A4519	Access for E&M Tram Stop installation (01C Picardy Place)	0	10-Jun-10					◆ Access for E&M Tram Stop installation (01C Picardy
A4520	Install LV Power Supply and LV Power Equipment	25	10-Jun-10	14-Jul-10				■ Install LV Power Supply and LV Power Equipment
A4530	Install Telecom Equipment	20	15-Jul-10	12-Aug-10				■ Install Telecom Equipment
A4540	Install Station Control Equipment + AFC Equipment	25	15-Jul-10	19-Aug-10				■ Install Station Control Equipment + AFC Equi
A4550	Package Test Tramstop	5	20-Aug-10	26-Aug-10				■ Package Test Transstop
Roadworks		697	28-Apr-08	26-Jan-11				
12230	Issue Construction Drawings	0		28-Apr-08*				
Picardy Place Ch 450-700		272	04-Jul-10	26-Jan-11				
Phase 1			20	04-Jan-10	29-Jan-10			
A13580	Dummy		20	04-Jan-10	29-Jan-10			
Phase 2			40	01-Feb-10	25-Mar-10			
A13590	Dummy		40	01-Feb-10	25-Mar-10			
Phase 3			42	29-Mar-10	25-May-10			
A13600	Dummy		40	29-Mar-10	25-May-10			
Phase 4			39	26-May-10	21-Jul-10			
A13610	Dummy		40	26-May-10	21-Jul-10			
Phase 5			64	22-Jul-10	20-Oct-10			
A13620	Dummy		40	22-Jul-10	20-Oct-10			
Phase 6			67	21-Oct-10	26-Jan-11			
A13630	Dummy		40	21-Oct-10	26-Jan-11			
York Place Ch 700-850		73	04-Jan-10	12-Apr-10				
Phase 1			50	04-Jan-10	12-Mar-10			
A13680	Dummy		50	04-Jan-10	12-Mar-10			
Phase 2			21	15-Mar-10	12-Apr-10			
A13690	Dummy		20	15-Mar-10	12-Apr-10			
York Place Ch 850-1000		76	13-Apr-10	21-Jul-10				
Phase 1			51	13-Apr-10	23-Jun-10			
A13700	Dummy		50	13-Apr-10	23-Jun-10			
Phase 2			19	24-Jun-10	21-Jul-10			
A13710	Dummy		20	24-Jun-10	21-Jul-10			
Cathedral SubStation		148	09-Feb-10	03-Sep-10				
346	Order REC supply from Scottish Power	0	08-Feb-10					◆ Order REC supply from Scottish Power,
356	Civil Engineering and Building Works	65	01-Mar-10	02-Jun-10				Civil Engineering and Building Works
A2838	Access for visual inspection for E&M substation installation (01C Cathedral)	0	04-May-10					◆ Access for visual inspection for E&M substation installat
A2839	Access for E&M substation installation (01C Cathedral)	0	03-Jun-10					◆ Access for E&M substation installation (01C Cathedr
A5580	Power Infeed from Public Net available inc HV cable	0	03-Jun-10					◆ Power Infeed from Public Net available inc HV cable
A5590	Install LV Power Supply and LV Power Equipment	15	03-Jun-10	23-Jun-10				■ Install LV Power Supply and LV Power Equipment
A5600	Installation of TPS Equipment	30	17-Jun-10	28-Jul-10				■ Installation of TPS Equipment
A5610	Install Telecom and Scada	15	08-Jul-10	28-Jul-10				■ Install Telecom and Scada
A5620	Testing and Commissioning	14	29-Jul-10	18-Aug-10				■ Testing and Commissioning
A6120	Installation of SIG-Interlocking cubicle	10	17-Jun-10	30-Jun-10				■ Installation of SIG-Interlocking cubicle
A6130	Commissioning of SIG -Interlocking cubicle	5	30-Aug-10	03-Sep-10				■ Commissioning of SIG -Interlocking cubicle
St Andrews Square (inc.) to Princes Street West (exc.)		655	06-Feb-08	03-Sep-10				
Trackworks		402	28-Apr-08	27-Nov-09				
12240	Issue Construction Drawings	0		28-Apr-08*				
Waverley Bridge Ch 1310-1460		19	06-Oct-09	20-Oct-09				
Phase 2			19	06-Oct-09	30-Oct-09			
A11650	Establish Traffic Management & Temp. Fencing	2	06-Oct-09	07-Oct-09				■ Establish Traffic Management & Temp. Fencing
A11660	Excavate box	2	08-Oct-09	09-Oct-09				■ Excavate box
A11670	Excavate, lay and concrete ducts	3	12-Oct-09	14-Oct-09				■ Excavate, lay and concrete ducts
St Andrews Square (inc.) to Princes Street West (exc.)		655	06-Feb-08	03-Sep-10				
Trackworks		402	28-Apr-08	27-Nov-09				
12240	Issue Construction Drawings	0		28-Apr-08*				
Waverley Bridge Ch 1310-1460		19	06-Oct-09	20-Oct-09				
Phase 2			19	06-Oct-09	30-Oct-09			
A11650	Establish Traffic Management & Temp. Fencing	2	06-Oct-09	07-Oct-09				■ Establish Traffic Management & Temp. Fencing
A11660	Excavate box	2	08-Oct-09	09-Oct-09				■ Excavate box
A11670	Excavate, lay and concrete ducts	3	12-Oct-09	14-Oct-09				■ Excavate, lay and concrete ducts

Activity ID	Activity Name	Original Duration	Start	Finish	2008	2009	2010	2011
			O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N					
	A11680	Excavate and construct OLE bases	3	12-Oct-09	14-Oct-09			I Excavate and construct OLE bases
	A11690	Place Lower concrete and cure	3	15-Oct-09	19-Oct-09			II Place Lower concrete and cure
	A11700	Set Track (75m)	1	20-Oct-09	20-Oct-09			III Set Track (75m)
	A11710	Place upper concrete and cure	5	21-Oct-09	27-Oct-09			IV Place upper concrete and cure
	A11720	Street Surface finishes	3	28-Oct-09	30-Oct-09			V Street Surface finishes
St Andrews Square Ch 1000-1310					57	07-Sep-09	27-Nov-09	
A13530	Dummy	60	07-Sep-09	27-Nov-09				VI Dummy
Roadworks					402	28-Apr-08	27-Nov-09	
12250	Issue Construction Drawings	0		28-Apr-08*				◆ Issue Construction Drawings, 28-Apr-08*
Waverley Bridge Ch 1460-1310					57	07-Sep-09	27-Nov-09	
Phase 1					20	07-Sep-09	05-Oct-09	
A10670	Establish Traffic Management & Temp. Fencing	2	07-Sep-09	08-Sep-09				I Establish Traffic Management & Temp. Fencing
A10680	Take down permanent traffic signs / signals	5	09-Sep-09	15-Sep-09				II Take down permanent traffic signs / signals
A10690	Excavate traffic islands	3	16-Sep-09	18-Sep-09				III Excavate traffic islands
A10700	Subbase	2	21-Sep-09	22-Sep-09				IV Subbase
A10710	Temporary surfacing	3	23-Sep-09	25-Sep-09				V Temporary surfacing
A10720	Temporary Traffic signals / signs / white lines	5	28-Sep-09	02-Oct-09				VI Temporary Traffic signals / signs / white lines
A10730	Remove fencing and Traffic Management	1	05-Oct-09	05-Oct-09				VII Remove fencing and Traffic Management
Phase 2					14	06-Oct-09	23-Oct-09	
A10740	Establish Traffic Management & Temp. Fencing	2	06-Oct-09	07-Oct-09				I Establish Traffic Management & Temp. Fencing
A10750	Excavate kerbline	2	06-Oct-09	09-Oct-09				II Excavate kerbline
A10760	Relay kerbs	4	09-Oct-09	14-Oct-09				III Relay kerbs
A10770	Resel Gullies	4	12-Oct-09	15-Oct-09				IV Resel Gullies
A10780	Plane out wearing course	1	16-Oct-09	16-Oct-09				V Plane out wearing course
A10790	Resurface road	3	19-Oct-09	21-Oct-09				VI Resurface road
A10800	Pavement (1m strip)	4	15-Oct-09	20-Oct-09				VII Pavement (1m strip)
A10810	White Lines	1	22-Oct-09	22-Oct-09				VIII White Lines
A10820	Street Lighting / Road signs	6	15-Oct-09	22-Oct-09				IX Street Lighting / Road signs
A10830	Remove fencing and Traffic Management	1	23-Oct-09	23-Oct-09				X Remove fencing and Traffic Management
Phase 3					23	25-Oct-09	27-Nov-09	
A11140	Establish Traffic Management & Temp. Fencing	2	26-Oct-09	27-Oct-09				I Establish Traffic Management & Temp. Fencing
A11150	Rebuild Traffic Islands	22	28-Oct-09	26-Nov-09				II Rebuild Traffic Islands
A11160	Remove fencing and Traffic Management	1	27-Nov-09	27-Nov-09				III Remove fencing and Traffic Management
St Andrews Square Ch 1000-1310					57	07-Sep-09	27-Nov-09	
A13520	Dummy	60	07-Sep-09	27-Nov-09				VI Dummy
Princes Street West Tram Stop					491	22-Feb-08	01-Feb-10	
12290	Issue Construction Drawings	0		22-Feb-08*				◆ Issue Construction Drawings, 22-Feb-08*
578	Order REC Supply	0	13-Jul-09					◆ Order REC Supply
630	Civil Engineering And Building Works	65	05-Feb-09	08-May-09				Civil Engineering And Building Works
A2760	Deliver and Install Shelter	10	28-Sep-09	12-Oct-09				■ Deliver and Install Shelter
A4598	Access for visual inspection for E&M Tram Stop installation (01D Princess Street W)	0	10-Sep-09					◆ Access for visual inspection for E&M Tram Stop installation (01D Princess Street W)
A4599	Access for E&M Tram Stop installation (01D Princess Street West)	0	12-Oct-09					◆ Access for E&M Tram Stop installation (01D Princess Street West)
A4600	Install LV Power Supply and LV Power Equipment	25	12-Oct-09	16-Nov-09				■ Install LV Power Supply and LV Power Equipment
A4610	Install Telecom Equipment	20	16-Nov-09	18-Jan-10				■ Install Telecom Equipment
A4620	Install Station Control Equipment + AFC Equipment	25	16-Nov-09	25-Jan-10				■ Install Station Control Equipment + AFC Equipment
A4630	Package Test Tramstop	5	25-Jan-10	01-Feb-10				■ Package Test Tramstop
St Andrews Square Tram Stop					655	06-Feb-08	03-Sep-10	
12260	Issue Construction Drawings	0		05-Feb-08*				◆ Issue Construction Drawings, 05-Feb-08*
568	Order REC Supply	0	21-Sep-09					◆ Order REC Supply
620	Civil Engineering And Building Works	65	07-Sep-09	08-Jan-10				Civil Engineering And Building Works
A2750	Deliver and Install Shelter	10	02-Nov-09	13-Nov-09				■ Deliver and Install Shelter
A4558	Access for visual inspection for E&M Tram Stop installation (01C St. Andrews Squa	0	15-Oct-09					◆ Access for visual inspection for E&M Tram Stop installation (01C St. Andrews Squa)
A4559	Access for E&M Tram Stop installation (01C St. Andrews Square)	0	16-Nov-09					◆ Access for E&M Tram Stop installation (01C St. Andrews Square)
A4560	Install LV Power Supply and LV Power Equipment	25	16-Nov-09	22-Jan-10				■ Install LV Power Supply and LV Power Equipment
A4570	Install Telecom Equipment	20	25-Jan-10	19-Feb-10				■ Install Telecom Equipment
								▼ 03-Sep-10, St Andrews Square Tram Stop

Activity ID	Activity Name	Original Duration	Start	Finish	2008					2009					2010					2011						
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
A4580	Install Station Control Equipment + AFC Equipment	25	25-Jan-10	26-Feb-10																						Install Station Control Equipment + AFC Equipment
A4590	Package Test Tramstop	5	01-Mar-10	05-Mar-10																						Package Test Tramstop
A6150	Installation of SIG-interlocking cubicle	15	30-Nov-09	18-Dec-09																						Installation of SIG-interlocking cubicle
A6160	Commissioning of SIG-interlocking cubicle	5	30-Aug-10	03-Sep-10																						Commissioning of SIG-interlocking cubicle
01D Princes Street (inc.) to Haymarket (exc.)					630	29-Jan-08	22-Jul-10																			22-Jul-10, 01D Princes Street (inc.) to Haymarket
E & M Installation					47	27-Apr-10	01-Jul-10																			01-Jul-10, E & M Installation
A3803	Access for visual inspection for E&M wayside installation (01D)	0	27-Apr-10																							◆ Access for visual inspection for E&M wayside installation
A3804	Access for E&M wayside installation (01D)	0	19-May-10																							◆ Access for E&M wayside installation (01D),
A3805	Installation of poles and building fixings	10	19-May-10	28-May-10																						Installation of poles and building fixings
A2810	Overhead Catenary Line	24	29-May-10	21-Jun-10																						Overhead Catenary Line
A2818	Access for visual inspection to cable pits for cable laying (01D)	0	17-May-10																							◆ Access for visual inspection to cable pits for cable laying (01D),
A2819	Access to cable pits for cable laying (01D)	0	08-Jun-10																							◆ Access to cable pits for cable laying (01D),
A3820	Install Electrical Cables	12	08-Jun-10	19-Jun-10																						Install Electrical Cables
A3830	Install Fibre Optic Cables	12	08-Jun-10	19-Jun-10																						Install Fibre Optic Cables
A3840	Install Signalling Wayside Equipment	12	20-Jun-10	01-Jul-10																						Install Signalling Wayside Equipment
Princes Street West (inc.) to Shadwick Place (exc.)					395	31-Mar-08	20-Oct-09																			20-Oct-09, Princes Street West (inc.) to Shadwick Place (exc.)
Roadworks					395	31-Mar-08	20-Oct-09																			20-Oct-09, Roadworks
12270	Issue Construction Drawings	0	0	31-Mar-08*																						◆ Issue Construction Drawings, 31-Mar-08*
Lothian Road Junction Gb 440-280					204	05-Jan-09	20-Oct-09																			20-Oct-09, Lothian Road Junction Gb 440-280
Phase 1					21	05-Jan-09	02-Feb-09																			02-Feb-09, Phase 1
AB250	Establish Traffic Management & Temp. Fencing	2	05-Jan-09	06-Jan-09																						Establish Traffic Management & Temp. Fencing
AB260	Take down permanent traffic signs / signals	5	07-Jan-09	13-Jan-09																						Take down permanent traffic signs / signals
AB270	Excavate traffic islands	3	14-Jan-09	16-Jan-09																						Excavate traffic islands
AB280	Subbase	2	19-Jan-09	20-Jan-09																						Subbase
AB290	Temporary surfacing	3	21-Jan-09	23-Jan-09																						Temporary surfacing
AB300	Temporary Traffic signals / signs / white lines	5	26-Jan-09	30-Jan-09																						Temporary Traffic signals / signs / white lines
AB310	Remove fencing and Traffic Management	1	02-Feb-09	02-Feb-09																						Remove fencing and Traffic Management
Phase 2					50	03-Feb-09	13-Apr-09																			13-Apr-09, Phase 2
AB490	Establish Traffic Management & Temp. Fencing	2	03-Feb-09	04-Feb-09																						Establish Traffic Management & Temp. Fencing
AB500	Excavate North kerbline	2	05-Feb-09	06-Feb-09																						Excavate North kerbline
AB510	Relay North kerbs	5	06-Feb-09	12-Feb-09																						Relay North kerbs
AB520	Reset Gullies	5	09-Feb-09	13-Feb-09																						Reset Gullies
AB530	Plane out wearing course	2	16-Feb-09	17-Feb-09																						Plane out wearing course
AB540	Resurface road	3	06-Apr-09	08-Apr-09																						Resurface road
AB550	Pavement (1m strip)	5	13-Feb-09	19-Feb-09																						Pavement (1m strip)
AB560	White Lines	1	09-Apr-09	09-Apr-09																						White Lines
AB570	Street Lighting / Road signs	7	13-Feb-09	23-Feb-09																						Street Lighting / Road signs
AB570	Remove fencing and Traffic Management	1	13-Apr-09	13-Apr-09																						Remove fencing and Traffic Management
Phase 3					14	14-Apr-09	01-May-09																			01-May-09, Phase 3
AB580	Establish Traffic Management & Temp. Fencing	2	14-Apr-09	15-Apr-09																						Establish Traffic Management & Temp. Fencing
AB590	Excavate South kerbline	2	16-Apr-09	17-Apr-09																						Excavate South kerbline
AB600	Relay South kerbs	4	17-Apr-09	22-Apr-09																						Relay South kerbs
AB610	Reset Gullies	4	20-Apr-09	23-Apr-09																						Reset Gullies
AB620	Plane out wearing course	1	24-Apr-09	24-Apr-09																						Plane out wearing course
AB630	Resurface road	3	27-Apr-09	29-Apr-09																						Resurface road
AB640	Pavement (1m strip)	4	23-Apr-09	28-Apr-09																						Pavement (1m strip)
AB650	White Lines	1	30-Apr-09	30-Apr-09																						White Lines
AB660	Street Lighting / Road signs	6	23-Apr-09	30-Apr-09																						Street Lighting / Road signs
AB665	Remove fencing and Traffic Management	1	01-May-09	01-May-09																						Remove fencing and Traffic Management
Phase 4a					57	31-Jul-09	20-Oct-09																			20-Oct-09, Phase 4a
A9000	Establish Traffic Management & Temp. Fencing	2	31-Jul-09	07-Sep-09																						Establish Traffic Management & Temp. Fencing
A9010	Excavate for new kerb lines & channel	4	06-Sep-09	11-Sep-09																						Excavate for new kerb lines & channel
A9020	Lay new kerbs	4	09-Sep-09	14-Sep-09																						Lay new kerbs
A9030	Reset Gullies	4	10-Sep-09	15-Sep-09																						Reset Gullies
A9040	Surface new channels	4	16-Sep-09	21-Sep-09																						Surface new channels

Activity ID	Activity Name	Original Duration	Start	Finish	2008	2009	2010	2011
			G N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D					
A9050	Pavement	25	15-Sep-09	19-Oct-09				
A9060	Rebuild Traffic Islands	15	22-Sep-09	12-Oct-09				
A9080	Street Lighting / Road signs	5	06-Oct-09	12-Oct-09				
A9130	Remove fencing and Traffic Management	1	20-Oct-09	20-Oct-09				
Printers Street Ch 200-0, 1980-1310					127	03-Feb-09	31-Jul-09	
Phase 1					102	03-Feb-09	25-Jun-09	
A13840	Establish Traffic Management & Temp. Fencing	2	03-Feb-09	04-Feb-09				
A13850	Excavate North kerbline	19	05-Feb-09	03-Mar-09				
A13860	Relay North kerbs	48	12-Feb-09	21-Apr-09				
A13870	Reset Guilles	48	19-Feb-09	28-Apr-09				
A13880	Plane out wearing course	10	29-Apr-09	13-May-09				
A13890	Resurface road	7	15-Jun-09	23-Jun-09				
- A13900	Pavement (1m strip)	48	19-Feb-09	28-Apr-09				
A13910	White Lines	1	24-Jun-09	24-Jun-09				
A13920	Street Lighting / Road signs	5	22-Apr-09	28-Apr-09				
A13930	Remove fencing and Traffic Management	1	25-Jun-09	25-Jun-09				
Phase 2					127	03-Feb-09	31-Jul-09	
A13940	Establish Traffic Management & Temp. Fencing	2	03-Feb-09	04-Feb-09				
A13950	Excavate South kerbline	19	05-Feb-09	03-Mar-09				
A13960	Relay South kerbs	48	12-Feb-09	21-Apr-09				
A13970	Reset Guilles	48	19-Feb-09	28-Apr-09				
A13980	Plane out wearing course	10	29-Apr-09	13-May-09				
A13990	Resurface road	26	24-Jun-09	29-Jul-09				
A14000	Pavement (1m strip)	48	19-Feb-09	28-Apr-09				
A14010	White Lines	1	30-Jul-09	30-Jul-09				
A14020	Street Lighting / Road signs	5	22-Apr-09	28-Apr-09				
A14030	Remove fencing and Traffic Management	1	31-Jul-09	31-Jul-09				
Trackworks (710m)					339	31-Mar-09	30-Jul-09	
12280	Issue Construction Drawings	0		31-Mar-09*				
Lothian Road Junction Ch 440-280					125	03-Feb-09	31-Jul-09	
Phase 2					45	03-Feb-09	05-Apr-09	
1st half					23	03-Feb-09	05-Mar-09	
A8320	Establish Traffic Management & Temp. Fencing	2	03-Feb-09	04-Feb-09				
A8330	Excavate box	3	05-Feb-09	09-Feb-09				
A8340	Excavate, lay and concrete ducts	4	10-Feb-09	13-Feb-09				
A8350	Excavate and construct OLE bases	4	10-Feb-09	13-Feb-09				
A8360	Place Lower concrete and cure	3	16-Feb-09	18-Feb-09				
A8370	Set Track (54m)	2	19-Feb-09	20-Feb-09				
A8380	Place upper concrete and cure	5	23-Feb-09	27-Feb-09				
A8390	Street Surface Finishes	4	02-Mar-09	05-Mar-09				
2nd half					22	03-Mar-09	06-Apr-09	
A8410	Excavate box	3	05-Mar-09	10-Mar-09				
A8420	Excavate, lay and concrete ducts	4	11-Mar-09	16-Mar-09				
A8430	Excavate and construct OLE bases	4	11-Mar-09	16-Mar-09				
A8440	Place Lower concrete and cure	3	17-Mar-09	19-Mar-09				
A8450	Set Track	2	20-Mar-09	23-Mar-09				
A8460	Place upper concrete and cure	5	24-Mar-09	30-Mar-09				
A8470	Street Surface Finishes	4	31-Mar-09	03-Apr-09				
A8480	Remove fencing and Traffic Management	1	06-Apr-09	08-Apr-09				
Phase 3a					31	05-May-09	17-Jun-09	
1st half					16	05-May-09	27-May-09	
A8693	Establish Traffic Management & Temp. Fencing	2	05-May-09	06-May-09				
A8690	Excavate box	1	07-May-09	07-May-09				
A8700	Excavate, lay and concrete ducts	2	06-May-09	11-May-09				
A8710	Excavate and construct OLE bases	2	06-May-09	11-May-09				

Activity ID	Activity Name	Original Duration	Start	Finish	2008	2009	2010	2011
			O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D					
A8720	Place Lower concrete and cure	3	12-May-09	14-May-09			I Place Lower concrete and cure;	
A8730	Set Track (54m)	1	15-May-09	15-May-09			I Set Track (54m);	
A8740	Place upper concrete and cure	5	18-May-09	22-May-09			I Place upper concrete and cure;	
A8750	Street Surface finishes	2	26-May-09	27-May-09			I Street Surface finishes;	
	2nd half		15	28-May-09	17-Jun-09		V 17-Jun-09; 2nd half;	
A8760	Excavate box	1	28-May-09	28-May-09			I Excavate box	
A8770	Excavate, lay and concrete ducts	2	29-May-09	01-Jun-09			I Excavate, lay and concrete ducts;	
A8780	Excavate and construct OLE bases	2	29-May-09	01-Jun-09			I Excavate and construct OLE bases;	
A8790	Place Lower concrete and cure	3	02-Jun-09	04-Jun-09			I Place Lower concrete and cure	
A8800	Set Track	1	05-Jun-09	05-Jun-09			I Set Track	
A8810	Place upper concrete and cure	5	08-Jun-09	12-Jun-09			I Place upper concrete and cure	
A8820	Street Surface finishes	2	15-Jun-09	16-Jun-09			I Street Surface finishes;	
A8830	Remove fencing and Traffic Management	1	17-Jun-09	17-Jun-09			I Remove fencing and Traffic Management;	
	Phase 4		30	18-Jun-09	30-Jul-09		V 30-Jul-09; Phase 4;	
	1st half		15	18-Jun-09	09-Jul-09		V 09-Jul-09; 1st half;	
A8840	Establish Traffic Management & Temp. Fencing	2	18-Jun-09	19-Jun-09			I Establish Traffic Management & Temp. Fencing	
A8850	Excavate box	1	22-Jun-09	22-Jun-09			I Excavate box	
A8860	Excavate, lay and concrete ducts	2	23-Jun-09	24-Jun-09			I Excavate, lay and concrete ducts	
A8870	Excavate and construct OLE bases	2	23-Jun-09	24-Jun-09			I Excavate and construct OLE bases	
A8880	Place Lower concrete and cure	3	25-Jun-09	29-Jun-09			I Place Lower concrete and cure	
A8890	Set Track (54m)	1	30-Jun-09	30-Jun-09			I Set Track (54m);	
A8900	Place upper concrete and cure	5	01-Jul-09	07-Jul-09			I Place upper concrete and cure	
A8910	Street Surface finishes	2	08-Jul-09	09-Jul-09			I Street Surface finishes;	
	2nd half		15	10-Jul-09	30-Jul-09		V 30-Jul-09; 2nd half;	
A8920	Excavate box	1	10-Jul-09	10-Jul-09			I Excavate box	
A8930	Excavate, lay and concrete ducts	2	13-Jul-09	14-Jul-09			I Excavate, lay and concrete ducts	
A8940	Excavate and construct OLE bases	2	13-Jul-09	14-Jul-09			I Excavate and construct OLE bases	
A8950	Place Lower concrete and cure	3	15-Jul-09	17-Jul-09			I Place Lower concrete and cure	
A8960	Set Track	1	20-Jul-09	20-Jul-09			I Set Track	
A8970	Place upper concrete and cure	5	21-Jul-09	27-Jul-09			I Place upper concrete and cure	
A8980	Street Surface finishes	2	28-Jul-09	29-Jul-09			I Street Surface finishes	
A8990	Remove fencing and Traffic Management	1	30-Jul-09	30-Jul-09			I Remove fencing and Traffic Management;	
	Princes Street Cn 280-0-1980-1310		102	03-Feb-09	25-Jun-09		V 25-Jun-09, Princes Street Cn 280-0-1980-1310;	
	Phase 1						V 25-Jun-09, Phase 1;	
A13760	Establish Traffic Management & Temp. Fencing	2	03-Feb-09	04-Feb-09			I Establish Traffic Management & Temp. Fencing	
A13770	Excavate box	38	05-Feb-09	30-Mar-09			Excavate box	
A13780	Excavate, lay and concrete ducts	64	12-Feb-09	14-May-09			Excavate, lay and concrete ducts	
A13790	Excavate and construct OLE bases	64	19-Feb-09	21-May-09			Excavate and construct OLE bases	
A13800	Place Lower concrete and cure	22	24-Apr-09	27-May-09			I Place Lower concrete and cure	
A13810	Set Track (950m)	19	01-May-09	29-May-09			I Set Track (950m);	
A13820	Place upper concrete and cure	24	11-May-09	12-Jun-09			I Place upper concrete and cure	
A13830	Street Surface finishes	28	18-May-09	25-Jun-09			I Street Surface finishes	
	Shandwick Place (inc) to Haymarket (exc)		630	29-Jan-08	22-Jul-10		V 22-Jul-10, Shandwick Place (inc) to Haymarket	
	Shandwick Place Tram Stop		630	29-Jan-08	22-Jul-10		V 22-Jul-10, Shandwick Place Tram Stop	
12300	Issue Construction Drawings	0		29-Jan-08*				
588	Order REC Supply	0	08-Mar-10				◆ Order REC Supply,	
640	Civil Engineering And Building Works	65	09-Sep-09	12-Jan-10			◆ Civil Engineering And Building Works	
A2810	Deliver and Install Shelter	10	20-Apr-10	05-May-10			◆ Deliver and Install Shelter	
A4638	Access for visual inspection for E&M Tram Stop installation (01D Shandwick Place)	0	05-Apr-10				◆ Access for visual inspection for E&M Tram Stop installation (01D Shandwick Place)	
A4639	Access for E&M Tram Stop installation (01D Shandwick Place)	0	05-May-10				◆ Access for E&M Tram Stop installation (01D Shandwick Place)	
A4640	Install LV Power Supply and LV Power Equipment	25	05-May-10	10-Jun-10			◆ Install LV Power Supply and LV Power Equipment	
A4650	Install Telecom Equipment	20	10-Jun-10	08-Jul-10			◆ Install Telecom Equipment	
A4660	Install Station Control Equipment + AFC Equipment	25	10-Jun-10	15-Jul-10			◆ Install Station Control Equipment + AFC Equipment	
A4670	Package Test Tramstop	5	15-Jul-10	22-Jul-10			◆ Package Test Tramstop	
	Roadworks		503	31-Mar-08	24-Mar-10		V 24-Mar-10, Roadworks	

Activity ID	Activity Name	Original Duration	Start	Finish	2008					2009					2010					2011									
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O
12310	Issue Construction Drawings	0		31-Mar-08*																									
	Haymarket Ch 1250-1125		267	05-Jan-09	23-Oct-09																								
	Phase 1			17	05-Jan-09	27-Jan-09																							
	A6390	Establish Traffic Management & Temp. Fencing		2	05-Jan-09	06-Jan-09																							
	A6400	Remove island surfacing and exc. to formation		4	07-Jan-09	12-Jan-09																							
	A6410	Construct Kerb lines		2	13-Jan-09	14-Jan-09																							
	A6420	Move Gullies		2	15-Jan-09	16-Jan-09																							
	A6430	Sub base		2	19-Jan-09	20-Jan-09																							
	A6440	Roadbase/base course/wearing course/temp ramps		3	21-Jan-09	23-Jan-09																							
	A6450	Pavement Works		5	15-Jan-09	21-Jan-09																							
	A6460	White Lines		1	26-Jan-09	26-Jan-09																							
	A6470	Street Lighting / Traffic Signals / Road Signs		5	15-Jan-09	21-Jan-09																							
	A6475	Remove fencing and Traffic Management		1	27-Jan-09	27-Jan-09																							
				21	28-Jan-09	25-Feb-09																							
	Phase 2			2	28-Jan-09	29-Jan-09																							
	A6480	Establish Traffic Management & Temp. Fencing		2	30-Jan-09	02-Feb-09																							
	A6490	Excavate for new channel and kerb line / remove existing kerbs		2	03-Feb-09	04-Feb-09																							
	A6500	Construct Kerb lines		1	05-Feb-09	05-Feb-09																							
	A6510	Reset Gullies		1	06-Feb-09	06-Feb-09																							
	A6520	Surface new channel		1	09-Feb-09	09-Feb-09																							
	A6540	Pavement Works		15	05-Feb-09	25-Feb-09																							
	A6550	White Lines		1	09-Feb-09	09-Feb-09																							
	A6560	Street Lighting / Traffic Signals / Road Signs		3	05-Feb-09	09-Feb-09																							
	A6565	Remove fencing and Traffic Management		1	12-Feb-09	12-Feb-09																							
				23	30-Mar-09	29-Apr-09																							
	Phase 4a			2	30-Mar-09	31-Mar-09																							
	A6730	Establish Traffic Management & Temp. Fencing		2	01-Apr-09	07-Apr-09																							
	A6740	Remove island surfacing and exc. to formation		5	01-Apr-09	07-Apr-09																							
	A6750	Construct Kerb lines		4	08-Apr-09	14-Apr-09																							
	A6760	Move Gullies		2	15-Apr-09	16-Apr-09																							
	A6770	Sub base		3	17-Apr-09	21-Apr-09																							
	A6775	Plane off wearing course		1	22-Apr-09	22-Apr-09																							
	A6780	Roadbase/base course/wearing course/temp ramps		3	23-Apr-09	27-Apr-09																							
	A6790	Pavement Works		6	15-Apr-09	22-Apr-09																							
	A6800	White Lines		1	28-Apr-09	28-Apr-09																							
	A6810	Street Lighting / Traffic Signals / Road Signs		7	15-Apr-09	23-Apr-09																							
	A6815	Remove fencing and Traffic Management		1	29-Apr-09	29-Apr-09																							
				20	30-Apr-09	28-May-09																							
	Phase 4b			2	30-Apr-09	01-May-09																							
	A6820	Establish Traffic Management & Temp. Fencing		1	05-May-09	05-May-09																							
	A6830	Remove island surfacing and exc. to formation		4	06-May-09	11-May-09																							
	A6840	Construct Kerb lines		2	12-May-09	13-May-09																							
	A6850	Move Gullies		3	14-May-09	18-May-09																							
	A6860	Sub base		1	19-May-09	19-May-09																							
	A6870	Plane off wearing course		3	20-May-09	22-May-09																							
	A6880	Roadbase/base course/wearing course/temp ramps		12	12-May-09	26-May-09																							
	A6890	Pavement Works		1	28-May-09	26-May-09																							
	A6900	White Lines		7	12-May-09	20-May-09																							
	A6910	Street Lighting / Traffic Signals / Road Signs		1	27-May-09	27-May-09																							
	A6915	Remove fencing and Traffic Management		49	17-Jul-09	24-Sep-09																							
	Phase 6b			2	17-Jul-09	20-Jul-09																							
	A7240	Establish Traffic Management & Temp. Fencing		2	21-Jul-09	22-Jul-09																							
	A7250	Excavate for new channel and kerb line / remove existing kerbs		5	23-Jul-09	29-Jul-09																							
	A7260	Construct Kerb lines		5	24-Jul-09	30-Jul-09																							
	A7270	Reset Gullies		2	31-Jul-09	07-Sep-09																							
	A7280	Surface new channel		15	30-Jul-09	23-Sep-09																							
	A7290	Pavement Works		7	30-Jul-09	11-Sep-09																							
	A7310	Street Lighting / Traffic Signals / Road Signs																											

V 23-Oct-09, Haymarket Ch 1250-1125

V 27-Jan-09, Phase 1

I Establish Traffic Management & Temp. Fencing

I Remove island surfacing and exc. to formation

I Construct Kerb lines

I Move Gullies

I Sub base

I Roadbase/base course/wearing course/temp ramps

I Pavement Works

I White Lines

I Street Lighting / Traffic Signals / Road Signs

I Remove fencing and Traffic Management

V 25-Feb-09, Phase 2

I Establish Traffic Management & Temp. Fencing

I Excavate for new channel and kerb line / remove existing kerbs

I Construct Kerb lines

I Reset Gullies

I Surface new channel

I Pavement Works

I White Lines

I Street Lighting / Traffic Signals / Road Signs

I Remove fencing and Traffic Management

V 29-Apr-09, Phase 4a

I Establish Traffic Management & Temp. Fencing

I Remove island surfacing and exc. to formation

I Construct Kerb lines

I Move Gullies

I Sub base

I Plane off wearing course

I Roadbase/base course/wearing course/temp ramps

I Pavement Works

I White Lines

I Street Lighting / Traffic Signals / Road Signs

I Remove fencing and Traffic Management

V 28-May-09, Phase 4b

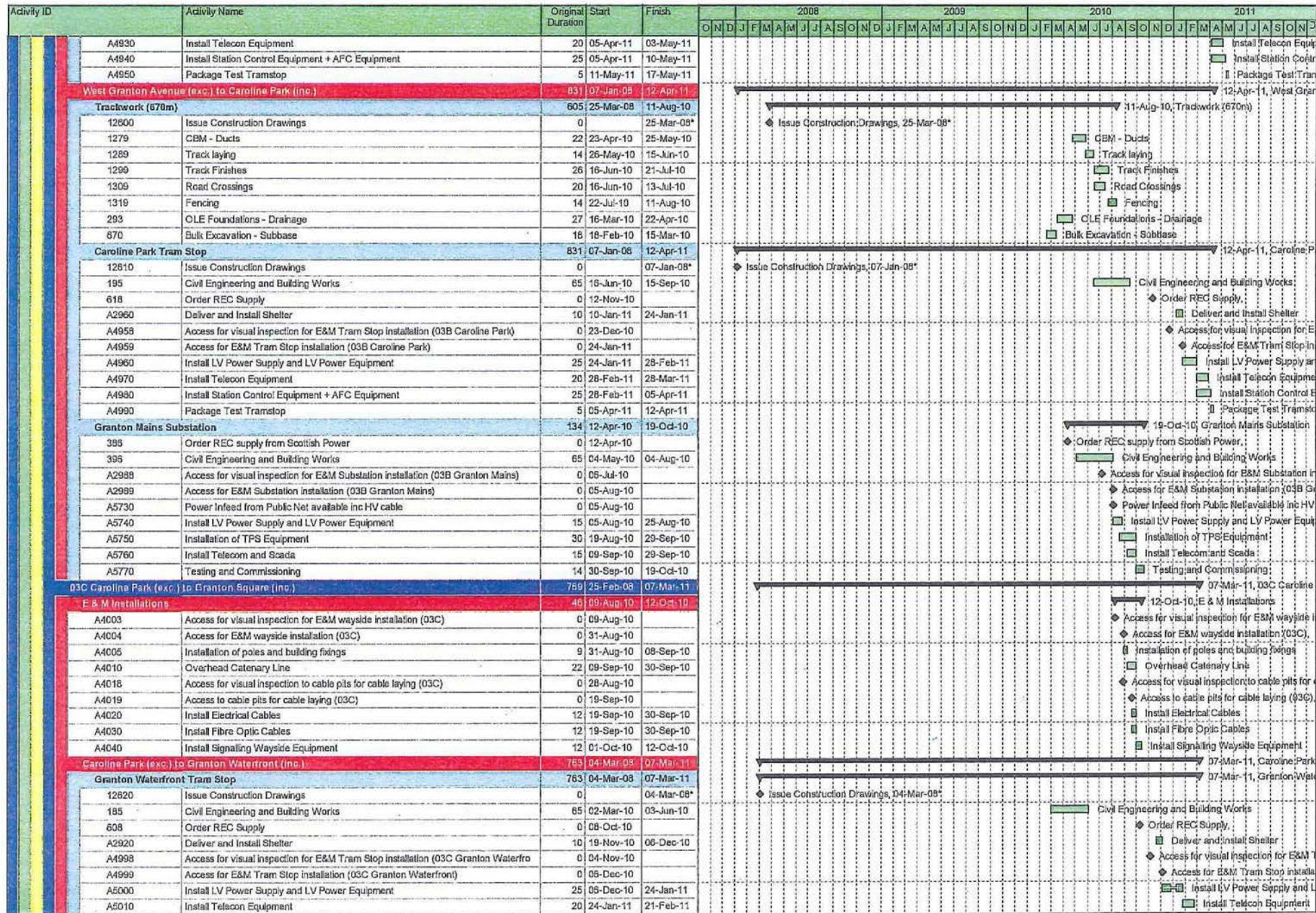
I Establish Traffic Management & Temp. Fencing

Activity ID	Activity Name	Original Duration	Start	Finish	2008					2009					2010					2011					
					O	N	D	J	F	M	A	M	J	A	S	O	N	D	J	F	M	A	M	J	A
A7180	Excavate, lay and concrete ducts	2	15-Sep-09	16-Sep-09																					
A7190	Excavate and construct OLE bases	2	15-Sep-09	16-Sep-09																					
A7200	Place Lower concrete and cure	3	17-Sep-09	21-Sep-09																					
A7210	Set Track	1	22-Sep-09	22-Sep-09																					
A7220	Place upper concrete and cure	5	23-Sep-09	29-Sep-09																					
A7230	Street Surface finishes	2	30-Sep-09	01-Oct-09																					
A7235	Remove fencing and Traffic Management	1	02-Oct-09	02-Oct-09																					
Torpinchen Ch 1125-940		163	30-Mar-09	16-Nov-09																					
Phase 1			47	30-Mar-09	03-Jun-09																				
1st half			24	30-Mar-09	30-Apr-09																				
A7360	Establish Traffic Management & Temp. Fencing	2	30-Mar-09	31-Mar-09																					
A7380	Excavate box	3	01-Apr-09	03-Apr-09																					
A7390	Excavate, lay and concrete ducts	4	05-Apr-09	09-Apr-09																					
A7400	Excavate and construct OLE bases	4	05-Apr-09	09-Apr-09																					
A7410	Place Lower concrete and cure	3	13-Apr-09	15-Apr-09																					
A7420	Set Track (145m)	2	15-Apr-09	17-Apr-09																					
A7430	Place upper concrete and cure	5	20-Apr-09	24-Apr-09																					
A7440	Street Surface finishes	4	27-Apr-09	30-Apr-09																					
2nd half			23	01-May-09	03-Jun-09																				
A7450	Excavate box	3	01-May-09	06-May-09																					
A7460	Excavate, lay and concrete ducts	4	07-May-09	12-May-09																					
A7470	Excavate and construct OLE bases	4	07-May-09	12-May-09																					
A7480	Place Lower concrete and cure	3	13-May-09	15-May-09																					
A7490	Set Track	2	18-May-09	19-May-09																					
A7500	Place upper concrete and cure	5	20-May-09	27-May-09																					
A7510	Street Surface finishes	4	28-May-09	02-Jun-09																					
A7515	Remove fencing and Traffic Management	1	03-Jun-09	03-Jun-09																					
Phase 2			31	05-Oct-09	16-Nov-09																				
1st half			16	05-Oct-09	26-Oct-09																				
A7520	Establish Traffic Management & Temp. Fencing	2	05-Oct-09	06-Oct-09																					
A7540	Excavate box	1	07-Oct-09	07-Oct-09																					
A7550	Excavate, lay and concrete ducts	2	08-Oct-09	09-Oct-09																					
A7560	Excavate and construct OLE bases	2	08-Oct-09	09-Oct-09																					
A7570	Place Lower concrete and cure	3	12-Oct-09	14-Oct-09																					
A7580	Set Track (40m)	1	15-Oct-09	15-Oct-09																					
A7590	Place upper concrete and cure	5	16-Oct-09	22-Oct-09																					
A7600	Street Surface finishes	2	23-Oct-09	26-Oct-09																					
2nd half			15	27-Oct-09	16-Nov-09																				
A7610	Excavate box	1	27-Oct-09	27-Oct-09																					
A7620	Excavate, lay and concrete ducts	2	28-Oct-09	29-Oct-09																					
A7630	Excavate and construct OLE bases	2	28-Oct-09	29-Oct-09																					
A7640	Place Lower concrete and cure	3	30-Oct-09	03-Nov-09																					
A7650	Set Track	1	04-Nov-09	04-Nov-09																					
A7660	Place upper concrete and cure	5	05-Nov-09	11-Nov-09																					
A7670	Street Surface finishes	2	12-Nov-09	13-Nov-09																					
A7675	Remove fencing and Traffic Management	1	15-Nov-09	16-Nov-09																					
West Mainland Ch 940-850			39	25-Mar-10	19-May-10																				
Phases 2 & 3			39	25-Mar-10	19-May-10																				
1st half			20	25-Mar-10	21-Apr-10																				
A7940	Establish Traffic Management & Temp. Fencing	2	25-Mar-10	26-Mar-10																					
A7960	Excavate box	2	29-Mar-10	30-Mar-10																					
A7970	Excavate, lay and concrete ducts	3	31-Mar-10	05-Apr-10																					
A7980	Excavate and construct OLE bases	3	31-Mar-10	05-Apr-10																					
A7990	Place Lower concrete and cure	3	05-Apr-10	09-Apr-10																					
A8000	Set Track (90m)	1	09-Apr-10	09-Apr-10																					
2nd half			21	21-Apr-10	18-May-10																				
Phases 2 & 3			21	21-Apr-10	18-May-10																				
1st half			21	21-Apr-10	21-Apr-10																				
A7940	Establish Traffic Management & Temp. Fencing	2	21-Apr-10	21-Apr-10																					
A7960	Excavate box	2	22-Apr-10	22-Apr-10																					
A7970	Excavate, lay and concrete ducts	3	23-Apr-10	27-Apr-10																					
A7980	Excavate and construct OLE bases	3	23-Apr-10	27-Apr-10																					
A7990	Place Lower concrete and cure	3	28-Apr-10	01-May-10																					
A8000	Set Track (90m)	1	01-May-10	01-May-10																					
2nd half			21	21-Apr-10	18-May-10																				
Phases 2 & 3			21	21-Apr-10	18-May-10																				
1st half			21	21-Apr-10	21-Apr-10																				
A7940	Establish Traffic Management & Temp. Fencing	2	21-Apr-10	21-Apr-10																					
A7960	Excavate box	2	22-Apr-10	22-Apr-10																					
A7970	Excavate, lay and concrete ducts	3	23-Apr-10	27-Apr-10																					
A7980	Excavate and construct OLE bases	3	23-Apr-10	27-Apr-10																					
A7990	Place Lower concrete and cure	3	28-Apr-10	01-May-10																					
A8000	Set Track (90m)	1	01-May-10	01-May-10																					
2nd half			21	21-Apr-10	18-May-10																				
Phases 2 & 3			21	21-Apr-10	18-May-10																				
1st half			21	21-Apr-10	21-Apr-10																				
A7940	Establish Traffic Management & Temp. Fencing	2	21-Apr-10	21-Apr-10																					
A7960	Excavate box	2	22-Apr-10	22-Apr-10																					
A7970	Excavate, lay and concrete ducts	3	23-Apr-10	27-Apr-10																					
A7980	Excavate and construct OLE bases	3	23-Apr-10	27-Apr-10																					
A7990	Place Lower concrete and cure	3	28-Apr-10	01-May-10																					
A8000	Set Track (90m)	1	01-May-10	01-May-10																					
2nd half			21	21-Apr-10	18-May-10				</																

The Gantt chart displays the following project timelines:

- Roseburn (exc.) to Ravelston Dykes (inc.)**: 843 days (28-Sep-07 to 25-Jan-11)
- Ravelston Dykes Tram Stop**: 751 days (11-Feb-08 to 25-Jan-11)
 - Issue Construction Drawings: 0 days (11-Feb-08*)
 - Civil Engineering and Building Works: 65 days (17-Aug-10 to 15-Nov-10)
 - Order REC Supply: 0 days (31-Aug-10)
 - Deliver and Install Shelter: 10 days (12-Oct-10 to 25-Oct-10)
 - Access for visual inspection for E&M Tram Stop installation (03A Ravelston Dykes): 0 days (24-Sep-10)
 - Access for E&M Tram Stop installation (03A Ravelston Dykes): 0 days (26-Oct-10)
 - Install LV Power Supply and LV Power Equipment: 26 days (26-Oct-10 to 30-Nov-10)
 - Install Telecom Equipment: 20 days (01-Dec-10 to 11-Jan-11)
 - Install Station Control Equipment + AFC Equipment: 25 days (01-Dec-10 to 18-Jan-11)
 - Package Test Tramstop: 5 days (19-Jan-11 to 25-Jan-11)
- St Georges Bridges (S3 & S4)**: 541 days (11-Feb-08 to 29-Mar-10)
 - Issue Construction Drawings: 0 days (11-Feb-08*)
 - St. Georges Bridges (S3 & S4): 76 days (27-Nov-09 to 29-Mar-10)
- Trackwork (600m)**: 766 days (28-Sep-07 to 05-Oct-10)
 - Issue Construction Drawings: 0 days (28-Sep-07*)
 - CBM - Ducts: 20 days (01-Jul-10 to 28-Jul-10)
 - Track laying: 12 days (29-Jul-10 to 16-Aug-10)
 - Track Finishes: 24 days (17-Aug-10 to 17-Sep-10)
 - Fencing: 12 days (20-Sep-10 to 05-Oct-10)
 - OLE Foundations - Drainage: 24 days (27-May-10 to 30-Jun-10)
 - Bulk Excavation - Subbase inc. Retaining Walls: 40 days (30-Mar-10 to 25-May-10)
- Colbridge Viaduct (S2)**: 457 days (11-Feb-08 to 26-Nov-09)
 - Issue Construction Drawings: 0 days (11-Feb-08*)
 - Colbridge Viaduct (S2): 103 days (06-Jul-09 to 25-Nov-09)
- Ravelston Dykes (exc.) to Craigleath (inc.)**: 917 days (28-Sep-07 to 09-May-11)
 - Ravelston Dykes Bridge (S5): 401 days (11-Feb-08 to 08-Sep-09)
 - Issue Construction Drawings: 0 days (11-Feb-08*)
 - Ravelston Dykes Bridge (S5): 76 days (06-Jul-09 to 08-Sep-09)
- Trackwork (990m)**: 724 days (06-May-08 to 11-Mar-11)
 - Issue Construction Drawings: 0 days (06-May-08*)
 - CBM - Ducts: 33 days (27-Sep-10 to 10-Nov-10)
 - Track laying: 20 days (11-Nov-10 to 09-Dec-10)
 - Track Finishes: 36 days (10-Dec-10 to 11-Feb-11)
 - Fencing: 20 days (14-Feb-11 to 11-Mar-11)
 - OLE Foundations - Drainage: 27 days (19-Aug-10 to 24-Sep-10)
 - Bulk Excavation - Subbase inc. Retaining Walls: 66 days (17-May-10 to 18-Aug-10)
- Craigleath Tram Stop**: 625 days (11-Feb-08 to 09-May-11)
 - Issue Construction Drawings: 0 days (11-Feb-08*)
 - Civil Engineering and Building Works: 65 days (25-Nov-10 to 10-Mar-11)
 - Order REC Supply: 0 days (10-Dec-10)
 - Deliver and Install Shelter: 10 days (04-Feb-11 to 17-Feb-11)
 - Access for visual inspection for E&M Tram Stop installation (03A Craigleath): 0 days (19-Jan-11)
 - Access for E&M Tram Stop installation (03A Craigleath): 0 days (18-Feb-11)
 - Install LV Power Supply and LV Power Equipment: 25 days (18-Feb-11 to 24-Mar-11)
 - Install Telecom Equipment: 20 days (25-Mar-11 to 22-Apr-11)
 - Install Station Control Equipment + AFC Equipment: 25 days (25-Mar-11 to 29-Apr-11)

Activity ID	Activity Name	Original Duration	Start	Finish	2008					2009					2010					2011								
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	J	F	M	A	M	J	J	A	S	O
	A4890	Install Telecon Equipment		20-Dec-10	28-Jan-11																							Install Telecon Equipment
	A4900	Install Station Control Equipment + AFC Equipment		25	20-Dec-10	04-Feb-11																						Install Station Control Equipment
	A4910	Package Test Tramstop		5	07-Feb-11	11-Feb-11																						Package Test Tramstop
	A6210	Installation of SIG-interlocking cubicle		10	26-Nov-10	09-Dec-10																						Installation of SIG-interlocking cubicle
	A6220	Commissioning of SIG -interlocking cubicle		5	22-Jun-11	28-Jun-11																						Commissioning
	Drylow Drive Bridge (S11)			672	28-Sep-07	21-May-10																						21-May-10, Drylow Drive Bridge (S11)
	12540	Issue Construction Drawings		0	28-Sep-07*																							Drylow Drive Bridge (S11)
	78	Drylow Drive Bridge (S11)		31	08-Apr-10	21-May-10																						07-Apr-10, Ferry Road Retaining Wall (W2)
	Ferry Road Retaining Wall (W2)			640	28-Sep-07	07-Apr-10																						Issue Construction Drawings, 28-Sep-07*
	12550	Issue Construction Drawings		0	28-Sep-07*																							Ferry Road Retaining Walls (W2)
	79	Ferry Road Retaining Walls (W2)		82	27-Nov-09	07-Apr-10																						12-Oct-10, Trackwork (419m)
	Trackwork (419m)			619	06-May-08	12-Oct-10																						Issue Construction Drawings, 06-May-08*
	12560	Issue Construction Drawings		0	05-May-08*																							CBM - Ducts
	1539	CBM - Ducts		14	03-Aug-10	20-Aug-10																						Track laying
	1549	Track laying		9	23-Aug-10	02-Sep-10																						Track Finishes
	1559	Track Finishes		19	03-Sep-10	29-Sep-10																						Fencing
	1569	Fencing		9	30-Sep-10	12-Oct-10																						OLE Foundations - Drainage
	353	OLE Foundations - Drainage		17	08-Jul-10	30-Jul-10																						Bulk Excavation - Subbase inc. Retaining Walls
	730	Bulk Excavation - Subbase inc. Retaining Walls		37	17-May-10	07-Jul-10																						17-May-11, Opening Sequence D (Crewe Toll to Grantron Square)
	Opening Sequence D (Crewe Toll to Grantron Square)			857	07-Jan-08	17-May-11																						17-May-11, 03B C
	03B Crewe Toll (exc.) to Caroline Park (inc.)			857	07-Jan-08	17-May-11																						21-Mar-11, E & M Installation
	E & M Installations			47	14-Jan-11	21-Mar-11																						Access for visual inspection for E&M wayside installation (03B)
	A3993	Access for visual inspection for E&M wayside installation (03B)		0	14-Jan-11																							Access for visual inspection for E&M wayside installation (03B)
	A3994	Access for E&M wayside installation (03B)		0	05-Feb-11																							Installation of poles and building fixings
	A3955	Installation of poles and building fixings		11	05-Feb-11	15-Feb-11																						Overhead Catenary Line
	A3970	Overhead Catenary Line		26	16-Feb-11	13-Mar-11																						Access for visual inspection for cable pits for cable laying (03B)
	A3978	Access for visual inspection to cable pits for cable laying (03B)		0	04-Feb-11																						Access to cable pits for cable laying (03B)	
	A3979	Access to cable pits for cable laying (03B)		0	26-Feb-11																						Install Electrical Cables	
	A3980	Install Electrical Cables		12	26-Feb-11	09-Mar-11																						Install Fibre Optic Cables
	A3990	Install Fibre Optic Cables		12	26-Feb-11	09-Mar-11																						Install Signalling Wayside Equipment
	Crewe Toll (exc.) to West Grantron Avenue (inc.)			841	28-Jan-08	17-May-11																						17-May-11, Crewe Toll
	Crewe Road Gardens Bridge (S12)			718	04-Feb-08	01-Dec-10																						01-Dec-10, Crewe Road Gardens
	12570	Issue Construction Drawings		0	04-Feb-08*																							Substructure
	1579	Substructure		53	08-Apr-10	23-Jun-10																						Superstructure
	1589	Superstructure		57	24-Jun-10	27-Sep-10																						Wingwalls
	1599	Wingwalls		149	04-May-10	01-Dec-10																						Roadworks
	85	Roadworks		25	25-Aug-10	28-Sep-10																						24-Feb-11, Trackwork (57)
	Trackwork (670m)			742	25-Mar-08	24-Feb-11																						Issue Construction Drawings, 04-Feb-08*
	12580	Issue Construction Drawings		0	25-Mar-08*																						CBM - Ducts	
	1329	CBM - Ducts		22	27-Oct-10	25-Nov-10																					Track laying	
	1339	Track laying		14	28-Nov-10	16-Dec-10																					Track Finishes	
	1349	Track Finishes		26	17-Dec-10	04-Feb-11																					Road Crossings	
	1359	Road Crossings		30	17-Dec-10	10-Feb-11																					Fencing	
	1369	Fencing		14	07-Feb-11	24-Feb-11																					OLE Foundations - Drainage	
	303	OLE Foundations - Drainage		27	20-Sep-10	26-Oct-10																					Bulk Excavation - Subbase	
	680	Bulk Excavation - Subbase		18	25-Aug-10	17-Sep-10																					17-May-11, West Grantron Avenue	
	West Grantron Avenue Tram Stop			841	28-Jan-08	17-May-11																						Issue Construction Drawings, 28-Jan-08*
	12590	Issue Construction Drawings		0	28-Jan-08*																						Civil Engineering and Building Works	
	205	Civil Engineering and Building Works		65	03-Dec-10	18-Mar-11																					Order REC Supply	
	628	Order REC Supply		0	20-Dec-10																						Deliver and Install Shelter	
	A2020	Deliver and Install Shelter		10	14-Feb-11	25-Feb-11																					Access for visual inspection for E&M Tram Stop installation (03B West Grantron Avenue)	
	A4918	Access for visual inspection for E&M Tram Stop installation (03B West Grantron Avenue)		0	27-Jan-11																						Access for E&M Tram Stop installation (03B West Grantron Avenue)	
	A4919	Access for E&M Tram Stop installation (03B West Grantron Avenue)		0	28-Feb-11																						Install LV Power Supply and LV Power Equipment	
	A4920	Install LV Power Supply and LV Power Equipment		25	28-Feb-11	04-Apr-11																					17-May-11, West Grantron Avenue	



Activity ID	Activity Name	Original Duration	Start	Finish	2008			2009			2010			2011														
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	O
	A5020	Install Station Control Equipment + AFC Equipment	25	24-Jan-11	26-Feb-11																						Install Station Control Equ	
	A5030	Package Test Tramstop	5	28-Feb-11	07-Mar-11																						Package Test Tramstop	
Trackwork (370m)					509	03-Apr-08	06-Apr-10																					06-Apr-10, Trackwork (370m)
1229	CBM - Ducts	13	01-Feb-10	17-Feb-10																								CBM - Ducts
1239	Track laying	8	18-Feb-10	01-Mar-10																							Track laying	
1249	Track Finishes	17	02-Mar-10	24-Mar-10																							Track Finishes	
1259	Road Crossings	20	02-Mar-10	29-Mar-10																							Road Crossings	
12530	Issue Construction Drawings	0	03-Apr-08*																								Issue Construction Drawings, 03-Apr-08*	
1259	Fencing	6	25-Mar-10	06-Apr-10																							Fencing	
283	OLE Foundations - Drainage	15	11-Jan-10	29-Jan-10																							OLE Foundations - Drainage	
650	Bulk Excavation - Subbase	18	02-Dec-09	08-Jan-10																							Bulk Excavation - Subbase	
Granton Waterfront (exc.) to Granton Square (inc.)					744	25-Feb-08	31-Jan-11																				31-Jan-11, Granton Waterfront	
Granton Square Tram Stop					744	25-Feb-08	31-Jan-11																				31-Jan-11, Granton Square	
12640	Issue Construction Drawings	0	25-Feb-08*																								Civil Engineering and Building Works	
175	Civil Engineering and Building Works	65	18-Jan-10	19-Apr-10																							Order REC Supply	
598	Order REC Supply	0	03-Sep-10																								Deliver and Install Shelter	
A2860	Deliver and Install Shelter	10	15-Oct-10	29-Oct-10																							Access for visual inspection for E&M Tram Stop installation	
A5038	Access for visual inspection for E&M Tram Stop installation (03C Granton Square)	0	29-Sep-10																								Access for E&M Tram Stop installation	
A5039	Access for E&M Tram Stop installation (03C Granton Square)	0	29-Oct-10																								Install LV Power Supply and LV Power Equipment	
A5040	Install LV Power Supply and LV Power Equipment	25	29-Oct-10	06-Dec-10																							Install Telecom Equipment	
A5050	Install Telecom Equipment	20	06-Dec-10	17-Jan-11																							Install Station Control Equipment	
A5060	Install Station Control Equipment + AFC Equipment	25	06-Dec-10	24-Jan-11																							Package Test Tramstop	
A5070	Package Test Tramstop	5	24-Jan-11	31-Jan-11																							Installation of SIG-interlocking public	
A6240	Installation of SIG-interlocking cubicle	10	12-Nov-10	26-Nov-10																							Commissioning of SIG-interlocking	
A6250	Commissioning of SIG-interlocking cubicle	5	26-Nov-10	03-Dec-10																								
Granton Road Sub Station					187	14-Dec-09	08-Sep-10																				08-Sep-10, Granton Road Sub Station	
356	Order REC supply from Scottish Power	0	14-Dec-09																								Order REC supply from Scottish Power	
376	Civil Engineering and Building Works	65	18-Jan-10	19-Apr-10																							Civil Engineering and Building Works	
A2888	Access for visual inspection for E&M Substation installation (03C Granton Road)	0	19-Mar-10																								Access for visual inspection for E&M Substation installation (03C Granton Road)	
A2889	Access for E&M Substation installation (03C Granton Road)	0	20-Apr-10																								Power Infed from Public Net available incl HV cable	
A5780	Power Infed from Public Net available incl HV cable	0	20-Apr-10																								Install LV Power Supply and LV Power Equipment	
A5790	Install LV Power Supply and LV Power Equipment	15	20-Apr-10	11-May-10																							Installation of TPS Equipment	
A5800	Installation of TPS Equipment	30	07-Jul-10	19-Aug-10																							Install Telecom and Scada	
A5810	Install Telecom and Scada	15	28-Jul-10	19-Aug-10																							Testing and Commissioning	
A5820	Testing and Commissioning	14	19-Aug-10	08-Sep-10																								
Trackwork (1130m)					521	03-Apr-08	22-Apr-10																				22-Apr-10, Trackwork (1130m)	
1179	CBM - Ducts	37	09-Oct-09	01-Dec-09																							CBM - Ducts	
1189	Track laying	23	02-Dec-09	15-Jan-10																							Track laying	
1199	Track Finishes	45	18-Jan-10	19-Mar-10																							Track Finishes	
1209	Road Crossings	40	18-Jan-10	12-Mar-10																							Road Crossings	
1219	Fencing	23	22-Mar-10	22-Apr-10																							Fencing	
12650	Issue Construction Drawings	0	03-Apr-08*																								Issue Construction Drawings, 03-Apr-08*	
273	OLE Foundations - Drainage	45	07-Aug-09	08-Oct-09																							OLE Foundations - Drainage	
650	Bulk Excavation - Subbase	23	06-Jul-09	06-Aug-09																							Bulk Excavation - Subbase	
SECTION 05 ROSEBURN JUNCTION TO GOGAR					741	28-Sep-07	30-Aug-10																				30-Aug-10, SECTION 05 ROSEBURN JUN	
Opening Sequence A (Airport to Haymarket)					741	28-Sep-07	30-Aug-10																				30-Aug-10, Opening Sequence A (Airport to	
05A Roseburn Junction (exc.) to Balgreen Road (inc.)					741	28-Sep-07	30-Aug-10																				30-Aug-10, 05A Roseburn Junction (exc.) to	
E & M Installations					70	21-May-10	30-Aug-10																				30-Aug-10, E & M Installations	
A4083	Access for visual inspection for E&M wayside installation (05A)	0	21-May-10																								Access for visual inspection for E&M wayside installation (05A)	
A4084	Access for E&M wayside installation (05A)	0	12-Jun-10																								Access for E&M wayside installation (05A)	
A4085	Installation of poles and building fixings	18	12-Jun-10	29-Jun-10																							Installation of poles and building fixings	
A4090	Overhead Catenary Line	43	30-Jun-10	30-Aug-10																							Overhead Catenary Line	
A4098	Access for visual inspection to cable pits for cable laying (05A)	0	22-Jun-10																								Access for visual inspection to cable pits for cable laying (05A)	
A4099	Access to cable pits for cable laying (05A)	0	14-Jul-10																								Access to cable pits for cable laying (05A)	

Activity ID	Activity Name	Original Duration	Start	Finish	2008					2009					2010					2011							
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	J	J	A	S
63	Possession 3 (16hrs)	0		17-Jan-09*																							
93	Place Beams	1	18-Jan-09	18-Jan-09																							
Run On Run Off Slabs					12	22-Jan-09	06-Feb-09																				
275	Backfill and cast slab north	8	28-Jan-09	06-Feb-09																							
34	Backfill and cast slab south	8	22-Jan-09	02-Feb-09																							
Tracklaying					11	30-Mar-09	13-Apr-09																				
44	Containment Slabs	8	30-Mar-09	08-Apr-09																							
45	Fix Rails	2	09-Apr-09	13-Apr-09																							
M & E Works					20	14-Apr-09	11-May-09																				
265	OLE Supports and Catenary over Tracks	1	11-May-09	11-May-09																							
64	OLE Supports	8	14-Apr-09	23-Apr-09																							
75	Catenary Cables	8	24-Apr-09	06-May-09																							
94	Possessions 4 (12hrs)	0		09-May-09*																							
Saughton Road Bridge (S24)					22	11-Apr-08	12-May-08																				
10820	Issue Construction Drawings	0		12-May-08*																							
121	Existing Structure	1	11-Apr-08	11-Apr-08																							
Trackwork (1690m)					301	30-Jun-08	07-Sep-09																				
12830	Issue Construction Drawings	0		30-Jun-08*																							
233	Bulk Excavation - Subbase	20	10-Mar-09	06-Apr-09																							
520	OLE Foundations - Drainage	23	07-Apr-09	11-May-09																							
949	CBM - Ducts	15	12-May-09	02-Jun-09																							
959	Track laying	23	03-Jun-09	03-Jul-09																							
989	Track Finishes	22	06-Jul-09	05-Aug-09																							
979	Fencing	23	06-Aug-09	07-Sep-09																							
Saughton Road North Tram Stop					463	05-Feb-08	01-Dec-09																				
10840	Issue Construction Drawings	0		05-Feb-08*																							
123	Civil Engineering and Building Works	65	06-Jul-09	05-Oct-09																							
248	Order REC Supply	0	20-Jul-09																								
A2080	Deliver and Install Shelter	10	01-Sep-09	14-Sep-09																							
A5158	Access for visual inspection for E&M Tram Stop installation (05B Saughton Road N	0	14-Aug-09																								
A5159	Access for E&M Tram Stop installation (05B Saughton Road North)	0	15-Sep-09																								
A5160	Install LV Power Supply and LV Power Equipment	25	15-Sep-09	19-Oct-09																							
A5170	Instal Telecom Equipment	20	20-Oct-09	18-Nov-09																							
A5180	Instal Station Control Equipment + AFC Equipment	25	20-Oct-09	23-Nov-09																							
A5190	Package Test Tramstop	5	24-Nov-09	01-Dec-09																							
Saughton road North (exc) to South Gyle Access (inc.)					386	27-Mar-08	02-Oct-09																				
Bankhead Drive Substation					152	02-Mar-09	02-Oct-09																				
256	Order REC supply from Scottish Power	0	02-Mar-09																								
266	Civil Engineering and Building Works	65	23-Mar-09	24-Jun-09																							
A2258	Access for visual inspection for E&M Substation installation (05B Bankhead Drive)	0	25-May-09																								
A2259	Access for E&M Substation installation (05B Bankhead Drive)	0	25-Jun-09																								
A5880	Power infused from Public Net available inc HV cable	0	25-Jun-09																								
A5890	Install LV Power Supply and LV Power Equipment	15	25-Jun-09	15-Jul-09																							
A5900	Installation of TPS Equipment	30	04-Aug-09	14-Sep-09																							
A5910	Install Telecom and Scada	15	25-Aug-09	14-Sep-09																							
A5920	Testing and Commissioning	14	15-Sep-09	02-Oct-09																							
Bankhead Retaining Wall (W11)					41	03-Apr-08	02-Jun-08																				
10860	Issue Construction Drawings	0		03-Apr-08*																							
127	Retaining Wall Construction	20	02-May-08	02-Jun-08																							
Broomhouse Road Bridge (S25)					1	11-Apr-08	11-Apr-08																				
125	Existing Structure	1	11-Apr-08	11-Apr-08																							
South Gyle Access Tram Stop					314	30-Jun-08	25-Sep-09																				
12870	Issue Construction Drawings	0		30-Jun-08*																							
129	Civil Engineering and Building Works	65	23-Mar-09	24-Jun-09																							
318	Order REC Supply	0	13-May-09																								