Geotechnical		Embankment and cutting drainage concept design (excluding track drainage and drainage of remaining offstreet areas)		Yes	
Geotechnical		Provision of geotechnical design parameters for structural design		Yes	
Geotechnical		Completing the Scottish trunk roads geotechnical certification process to the satisfaction of Transport Scotland		Yes	
Geotechnical	Earthworks	Cut & Fill Analysis (Roseburn Corridor)	-	Yes	/#2
Landscape Architecture		Brief and scope		Yes	
Landscape Architecture		Detailed design		Yes	
Landscape Architecture		Cross referencing of landscape requirements onto Engineering plans		Yes	
Landscape Architecture	Landscaping Street Furniture	Detailed design and approvals	30	Yes	
Landscape Architecture	Fencing Works	Layout and Details		Yes	
Landscape Architecture	Boundaries	Fencelines and fences		Yes	
Lighting	Lighting	Cycleways and paths	7///	Yes	**************************************
Lighting	Lighting	Park and Ride facilities		Yes	
Lighting	Highways / Street Lighting	Outline design and approval (including foundation design)		Yes	
Lighting	Highways / Street Lighting	Detailed design and approvals (including foundation design)		Yes	
Lighting	Highways / Street Lighting	Identify Power supplies from existing sources		Yes	
Lighting	Highways / Street Lighting	Power supply from new source		Yes	

Lighting	Highways / Street Lighting	OLE/Street lighting to accord with lighting design		Yes	
Lighting	Tramway Lighting	Outline design and approval		Yes	
Lighting	Tramway Lighting	Detailed design and approvals		Yes	
Lighting	Tramway Lighting	Power supply		Yes	
OLE	OLE	Outline design and approvals		Yes	
OLE	OLE	Detailed design - catenary	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Approvals - catenary		Yes	SDS to be instructed to manage this process and all approvals that are not in current SDS scope
OLE	OLE	Detailed design - auto tensioned	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Approvals - auto tensioned		Yes	SDS to be instructed to manage this process and all approvals that are not in current SDS scope
OLE	OLE	Building Fixing Report including design/approvals (excluding detailed wiring design and detailed building fixings locations)		Yes	To be finalised in SDS/BBS alignment workshops
OLE	OLE	Pantograph interface and performance characteristics	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Typical cross sections and detailed cross sections	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Proposal for poles, wiring arrangements and the tensioning equipment	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Technical and performance specification for the OLE	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Proposal for equipment type and method of supporting the equipment along the route, including the wall fixings	Yes		To be finalised in SDS/BBS alignment workshops

OLE	OLE	Detailed pole and wall fixing locations (easting and northing coordinates) and the detailed wiring design		Yes	Provided auto-tensioning used in city centre
OLE	OLE	Detailed wiring layout design	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Detailed survey work including building fixing location, height and condition; ground condition and pole location surveys		Yes	To be finalised in SDS/BBS alignment workshops
OLE	OLE	Depot OLE Design	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Specify forces & moments for masts	Yes		To be finalised in SDS/BBS alignment workshops
OLE	OLE	Mast foundations		Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Substation external and Distribution design and approvals		Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Substation internal and Distribution design and approvals	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Specify ducting requirements & mast to receive power supply	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Design ducting from substation to specified mast		Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Substation Civil / Building design		Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Substation Fencing design	12.00	Yes	
Power	Power Supplies	Substation Lighting design		Yes	
Power	Power Supplies	Earthing and Lightning Protection	JAMES NO.	Yes	12 September 100 100 September
Power	Stray Current	Draft stray current management position paper		Yes	Completed
Power	Stray Current	Stray current management going forward	Yes		

Power	Stray Current	Typical detail sketches of stray current track slab and structure solutions	Yes		
Power	Earthing and Bonding	Outline schematic cabling routing, earthing and bonding arrangements		Yes	To be finalised in SDS/BBS alignment workshops
Power	Earthing and Bonding	Draft system earthing policy		Yes	To be finalised in SDS/BBS alignment workshops
Power	Earthing and Bonding	Typical detail sketches of earthing and bonding solutions as required		Yes	To be finalised in SDS/BBS alignment workshops
Power	Earthing and Bonding	Detail designs of earthing and bonding solutions as required	Yes		To be finalised in SDS/BBS alignment workshops
Power	Earthing and Bonding	Selection of specific earthing & bonding components	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Determine traction power distribution equipment and principal component locations	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Specification of traction power equipment and draft typical principal component locations	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Relevant schematics and diagrams showing trackside traction equipment	W71UWXXXXV (1 -2 -1)	Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Review overhead line /cable make-up proposed	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Define overhead line/cable electrical make-up conductor and cable sections and cable materials	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Review traction supply substation positions proposed	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Define traction supply substation positions and rating	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Overhead line/cable make-up and traction supply substation positions input into Traction Power Study	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Review results of traction power study. Revise make-up and traction supply substation positions and ratings as necessary	Yes		To be finalised in SDS/BBS alignment workshops

Power	Power Supplies	Track power feeding and sectioning diagrams for main lines and Depot	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Traction supply substation schematic drawings	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Feed track bed electrical stray current control requirements to track discipline	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Feed traction power distribution design information for the depot building and track system within the Depot complex, incorporating isolator interlocking with Depot plant and the items within the general scope above, to the Overhead Line Equipment and Depot disciplines	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Work in conjunction with the Auxiliary Power discipline to specify the optimum method of supplying the Depot services power supply requirements, and feed into the appropriate Specifications		Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Traction power design report on overhead line/cable electrical make-up, traction supply substation positions, ratings, tram loadings, protection settings, load/fault discrimination, pantograph voltages and rail touch voltages.	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Draft traction supply substation equipment specification for traction supply substation procurement	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Feed overhead line / cable electrical make-up, including parallel support cabling, feeder cabling and feeder and section isoltors, to OLE discipline	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Feed traction power SCADA requirements to Systems and Communicaztions discipline	Yes		To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Specify to Scottish Power the high and low voltage supply requirements as apporpriate for traction, Depot services and substation building services	Yes		To be finalised in SDS/BBS alignment workshops
Power	LV supply	LV supply along route		Yes	
Power	Switch heating	Switch heating specification	Yes		To be finalised in SDS/BBS alignment workshops

Power	Permanent Way	Points heating	Yes		To be finalised in SDS/BBS alignment workshops
Power	Earthing and Bonding	Earthing and bonding design (of furnitire at tram stops)		Yes	
Power	Power Supplies	Depot Auxilliary Power Supplies		Yes	BBS to validate once equipment Is known
Power	Power Supplies	Depot Traction Power supplies	Yes	WALEY SELECT	
Power	Power Supplies	Power distribution equipment foundation design		Yes	To be finalised in SDS/BBS alignment workshops
Power	Power Supplies	Depot Substation and Distribution Design	Yes		To be finalised in SDS/BBS alignment workshops
Roads & Utilities	Register	Junction register		Yes	
Roads & Utilities		Horizontal layouts of roads and junctions on the tram route including pedestrian crossings according to the agreed base line (i.e. STAG incorporating Parliamentary Agreements and tie Change Notifications)		Yes	
Roads & Utilities	Ave.	Consultation with CEC & tie including preparation of realistic alternative layouts for road and junction horizontal layouts		Yes	
Roads & Utilities		Assessment of the preliminary p-way design	10.	Yes	
Roads & Utilities		Integration of the preliminary p-way design		Yes	
Roads & Utilities	K.	Integration of tramstop positioning where situated on-street		Yes	
Roads & Utilities		Preparation of cross sections along the on-street sections demonstrating available lane widths and permitted clearances		Yes	
Roads & Utilities		Preparation of cross sections detailing typical carriageway construction, footways construction, crossfalls, kerb heights and OLE pole locations (excluding foundation details)		Yes	
Roads & Utilities		Road markings		Yes	
Roads & Utilities		Prelim pedestrian and cycleway requirements for on-street areas and road crossings including Roseburn Corridor		Yes	

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Roads & Utilities		Assessment of existing traffic signal controller condition and capability	Yes		To be part of UTC provisional sum
Roads & Utilities		Assessment of existing urban traffic control (and proposed UTMC) system capability	Yes		To be part of UTC provisional sum
Roads & Utilities		Preliminary layout of depot access road		Yes	
Roads & Utilities		Road safety Audit Stage 1		Yes	
Roads & Utilities		Road safety Audit Stage 2		Yes	
Roads & Utilities		Road safety Audit Stage 3	Yes		SDS to support BBS
Roads & Utilities		Determination of the preliminary extent of works by assessment of the preliminary pway vertical alignment against existing ground levels, preliminary vertical design at discrete locations only, and assessment of current road condition		Yes	
Roads & Utilities	Roads Survey	Roads Condition Survey	Yes		BBS carrying out under tie change
Roads & Utilities	TRO	Preparation of traffic management plan based on preliminary roads design		Yes	
Roads & Utilities	TRO	Identification of permanent traffic management measures required along the route		Yes	
Roads & Utilities	TRO	Preparation of TRO plans and associated technical schedules for submission to Dundas & Wilson and CEC including revocations		Yes	
Roads & Utilities	TTRO	Review and design draft remporary traffic management arrangements on the route necessary for construction		Yes	
Roads & Utilities	TTRO	Identify existing and possible temporary traffic diversion routes on the wider road network including modifications required to infrastructure, bus stops, parking and loading.	Yes		
Roads & Utilities	TTRO	Consult with bus companies, police, fire department, CEC etc through the TTRO working group	Yes		
Roads & Utilities	TTRO	Prepare draft temporary traffic management drawings and TTRO plans and technical schedule for submission to CEC		Yes	
Roads & Utilities	Utilities	Define the utility apparatus diversion design parameters		Yes	Not Infraco Scope

Roads & Utilities	Utilities	Develop combined utility drawings incorporating the information received from tie and the ground penetrating radar survey		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Identification of potential conflicts within 2m of the swept path		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Reference each conflict on the plan drawings and recording information on oa schedule		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Catagorisation of potential apparatus conflicts within a pre- agreed envelope outside the swept path		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Design for utility apparatus diversion or protection within the agreed utility clearance zone (i.e. swept path + 0.45m & 1.2m depth)		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Liaise with each utility owner to obtain actual details on size, material and invert level of all identified conflicts and to discuss proposed apparatus diversions or protections		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Assess potential future utiliy maintenance work problems (safe working widths and traffic management implications)		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Utilities Trial Pits to inform design		Yes	Not Infraco Scope
Roads & Utilities	Utilities	Identification of environmental/archaelogical 'hot spots'		Yes	
Roads & Utilities	Roads Alignment	Outline Approval		Yes	
Roads & Utilities	Roads Alignment	Detailed design and approvals		Yes	
Roads & Utilities	Highways Junctions	Outline Approval		Yes	
Roads & Utilities	Highways Junctions	Traffic Flows / Priorities -Detailed Design		Yes	
Roads & Utilities	Highways Junctions	Traffic Signalling - Staging & Phasing		Yes	
Roads & Utilities	Highways Junctions	Traffic Signalling - Detailed Design for Hardware	Yes		

Roads & Utilities	Highways Junctions	Traffic Signalling - Capability of Signal Controllers	Yes		
Roads & Utilities	Highways Junctions	Traffic Signalling - Analysis & Settings - detailed design	Yes		
Roads & Utilities	Highways Junctions	Traffic Signalling - Analysis & Settings - in-service adjustment with trams	Yes		CEC would wish this to be carried out by BBS during the first 6 months of operation - would be a tie change if CEC confirm
Roads & Utilities	Highways Junctions	Traffic Signalling - Analysis & Settings - in-service adjustment without trams	Yes		
Roads & Utilities	Highways Junctions	Urban Traffic Control (UTC) -Detailed Design and interface between UTC & Signals and definition of required UTC functionality (excluding specification of UTC upgrade where not triggered by introduction of the tram scheme)	Yes		Limited to the Interface, any UTC functionality is not part of Infraco scope
Roads & Utilities	Highways Junctions	Urban Traffic Control (UTC) -Detailed Design and interface	Yes		Limited to the road traffic and tram signals
Roads & Utilities	Highways Junctions	Detailed junction layout design and approvals		Yes	
Roads & Utilities	Pavement Design	Detailed design and approvals		Yes	
Roads & Utilities	Pavement Design	Calculation of Residual Design Life for overlaid existing pavements		Yes	
Roads & Utilities	Safety Fences and Barriers	Detailed design and approvals		Yes	SDS scope as part of overall track design - does not depend on choice of track form
Roads & Utilities	Handrails	Detailed design and approvals		Yes	SDS scope as part of roads design
Roads & Utilities	Road Furniture excl Traffic Lights	Detailed design and approvals		Yes	SDS scope as part of roads design

Roads & Utilities	Traffic Lights	Location and detailed design and approvals for Hardware, Phasing & Functionality		Yes	
Roads & Utilities	Traffic Lights	Power Supply Design	Yes		SDS to design from arrival point of power from supplier to signal
Roads & Utilities	Traffic Lights	Cabling and ducting		Yes	
Roads & Utilities	Tramway Furniture	Detailed design		Yes	SDS scope as part of tram stop design
Roads & Utilities	Tramway Furniture	Power Supply Design	Yes		SDS to design from arrival point of power from supplier to tramstop furniture
Roads & Utilities	Tramway Furniture	Cabling and ducting		Yes	300 00 00 00 00 00 00 00 00 00 00 00 00
Roads & Utilities	Road Signs and Markings	Detailed design and approvals		Yes	
Roads & Utilities	Footpaths	Detailed design and approvals	-	Yes	The state of the s
Roads & Utilities	Cycle paths	Detailed design and approvals	A STATE OF THE STA	Yes	
Roads & Utilities	Highways Pedestrian Crossings	Detailed design and approvals		Yes	
Roads & Utilities	Non-Tram Ducts / Crossings	Detailed design and approvals. PB to supply tram related duct requirements and cross sections. Coordination and spatial planning to be undertaken by Halcrow.		Yes	
Roads & Utilities	Ducts / Crossings	Detailed design and approvals for traffic signalling.		Yes	

Roads & Utilities	Ducts / Crossings	Incorporate / coordinate all ducting on Engineering Plans	Yes	
Roads & Utilities	Hard Landscaping	Standard Drawings, Layout Drawings and approvals for surface finishes in highways areas	Yes	
Roads & Utilities	Hard Landscaping	Standard Drawings, Layout Drawings and approvals for surface finishes in tramway areas	Yes	
Roads & Utilities	MX Moss Model	Review of Client's MX Road Model	Yes	
Roads & Utilities	MX Moss Model	Roads Alignment	Yes	
Roads & Utilities	Earthworks	Detailed design and approvals (Related to Highways)	Yes	
Roads & Utilities	Earthworks	Special drainage details and approvals (Related to Highways)	Yes	
Roads & Utilities	Earthworks	Ground improvement / solum design for tram logging (if required)	Yes	
Roads & Utilities	Existing Utilities	Utilities Diversion Works design	Yes	nev median
Roads & Utilities	Existing Utilities	Design of protection works to existing utilities	Yes	1337 - State
Roads & Utilities	Drainage	Design of all new drainage works associated with highways works	Yes	
Roads & Utilities	Drainage	Design of connections of Tramway drainage to highways drainage	Yes	***********
Roads & Utilities	Drainage	Design of connections of new drainage to existing drainage - local connections	Yes	1
Roads & Utilities	Drainage	Design of connections of new drainage to existing drainage - remote runs to connections	Yes	-2001
Roads & Utilities	Traffic Management	Local and wide area	Yes	
Roads & Utilities	Footway	Design and approvals for footway along Roseburn Corridor	Yes	
Roads & Utilities	Earthworks	Cut & Fill Analysis (on street)	Yes	
Roads & Utilities		Traffic modelling for local and wide-area traffic models	Yes	
Roads & Utilities		Design of sub-station access roads from the existing road layout to the sub station compound but excluding the compound layout	Yes	
Roads & Utilities		Design of Park and Ride facilities	Yes	-0%1

Roads & Utilities		Reinstatement / making good car parks (e.g. Airport Hilton Hotel, Morrison's Supermarket at the Gyle and First ScotRail car park at Haymarket)	Yes
Roads & Utilities	WWW - 12	Reinstatement / making good Haymarket Station forecourt including taxi-ranks and bus stop	Yes
Roads & Utilities		Relocation of major existing on-street infrastructure, inc. listed monuments	Yes
Roads & Utilities		Drainage surveys to establish existing drainage and invert levels through Roseburn corridor. Co-ordination with CEC	Yes
Roads & Utilities		Design of drainage · Design of drainage for off-street track sections (e.g. the Roseburn Corridor) including identification of outfalls and obtaining outfall agreements with SEPA	Yes
Roads & Utilities	Drainage	Drainage survey (including invert levels if required) - Roseburn Corridor	Yes
Run Time	Runtime modelling		Yes
Run Time	Runtime modelling	O&TP Simulations used to verify the design concepts of track alignment, tram design, operating principles, traction power network principles, tramstop positioning and design, turnback/terminus facilities	Yes
Run Time	Runtime modelling	Timetable development following agreement of the runtime simulations principles for fleet sizing and layover estimation	Yes
Run Time	Runtime modelling	Simulation of the Track design during Preliminary Design Phase to ensure compliance with the principles of Operation	Yes
Run Time	Runtime modelling	Simulation of the complete Tramway for infrastructure, operations and traction power network design during the detailed design phase to verify the PB detailed design	Yes
Run Time	Operating Input	Review of operational issues affecting infrastructure design e.g. operational speed limits, timetables etc.	Yes
Supervisory, Control & Communications	Tram Signalling	Outline design and approvals	Yes

Supervisory, Control & Communications	Tram Signalling	Detailed design and approvals	Yes		
Supervisory, Control & Communications	Telecomms, Radio	Outline design and approvals		Yes	
Supervisory, Control & Communications	Telecomms, Radio	Detailed design and approvals	Yes		
Supervisory, Control & Communications	CCTV Systems	Outline design and approvals		Yes	CCTV coverage specification by SDS.
Supervisory, Control & Communications	CCTV Systems	Detailed design and approvals	Yes		30000000000000000000000000000000000000
Supervisory, Control & Communications	SCADA Systems	Outline design and approvals		Yes	
Supervisory, Control & Communications	SCADA Systems	Detailed design and approvals	Yes	S - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
Supervisory, Control & Communications		Tram position and detection system	Yes		
Supervisory, Control & Communications	Passenger Info	Passenger information display system	Yes		
Supervisory, Control & Communications	Telecomms	Telephone network	Yes		

Supervisory, Control & Communications	Passenger Info	Public address system	Yes		
Supervisory, Control & Communications	Radio	Operational radio system	Yes		
Supervisory, Control & Communications	Passenger Info	Passenger help/passenger emergency help points system	Yes		
Supervisory, Control & Communications	CCTV Systems	Closed circuit television system	Yes		
Supervisory, Control & Communications		Define loop location	Yes		To be finalised in SDS/BBS alignment workshops
Supervisory, Control & Communications		Detailed design of loop equipment and system functionality	Yes	OFFICE	
Supervisory, Control & Communications		Supervisory control and data acquisition	Yes		
Supervisory, Control & Communications		Operational data network	Yes		
Supervisory, Control & Communications		Depot control room - lighting, windows, building services		Yes	
Supervisory, Control & Communications		Depot equipment room	Yes		

Supervisory, Control & Communications	Radio	Tramborne supervisory control and communications equipment	Yes		
Supervisory, Control & Communications	CCTV Systems	CCTV Design Specification		Yes	Included in technical specification
Supervisory, Control & Communications	PA System	PA Acoustic Specification		Yes	Included in technical specification
Supervisory, Control & Communications	Depot CCTV	Depot CCTV for operations within Depot	Yes		to be monitored in OCC only
Supervisory, Control & Communications	Security	Locations and design of security systems within Depot		Yes	
Supervisory, Control & Communications	Security	Locations and design of communication systems within Depot	Yes		
System Assurance		To ensure, and provide a record of, assurance that the ETN has achieved an acceptable level of system safety, reliability, availability and maintainability performance	Yes		
System Assurance		To ensure all ETN requirements are met through a controlled process of Validation & Verification (V&V)	Yes		Working from SDS baseline and system
System Assurance	100000000000000000000000000000000000000	Occupational Health and Safety	Yes	**************************************	
System Assurance	and the same	Project risk	Yes		
System Assurance		Safety risk during construction	Yes	-	
System Assurance	RAM	Reliability, availability, maintainability studies - definition		Yes	Participant of Science Control o

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System Assurance	RAM	Reliability, availability, maintainability studies - validate	Yes		
Topographical Survey	Topographical Survey	Review Client's Data for Design Purposes		Yes	
Topographical Survey	Topographical Survey	Brief for any additional Topographical Survey required		Yes	
Topographical Survey	Topographical Survey	Scope for procurement of any additional Topographical Survey required		Yes	
Track	MX Moss Model	Review of Client's MX Model		Yes	
Track	MX Moss Model	Track Alignment (vertical & horizontal)		Yes	April 10 10 10 10 10 10 10 10 10 10 10 10 10
Track	MX Moss Model	Depot track layout		Yes	
Track	Permanent Way	Plain Line -Detailed design and approvals		Yes	
Track	Permanent Way	S&C - Detailed design and approvals		Yes	
Track	Permanent Way	Trackbed civil foundation design and approval		Yes	
Track	Permanent Way	Tramway drainage design and approvals (off-street running including Roseburn corridor)		Yes	
Track	Permanent Way	Surface finishes in hard landscaped areas - Layout and standard details only in tramway area		Yes	
Track	Permanent Way	Point machines, control and indication	Yes		
Track	Permanent Way	Typical tramway cross sections		Yes	
Track	Permanent Way	Wheel/rail interface study		Yes	
Track	Permanent Way	Wheel/rail interface management in ongoing design	Yes		
Track	Permanent Way	Assumed design tram vehicle study		Yes	Completed
Track	Permanent Way	Structure gauge and clearance		Yes	

Track	Permanent Way	Specification of the provision and installation of signs and markers related to speed restrictions; track location, distance and geometry; track-infrastructure spatial relationship; tram vehicle fouling points; safety		Yes	
Track	Permanent Way	Tramway categorisation/tramway definitions and extents		Yes	######################################
Track	Permanent Way	Trackwork specification	Yes		
Track	Permanent Way	Tram vehicle arrestment devices, ie measures to prevent trams running off track at termini	Yes		
Track	Permanent Way	Depot track layout with allowance for (but no design of) civil engineering structures (bridges, retaining walls etc) buildings, plant, internal roads, hard standings, car parks, approach tracks and access roads for road vehicles and tram vehicle deliveries.		Yes	
Track	Permanent Way	Track alignment - vertical & horizontal		Yes	- The state of the
Track	Permanent Way	Rheda City track form design including rail, chamber elements, rail fastening system, sleepers, cover layer and track supporting layer and the stiffness of that track form	Yes		
Track	Permanent Way	Civil engineering design (including drainage) to accommodate the Rheda City trackform		Yes	
Track	Permanent Way	Specification of surface treatment for a given CBR		Yes	No. 31 103 103 103 103 103 103 103 103 103
Track	Permanent Way	Specification of surface finish and/or cover layer		Yes	*** A THE TEXT TO SEE THE TEXT TO SE THE TEXT
Track	Drainage	Specification of Drainage of grooved rails and drainage within the trackform (e.g. ballasted & grasstrack)	Yes		
Track	Permanent Way	S&C outline design (geometry and components)	18/66	Yes	
Track	Permanent Way	S&C detailed design components	Yes	, , , ,	WALL SEASON MANUEL SEASON MANU
Track	Drainage	Design of connections of new drainage to existing drainage - local connections	514	Yes	AND THE CONTRACT OF THE CONTRA
Track	Drainage	Design of connections of new drainage to existing drainage - remote runs to connections		Yes	
Track		Specification of switch heating	Yes		721m2
Track		Specify number and size of ducts	Yes		

Track	1	Ducting layout and details		Yes	
Track		Transition Zones	Yes		
Track	12///27	Specify cant limits for track	Yes		
Track		Raods geometry to accommodate track		Yes	
Track		Rail section schedule	Yes		
Track	The state of the s	Schedule of geometry speed restrictions		Yes	
Track	Tig .	Input to Bill of Quantities (produced by Corduroy)	-	Yes	Completed
Track	S&C equipment	Point motors, detectors, indicators, controls	Yes		
Track	Drainage	Drainage for ballasted track		Yes	
Track	Permanent Way	Depot track layout and details		Yes	
Track	Permanent Way	Depot track foundation and details		Yes	
Track	Permanent Way	Depot track drainage and details	WALL A	Yes	
Track	Permanent Way	Identification of areas sensitive to Noise & Vibration		Yes	
Track	Permanent Way	Specification of floating slab (if necessary)	Yes	-	
Track	Permanent Way	Design of floating slab (if necessary)	Yes		
Tram Stops	Stops	Haymarket		Yes	
Tram Stops	Stops	Shandwick Place		Yes	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
Tram Stops	Stops	Princes Street		Yes	
Tram Stops	Stops	St Andrews Square (South St David St)	100000	Yes	
Tram Stops	Stops	St Andrews Square (North St Andrew St)		Yes	300
Tram Stops	Stops	Picardy Place		Yes	
Tram Stops	Stops	McDonald Place		Yes	
Tram Stops	Stops	Balfour Street). ::[=::::::::::::::::::::::::::::::::::	Yes	
Tram Stops	Stops	Foot of the Walk		Yes	
Tram Stops	Stops	Constitution Street		Yes	
Tram Stops	Stops	Ocean Drive	The second	Yes	
Tram Stops	Stops	Ocean Terminal		Yes	
Tram Stops	Stops	Newhaven Road		Yes	
Tram Stops	Stops	Lower Granton Road		Yes	
Tram Stops	Stops	Granton Square		Yes	
Tram Stops	Stops	Caroline Park		Yes	

Tram Stops	Stops	West Granton Access		Yes	
Tram Stops	Stops	Crewe Toll		Yes	
Tram Stops	Stops	Western General Hospital (Telford Road)		Yes	
Tram Stops	Stops	Graigleith		Yes	
Tram Stops	Stops	Ravelston Dykes		Yes	
Tram Stops	Stops	Roseburn	COS SOUTH	Yes	
Tram Stops	Stops	Murray field		Yes	
Tram Stops	Stops	Balgreen Road		Yes	
Tram Stops	Stops	Saughton Road North		Yes	
Tram Stops	Stops	South Gyle Access		Yes	200 A SECTION OF THE PROPERTY
Tram Stops	Stops	Edinburgh Park South		Yes	
Tram Stops	Stops	Edinburgh Park		Yes	
Tram Stops	Stops	Gyle	1 - 22-11-12	Yes	
Tram Stops	Halt	Depot Halt (Staff only)		Yes	
Tram Stops	Stops	Gogarburn		Yes	
Tram Stops	Stops	Ingliston Park and Ride		Yes	2
Tram Stops	Stops	Airport		Yes	
Tram Stops	Drawings	Layout Drawings and approvals		Yes	
Tram Stops	Civils Design	Detailed civil, structural and architectural design and approvals		Yes	10.000
Tram Stops	Drawings	Suppliers' & Manufacturers' Drawings	Yes		BBS as part of procurement of the shelter and stop equipment
Tram Stops	Drawings check	Suppliers' and Manufacturers' Drawings Check, Review and Comments	Yes		Not needed as a separate activity
Tram Stops		Detailed component selection tram stop furniture	Yes		BBS as part of procurement of the shelter and stop equipment
Tram Stops	LV Power	LV Power Supply design		Yes	
Tram Stops	Passenger Info	Provision for Passenger Information system		Yes	To be finalised in SDS/BBS alignment workshops
Tram Stops	Passenger Info	Component selection Passenger Information system	Yes		BBS as part of procurement of the shelter and stop equipment

Tram Stops	Passenger Info	Integrated Fare Collection System		Yes	
Tram Stops		Disability Discrimination Act	1000	Yes	
Tram Stops		Pedestrian Crossings between platforms and access to platforms from public highway.		Yes	
Tram Stops	-110	Platform Design		Yes	
Tram Stops		Platform finishes		Yes	
Tram Stops	100	Tactile surfacing		Yes	
Tram Stops	SOURCE IN SOURCE	Guardrails c/w handrails and tapping rails		Yes	
Tram Stops		Procurement of Shelters based on SDS specification	Yes		BBS as part of procurement of the shelter and stop equipment
Tram Stops		Procurement of Shelter seating based on SDS specification	Yes		BBS as part of procurement of the shelter and stop equipment
Tram Stops	2000	Shelter signage		Yes	
Tram Stops		Shelter drainage		Yes	
Tram Stops	SWARFE TABLE	Platform lighting	A	Yes	
Tram Stops		Platform drainage		Yes	
Tram Stops		Stop names/signage		Yes	
Tram Stops	Subject Control of the Control of th	Emergency lighting (as appropriate)		Yes	
Tram Stops		Stop Equipment cabinet	Yes		BBS - in line with other equipment cabinets
Tram Stops		Cable ducts and draw pits		Yes	
Tram Stops		Procurement of Waste Bins based on SDS specification	Yes		BBS as part of procurement of the shelter and stop equipment
Tram Stops		Internally illuminated logo	S. S. SENNAMINE	Yes	
Tram Stops		Structure to location map		Yes	
Tram Stops		Structure to information maps	A1	Yes	
Tram Stops	XXXII XXXXX	Staff toilets		Yes	
Tram Stops	53100	All necessary facilities for the Mobility impaired		Yes	Av a 5AV
Tram Stops		Secure Cycle Parking - at limited stops only	720 4000	Yes	
Tram Stops		Landscaping/roads works		Yes	
Tram Stops	And was	Ducting/cable Layout and details		Yes	

Tram Stops	Civils	Access ramps requiring civil engineering or geotechnical design input		Yes	
Tram Stops	Civils	Accomodation for but not the design of - CCTV, PA system, Passenger Information Displays, Clocks, Passenger help points, OLE supports		Yes	
Tram Stops	Civils	Design of civils to support CCTV, PA system, Passenger Information Displays, Clocks, Passenger help points, OLE supports		Yes	
Tram Stops	Civils	Provision within the Tramstop design for the installation of Ticket Vending Machines (TVM), inclusive of foundations, cable ducting (for power, control, indication and alarm cabling) from the TVM to the associated Stop Equipment Cubicles		Yes	
Tram Stops	Tramstop furniture	Tramstop furniture footings		Yes	
Tram Stops	Stop access	Design of footpath approaches to tramstops		Yes	
Trams	Tram vehicle	Performance Specification			
Trams		Review and update of Tram Requirement Specification			
Trams	3/10/20	Review and development of Tram Interface Specification			
Trams		Review of other Requirement Specifications and supporting documents as required			
Trams		Develop Tram delivery plan			
Trams		Develop Tram maintenance plan			= = = = = = = = = = = = = = = = = = = =
Trams		Develop Tram spares plan			
Trams		Develop Tram life-cycle costing plan	77		
Trams		Develop Tram design approval/factory inspection/testing witnessing plan		\$===0017	
Trams		Support to tie InfraCo Milostone and Testing plan	Yes	Yes	Identified separately in construction support proposal
Trams	3.0000000000000000000000000000000000000	Develop Tram Supply Agreement document			
Utilities	Utilities	Define the utility apparatus diversion design parameters		Yes	Not Infraco Scope

Utilities	Utilities	Develop combined utility drawings incorporating the information received from tie and the ground penetrating radar survey			Not Infraco Scope
Utilities	Utilities	Identification of potential conflicts within 2m of the swept path			Not Infraco Scope
Utilities	Utilities	Reference each conflict on the plan drawings and recording information on oa schedule			Not Infraco Scope
Utilities	Utilities	Catagorisation of potential apparatus conflicts within a pre- agreed envelope outside the swept path			Not Infraco Scope
Utilities	Utilities	Preliminary design for utility apparatus diversion or protection			Not Infraco Scope
Utilities	Utilities	Liaise with each utility owner to obtain actual details on size, material and invert level of all identified conflicts and to discuss proposed apparatus diversions or protections			Not Infraco Scope
Utilities	Utilities	Assess potential future utiliy maintenance work problems (safe working widths and traffic management implications)			Not Infraco Scope
Utilities	Utilities	Identification of environmental/archaelogical 'hot spots'.			
Utilities	Utilities	Utilities Trail Pits			Not Infraco Scope
	Clearance	Platform edge string - tram clearance		Yes	· ·
-0.21	Documentation	Requirement specs for training, ops and maint documentation in respect of Structures and Roads.		Yes	
	Retaining Walls	Retaining walls at Depot		Yes	
	Bridges/Ret. Walls	Ground modelling / ground water modelling requirements.		Yes	
-	Earthworks	Cut & Fill Analysis (off street, excl Roseburn Corridor)	Yes	-	SDS - as they have carried out this work since this was last circulated
4-2	Track support	Track formation design		Yes	
100	Base Plans	General Arrangement Drawings (1:500) and approvals		Yes	The state of the s
- 000	Demolition	Verify extent of demolition works required		Yes	

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	Demolition	Demolition Method Statement and Temporary Works designs	Yes		
	Demolition	Design of permanent works to any remaining party walls and the like.		Yes	Only as identified in Infraco Scope
98	Drainage	Flow studies of surrounding areas		Yes	
	Drainage	Design of drainage diversion works	X = 24 11000	Yes	
	Drainage	Design of protection works to existing drainage (including Roseburn Corridor)		Yes	
- 11 W	EMI / EMC	Study, policy, management		Yes	
	Technology Reviews			Yes	
2012-00-00		Off street furniture including lamp posts		Yes	
		Parking, loading, access review/provision		Yes	
000000000000000000000000000000000000000	Noise	Design of mitigation measures		Yes	
	Vibration	Design of mitigation measures		Yes	
	NR Survey	Network Rail Asset Survey		Yes	
	Radio	Radio Survey		Yes	
	Photo Survey	Photographic Survey		Yes	
	EMC	EMC Survey		Yes	Completed
1,258	EMC	EMC Strategy		Yes	Completed
	EMC	EMC Plan	Yes		
	EMC	EMC Testing	Yes		
	Site Clearance	Layout Drawings		Yes	
	Earthing & Bonding	E&B Plan	Yes		
	Earthing & Bonding	E&B Design	Yes		
	Earthing & Bonding	E&B Testing	Yes		

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	Safety	System Safety Strategy		Yes	SDS to complete in relation to SDS design then maintained by Infraco until handed to operations
-0.27		System Safety Management Plan		Yes	
	RAM	System RAMS Analysis		Yes	
		System RAMS Plan		Yes	
	V&V	System Verification & Validation Plan		Yes	
Construction Support	-	Quality assurance of construction of civils to design	72	Yes	-
Construction Support	181	Quality assurance of installation of systems to design	Yes	TH()	-
Construction Support		Additional design to overcome unforeseen ground conditions, utilities etc		Yes	
Construction Support		Additional design and other responses to Contruction Stage TQs		Yes	

APPENDIX PART 5

Disclosure Statement

(with attachments)

Part A - SDS Disclosures

With regard to clause 4.2.2 (a) to (g) of the Agreement the SDS provider confirms the following:

4.2.2 (a) the SDS Provider is not aware having made due and diligent enquiry, of any breaches by **tie** of the SDS Agreement and there is no dispute or claim subsisting nor are there any circumstances existing which might give rise to any dispute or claim relative to the SDS Agreement;

NO DISCLOSURE

4.2.2 (b) the information set out at Appendix Part 4 (*Design and Deliverable Status*) is true, complete and accurate in all respects and is not misleading;

NO DISCLOSURE

- 4.2.2 (c) the Deliverables completed by the SDS Provider to the date of this Agreement and listed in Appendix Part 4:
 - (A) are in all respects in compliance with the SDS Agreement and, without prejudice to the foregoing generality:
 - (i) the Tram Legislation;

NO DISCLOSURE

(ii) all applicable Law and Consents;

NO DISCLOSURE save where the Deliverables completed to date do not comply with the provisions of the Public Realm Design Workbook (other than existing requirements set out in the Tram Design Manual and the City of Edinburgh Council Standards for Streets) referred to in a letter dated 10 April from

CEC to **tie**, a copy of which was provided to the SDS Provider by CEC.

(iii) the Parliamentary Undertakings;

NO DISCLOSURE

 (iv) the Environmental Statements, and all other applicable environmental regulations and requirements;

NO DISCLOSURE

(iv) will permit compliance with the Code of Construction Practice; and

NO DISCLOSURE

(vi) the Third Party Agreements (and in the case of SRU the draft Third Party Agreement);

NO DISCLOSURE save that the Deliverables may not comply with the section 75 agreements set out as the eight items under the heading SECTION 75 AGREEMENTS of Appendix Part 6.

(B) is so as to enable the Edinburgh Tram Network on completion of construction, testing and commissioning to be sited (and thereafter be operated and maintained) within the limits of deviation under the Tram Legislation save as expressly indicated in Appendix Part 9,

NO DISCLOSURE

4.2.2 (d) the design as fully developed pursuant to the SDS Agreement following the date of this Agreement shall continue to meet the requirements of Clause 4.2.2(c)(A) and (B) and on the basis of the standard of reasonable skill and care exercised pursuant to clause 3.2 of the SDS Agreement that the designs and Deliverables completed prior to the date of this
 Agreement comply with the Employer's Requirements

Upon completion of the work entailed to resolve the misalignments (as referred to in Clause 4.6).

(ii) the designs and Deliverables as will be completed after the date of this Agreement will comply with the Employer's Requirements,

NO DISCLOSURE

provided that in circumstances where compliance with the Employer's Requirements is dependant upon further design development to be undertaken by the Client (and which is out with the Services provided by SDS), the SDS Provider's obligation pursuant to this Clauses 4.2.2(d) shall be limited to having produced or producing designs and Deliverables that are capable of allowing Infraco to develop a design which is compliant with the Employer's Requirements.

4.2.2 (e) save in respect of any Consents which are the responsibility of tie in terms of Clause 19 of the Infraco Contract, the Consents listed at Appendix Part 2 (Consents Programme) are all the Design Stage Consents which are required to enable the Edinburgh Tram Network to be procured, constructed, installed, tested and commissioned, and thereafter operated and maintained in accordance with the Infraco Contract;

NO DISCLOSURE

4.2.2 (f) it has received no Client Notice of Change or any other instruction from tie to vary any term of the SDS Agreement (whether pursuant to Clause 15 and 29.2 of the SDS Agreement or otherwise) and, subject to Clause 9.1 below, it has agreed no variation, alteration of the SDS Agreement; and

NO DISCLOSURE

4.2.2 (g) no Change in Law has come into effect or is anticipated to come into effect which would have a material adverse impact on the Deliverables completed or to be completed pursuant to the SDS Agreement

CPH/CPH/310299/15/19049225.2

NO DISCLOSURE

With regard to clause 5.2 of the Agreement the SDS provider confirms the following:

5.2 tie warrants to the Infraco that there is no dispute or claim subsisting (save to the extent that the same are fairly disclosed in the Disclosure Statement), nor are there any circumstances existing which might give rise to any dispute or claim by the SDS Provider against tie relative to the SDS Agreement

NO DISCLOSURE

Part B - tie Disclosures

In respect of the tie warranties under this Agreement (specifically Clause 9.2), tie discloses the attached letter in terms of variations to the SDS Agreement for Key Personnel.					
CPU/CPU/310200/15/19040225.2					



Steve Reynolds
Parsons Brinckerhoff,
Edinburgh Tram Network Project,
Citypoint,
65 Haymarket Terrace,
Edinburgh.
EH12 5HD

Our Ref: DEV-COR-812

Date: 2nd October 2007

Dear Steve,

Edinburgh Tram Network

System Design Services (SDS): Key Personnel and Other Staff

Further to discussions at the Critical Issues meeting of 28th Sept 2007, I confirm that the attached list of personnel are those we require (as a minimum) to be retained on the project, dedicated to the production of the design deliverables and until their completion. The list indicates both personnel to be retained at tie offices and also those working on the project but based at other locations.

We note that an updated Organisational Chart is to be issued shortly and it is our expectation that our requirements will be reflected in respect of the attached list of personnel, in compliance with *Clause 8* of The Agreement. Can you please let me have, as soon as possible, the Org Chart both as hard copy and odf

If you wish to discuss this list please contact me as soon as possible. In any case we might need to discuss the normal locations of those named people.

Yours sincerely

Tony Glazebrook

cc Matthew Crosse, Geoff Gilbert, Steven Bell

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Regizered in Scotland No. 230949 at City Chambers, High Street, Edinburgh EHT 114.

ETN

SYSTEM DESIGN SERVICES (SDS)

KEY PERSONNEL and STAFF - DETAILED DESIGN PHASE

Project Management and Engineering Staff

Steve Reynolds (at least 4 days perweek) - PD [Edinburgh]

Jason Chandler-PM [Edinburgh]

Chris Mason - Engineering Manager [Edinburgh]

Kate Shudall - Section Design Manager [Edinburgh]

Scott Ney-Section Design Manager [Edinburgh]

Carle Jones - Chief Plenner [Edinburgh]

Simon Price-EVIC

Chris Lee-System Safety

Martin Conroy - NR llalson

Tom Kelly [Edinburgh]

Bruce Ennion [Edinburgh]

Brian McCreer (Halcrow, MUDFA) [Edinburgh]

Chris Reid (Halcrow, MUDFA) [Edinburgh]

Tony Bishop - Interface Management

Malcolm Curry-System Integration

Tony Goodyear

Engineering Section Heads

Track-Tony Jory

Structures - Colin Walker (Halcrow) and Paul McQuade (PB)

Roads-M Bisset and Jim Guild

Depot & Tramstops-lan Brown

SCC-John Christofferson

Traffic Modelling - Warren Murphy

System Safety-Angus Park

OLE-Farhad Janani

Traction power etc - Dave Pennington

Stray current etc-Les Brunton

MLIDFA - David Pluse

APPENDIX PART 6

Third Party Agreements

AGREEMENTS TO BE CONCLUDED

- 1. Plot 108 SRU to be concl.
 - 1.1 Draft Minute of Agreement between The City of Edinburgh Council and Scottish Rugby Union plc.
 - 1.2 Letter to Faber Maunsell from Carl Bro dated 19 December 2005.

2. Stanley Casinos - to be concluded

2.1 Draft Minute of Agreement between The City of Edinburgh Council and Stanley Casinos Limited.

ETL1 AGREEMENTS

3. ADM Milling - Chancelot Mill at Western Harbour

- 3.1 Minute of Agreement between The City of Edinburgh Council and ADM Milling Limited dated 23 January 2006.
- 3.2 Associated Documents objection letter, plan and draft Agreement.

4. BAE System - Selex - Crewe Toll to Drylaw

- 4.1 Minute of Agreement between The City of Edinburgh Council and Selex Sensors and Airborne Systems Limited dated 20 and 25 January 2006.
- 4.2 Associated Documents objection letter, plans, draft Agreement.

5. Crown Estate Commissioners - Lower Granton Rd

5.1 Associated Documentation:

Letter to Alan Menzies, Crown Estate Solicitor, dated 26 March 2004.

Internal emails dated 19 April, 21 and 22 May 2007.

Objection letter.

6. Forth Ports - Constitution St to Granton Harbour

- 6.1 Minute of Agreement between The City of Edinburgh Council and Forth Ports PLC dated 15 February 2006.
- 6.2 Associated Documents: Objection Letter, Plans, Code of Construction Practice, draft Agreements.

7. Holyrood-Elphinstone Group - Granton Harbour

- 7.1 Minute of Agreement between The City of Edinburgh Council and Holyrood Services Limited dated 17 December 2004.
- 7.2 Associated Documents: Objection Letter, Plan, unsigned agreement.

8. Ocean Terminal - Ocean Dr

- 8.1 Minute of Agreement between The City of Edinburgh Council and Ocean Terminal Limited dated 10 and 15 February 2006.
- 8.2 Associated Documents: Objection Letter, Plan, draft agreement, CoCP.

9. Port Greenwich - Secondsite Agreement - West Granton Road

9.1 Minute of Agreement between The City of Edinburgh Council, National Grid Property Holdings Limited, Port Greenwich Limited and WM Morrison Supermarkets Plc, dated 28 February 2006 (not fully executed).

10. Royal Yacht Britannia - Ocean Terminal

- 10.1 Minute of Agreement between The City of Edinburgh Council and The Royal Yacht Britannia Trust dated 14 and 23 February 2006.
- 10.2 Associated Documents: Objection Letter, Plan, draft agreement, CoCP.

ETL 1 + 2 AGREEMENTS

11. Caledonian Ale House - Haymarket

11.1 Grant offer to the City of Edinburgh Council for Purchase of The Caledonian Ale House and 27 Roseburn Street dated 26 October 2005.

- 11.2 Schedule of Condition referred to in the lease between The City of Edinburgh Council and David Elliot.
- 11.3 Associated Documents: unsigned lease, 2 objection letters, withdrawal letter, completion statement, valuation report.

12. CGM Edinburgh Ltd - Haymarket

- 12.1 Minute of Agreement between The City of Edinburgh Council and CGM (Edinburgh) Limited with the Consent of the Governor and Company of the Bank of Scotland dated 13 May 2005, 16 May 2005 and 19 May 2005.
- 12.2 Associated Documents: 2 objection letters, plans 1, 2 and 3A.

13. The Institute of Chartered Accountants Scotland

- 13.1 Minute of Agreement between The City of Edinburgh Council and The Institute of Chartered Accountants for Scotland dated 27 September 2006 and 23 October 2006. (ETL1)
- 13.2 Minute of Agreement between The City of Edinburgh Council and The Institute of Charted Accountants for Scotland dated 27 September 2006 and 23 October 2006. (ETL2)
- 13.3 Associated Documents: assurance letter from tie to ICAS dated 11 October 2005, 4 draft agreements (Line 1), 2 draft agreements (Line 2), 6 correspondence letters, 3 objection letters.

14. Kenmore Capital Edinburgh Limited

- 14.1 Minute of Agreement between The City of Edinburgh Council and Kenmore Capital Edinburgh Limited with the consent of The Governor and Company of the Bank of Scotland unsigned.
- 14.2 Associated Documents: objection letter, 2 plans, unsigned agreement.

15. Land Securities Trillium

15.1 Minute of Agreement between The City of Edinburgh Council and Trillium (Prime)
Property GP Limited and Land Securities Trillium dated 2 September 2005 and 14

September 2005 and registered in the Books of Council and Session on 19 September 2005.

15.2 Associated Documents: route plan, title plan, objection letter, unsigned agreement.

16. Norwich Union Life and Pensions

- 16.1 Minute of Agreement between The City of Edinburgh Council and Norwich Union Life and Pensions Limited, National Car Parks Limited and George Watt Limited dated 3 May 2007 and 23 May 2007.
- 16.2 Closure letter and Associated Documents: 2 letters and 1 objection letter.
- 16.3 Position statement and Associated Documents: 2 withdrawal letters, position statement, objection letter, 3 letters.

17. Trustees of the City Point Unit Trust

17.1 Minute of Agreement between The City of Edinburgh Council and the Trustees of the City Point Unit Trust dated 10 May 2006.

18. Verity Trustees Limited

- 18.1 Minute of Agreement between The City of Edinburgh Council and the Verity Trustees Limited dated 28 October 2005 and 4 November 2005.
- 18.2 Associated Documents: email, 4 plans, 2 letters, objection letter, 2 notices of objection, 2 unsigned agreements.

ETL 2 AGREEMENTS

19. BAA Edinburgh Airport

- 19.1 Minute of Agreement between The City of Edinburgh Council and Edinburgh Airport Limited dated 14 September 2005.
- 19.2 Associated Documents: meeting note, airport masterplan, combined utilities plan, signed depot plan, signed terminal plan, signed plan, draft minute of agreement, signed agreement, 8 emails, 3 letters, 2 draft letters.
- 19.3 Licence between The City of Edinburgh Council and Edinburgh Airport Limited dated 28 January and 25 February 2008.

19.4 Agreement to Lease between The City of Edinburgh Council and Edinburgh Airport Limited dated 20 and 25 February 2008.

20. BRB Residuary

- 20.1 Minute of Agreement between The City of Edinburgh Council and BRB (Residuary) Limited dated 31 January 2006 and 9 February 2006.
- 20.2 Associated Documents: objection letter (line 1), objection letter (line 2).

21. Clerical Medical Investment Group

- 21.1 Minute of Agreement between The City of Edinburgh Council and the Clerical Medical Investment Group with the consent of Clerical Medical and General Life Assurance Society dated 2 June 2006 and 14 June 2006.
- 21.2 Associated Documents: objection letter, letter of closure.

22. FSH Nominees Limited

- 22.1 Minute of Agreement between The City of Edinburgh Council and FSH Nominees Limited and FSH (Edinburgh) Services Limited and Frogmore Developments Limited and Salmon Harvester Properties Limited dated 25 November 2005 and 2 December 2005 and 6 December 2005.
- 22.2 Associated Documents: position statement, COCP, Unsigned agreement, plan, email, objection letter.

23. Marshall Food Group Limited (Grampian Country Foods)

- 23.1 Minute of Agreement between the City of Edinburgh Council and Marshall Food Group Limited dated 14 and 23 September 2005.
- 23.2 Associated Documents: Recommendation letter, drawing, unsigned agreement, report, objection letter.

24. RJ and JB McLean

- 24.1 Missives between The City of Edinburgh Council and Roderick James McLean and Julie Bremner McLean dated October 2005.
- 24.2 Associated Documents: Letter enclosing missives, drawing and objection letter.

25. JPSE Limited (Jenners)

- 25.1 Minute of Agreement between The City of Edinburgh Council and JPSE Limited dated 18 January 2006 and 27 January 2006.
- 25.2 Associated Documents: revised unsigned agreement, plan, unsigned agreement, objection letter, unrevised unsigned agreement, plan, signed drawing, signed agreement, signed agreement, objection letter.

26. McDonalds Restaurant Limited

- 26.1 Minute of Agreement between The City of Edinburgh Council and McDonalds Restaurant Limited dated 8 November 2005 and 18 January 2005.
- 26.2 Associated Documents: letter enclosing agreement, COCP, signed agreement, objection letter.

27. Murrayfield Indoor Sports Club

- 27.1 Minute of Agreement between The City of Edinburgh Council and George Russell, George Manson, John Small, the trustees of Murrayfield Indoor Sports Club dated 25 October 2005 and 2 November 2005.
- 27.2 Associated Documents: Drawing, unsigned agreement, objection letter.

28. New Edinburgh Limited

- 28.1 Minute of Agreement between The City of Edinburgh Council and Edinburgh Park (Management) Limited dated 7 October 2005 and 4 October 2005.
- 28.2 Associated Documents: Letter from The City of Edinburgh Council to New Edinburgh Limited dated 7 October 2005, plan 1 included within s75 agreement, plan 2 Revision L, Plan 5, 4 signed drawings, signed agreement.

29. New Ingliston Limited

- 29.1 Minute of Agreement between The City of Edinburgh Council and New Ingliston Limited and Highland Properties Limited dated 8 November 2005 and 9 November 2005.
- 29.2 Associated Documents: 3 letters, 1 withdrawal letter, 1 letter from planning committee, COCP, 3 plans, unsigned agreement, 2 objection letters, summary report.

30. Trustees of Hanover Property Unit Trust

- 30.1 Minute of Agreement between The City of Edinburgh Council and Trustees of Hanover Property Unit Trust and RBSI Custody Bank Limited and RBSI Trust Company Limited dated 12 October 2005 and 12 December 2005.
- 30.2 Associated Documents: drawing, 2 objection letters, report, unsigned agreement.

31. The Royal Highland Agricultural Society of Scotland

- 31.1 Minute of Agreement between The City of Edinburgh Council and The Royal Highland Agricultural Society of Scotland dated 8 November 2005 and 9 November 2005.
- 31.2 Associated Documents: 2 comfort letters, objection letter, unsigned agreement, withdrawal letter, plan.

32. Safeway Morrisons - Gyle

32.1 Agreement between The City of Edinburgh Council and Safeway Stores Limited and WM Morrison Supermarkets plc with the consent of Universities Superannuation Scheme Limited dated 13 November 2005, 24 November 2005 and 15 March 2005.

33. Stakis Limited

- 33.1 Minute of Agreement between The City of Edinburgh Council and Stakis Limited dated 13 September 2005 and 20 September 2005.
- 33.2 Associated Documents: signed agreement position statement, 2 letters, signed pages of agreement, 3 signed plans. Unsigned agreement - objection letter, Note of telecom, copy of agreement.

34. UGC Properties Limited

- 34.1 Minute of Agreement between The City of Edinburgh Council and UGC Properties Limited and Unipart Automotive Limited dated 25 October 2005 and 21 November 2005.
- 34.2 Associated Documents: reminder letter, 2 objection letters, unsigned agreement, plan.

35. Universities Superannuation Scheme

- 35.1 Minute of Agreement between The City of Edinburgh Council and Universities Superannuation Scheme Limited with the consent of Safeway Stores Ltd and WM Morrison Supermarkets plc dated 15 November 2005 and 9 December 2005 and 23 December 2005.
- 35.2 Associated Documents: memorandum, objection letter, design manual, unsigned agreement, plan, COCP.

36. West Craigs Ltd

- 36.1 Minute of Agreement between The City of Edinburgh Council and Meadowfield Developments Limited dated 25 November 2005 and 28 November 2005.
- 36.2 Associated Documents: 2 letters, 1 objection letter, unsigned agreement, plan.

ROUTE WIDE AGREEMENTS

37. Adshel

- 37.1 Minute of Agreement between The City of Edinburgh Council and Adshel Limited dated 27 September 1996 and 15 October 1996.
- 37.2 Street Furniture Operating Lease between the City of Edinburgh Council and More Group UK Limited dated 3 August 1999 and 2 August 1999.

38. British Transport Police

- 38.1 Agreement letter between The City of Edinburgh Council and British Transport Police dated 11 November 2005.
- 38.2 Agreement letter between The City of Edinburgh Council and British Transport Police dated 11 November 2005.

38.3 Associated Documents: 2 objection letters.

39. BT

- 39.1 Minute of Agreement between The City of Edinburgh Council and British Telecommunications Plc dated 7 February 2006 and 25 January 2006.
- 39.2 Associated Documents: documental transmittal register.

40. Cable and Wireless

40.1 Minute of Agreement between The City of Edinburgh Council and Cable and Wireless UK dated 5 October 2006.

41. Easynet

41.1 Minute of Agreement between The City of Edinburgh Council and Easynet Telecommunications Limited dated 1 December 2006 and 28 November 2005.

42. Historic Scotland

42.1 Associated Documents: 2 letters, 2 objection letters, protocol.

43. Network Rail

- 43.1 Minute of Agreement between tie Limited and The City of Edinburgh Council and Network Rail Infrastructure Limited dated 17 June 2005 and 21 June 2005.
- 43.2 Asset Protection Agreement between tie Limited and The City of Edinburgh Council and Network Rail Infrastructure Limited dated 13 and 14 March 2008.
- 43.3 Associated Documents: 2 objection letters.

44. NTL Group Limited

- 44.1 Minute of Agreement between tie and The City of Edinburgh Council and NTL Group Limited and NTL National Networks Limited dated 17 October 2005 and 18 October 2005 and 10 October 2005.
- 44.2 Associated Documents: objection letter.

45. Royal Mail

- 45.1 Minute of Agreement between The City of Edinburgh Council and Royal Mail Group Plc and Post Office Limited dated 2 March 2006 and 8 February 2006.
- 45.2 Associated Documents: 2 letters, objection letter.

46. First Scotrail

- 46.1 Minute of Agreement between The City of Edinburgh Council and tie Limited and The City of Edinburgh Council and First Scotrail Limited dated 1 November 2005 and 27 October 2005.
- 46.2 Associated Documents: proposal, 4 letters, 2 objection letters.

47. Scottish Water

- 47.1 Minute of Agreement between tie Limited and The City of Edinburgh Council and Scottish Water dated 20 June, 23 June and 3 August 2005.
- 47.2 Associated Documents: 2 objection letters, 1 letter.

48. Thus PLC

48.1 Minute of Agreement between tie Limited and The City of Edinburgh Council and Thus Plc dated 7 December 2005 and 1 December 2005.

49. Transco PLC

- 49.1 Minute of Agreement between tie Limited and The City of Edinburgh Council and Transco Plc and Scottish Gas Networks Limited.
- 49.2 Side letter dated 7 December 2005.
- 49.3 Associated Document: 4 objection letters and 1 letter

SECTION 75 AGREEMENTS

50. CAPITAL CITY HOMES - OUT WITH LoD

50.1 Letter enclosing Minute of Agreement between The City of Edinburgh Council and Capital City Homes dated 5 January 2006 and 9 January 2006.

- 50.2 Letter enclosing Minute of Agreement between The City of Edinburgh Council and Capital City Homes dated 20 January 2006 and 26 January 2006.
- 50.3 Letter enclosing Minute of Agreement between The City of Edinburgh Council and Capital City Homes dated 7 November 2006 and 11 November 2006.

51. CLYDESIDE INVESTMENT PROPERTIES

51.1 Letter enclosing Minute of Agreement between The City of Edinburgh Council and Clydeside Investment Properties dated 14 November 2005 and 23 November 2005.

52. FORTH PORTS - Granton Harbour

- 52.1 Minute of Agreement between The City of Edinburgh Council and Forth Ports Plc dated 19 June 2003 and 20 June 2003.
- 52.2 Minute of Agreement between The City of Edinburgh Council and Forth Ports Plc dated 28 June 2002

53. NEL

- 53.1 Letter enclosing Minute of Agreement between The City of Edinburgh Council and New Edinburgh Limited and tie Ltd and The Edinburgh Branded Hotel and Leisure LLP with the consent of The Governor and Company of The Bank of Scotland dated 17, 19, 23, 13 August 2005 and 1 and 8 September 2005.
- 53.2 Letter enclosing Minute of Agreement between The City of Edinburgh Council and New Edinburgh Limited with the consent of The Governor and company of the Bank of Scotland dated 5 December 2006 and 9 January 2006.

54. RBS - GOGAR

- 54.1 Minute of Agreement between The City of Edinburgh Council and The Royal Bank of Scotland Plc dated 6 November 2002 and 8 November 2002.
- 54.2 Associated Documents: 5 photos, 9 emails, meeting note, GI Survey Report 1, GI Survey Report 2, GI Survey Report 3, GI Survey Report 4, GI Survey Report 5, Gogarburn Tram Stop Cost Excel 1, Gogarburn Tramstop Costs version 2, draft minute of amendment, RBS-CEC meeting agenda, RBS meeting note, 2 letters to I Turnball, 1 draft letter, 4 plans.

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55. SECONDSITE - PORT GREENWICH

- 55.1 Minute of Agreement between The City of Edinburgh Council Limited and Port Greenwich Limited dated 28 February 2006.
- 55.2 Associated Documents: 2 objection letters, 2 accompanying drawings, letter to accompany minute of agreement, s75 agreement.

56. SKILLS EXPRESS - OUTWITH LoD

56.1 Letter enclosing Minute of Agreement between The City of Edinburgh Council and Skill Express Limited dated 27 April 2005 and 3 May 2005.

57. TUSCAN DAWN - OUTWITH LoD

57.1 Letter enclosing Minute of Agreement between The City of Edinburgh Council and Tuscan Dawn Limited dated 29 September 2005 and 3 October 2005.

FURTHER AGREEMENTS

58. Marks & Spencer Plc

58.1 Minute of Agreement is in draft form and is not available - terms match the Safeway Stores and WM Morrisons Agreement. Relevant obligations have been flowed down to Schedule 13.

59. Edinburgh and Lothian Badgers Group

- 59.1 Letter to Patricia Alderson, Edinburgh and Lothian Badgers Group dated 18 November 2005 (ETL 1).
- 59.2 Letter to Patricia Alderson, Edinburgh and Lothian Badgers Group dated 7 November 2005 (ETL 2).

A. CLOSURES

ETL 1

1. CALA MANAGEMENT - CONSTITUTION ST.

Letter to Kevin Whitaker, Cala Management from tie, dated 7 September 2005.

Letter to Jane Sutherland, PBU from Ledingham Chalmers regarding CALA Management Limited dated 8 September 2005.

2. DEWAR, R - NEW ORCHARDFIELD

Letter to Robert Dewar from tie dated 3 November 2006.

3. S. FRAME - TELFORD DR.

Letter to Simon Frame from tie dated 19 March 2007.

4. NORMAN, DOWNIE & KERR - CONSTITUTION ST.

Letter to Jack Kerr, from tie dated 14 September 2005.

5. J. PEARSON, OCEAN DRIVE

Letter to Ewan Kennedy, from tie, dated 25 August 2005 enclosing letter to J. Pearson, from tie, dated 19 August 2005.

Letter to Ms. J.H. Pearson from tie, dated 17 March 2005

Letter to Judith Pearson from tie, dated 21 February 2006.

Draft Minute of Agreement, dated 17 May 2005

6. M. SCOTT, OCEAN DRIVE

Letter to Mr. Scott from tie dated 2 February 2007.

ETL 1+2

7. SCOTTISH ENTERPRISE - HAYMARKET

Letter to Kirsty Ramsay from tie dated 15 February 2007

8. VERISCOLOUR - CLIFFORD TERRACE

Letter to Bonar Mackenzie dayed 14 September 2005

ETL 2

9. COLLINSON CERAMICS

Letter of Closure from tie Limited to Collinson Ceramics dated 19 October 2005.

10. CUSTOM PROJECTS LIMITED - ROSEBURN STREET

Draft Minute of Agreement between The City of Edinburgh Council and Customs Projects Limited.

11. FRANK EARLEY (PROLAMINATES)

Correspondence with Frank Earley dated 5 April 2007.

12. GRAY'S MILL COACHWORKS

Draft Minute of Agreement between The City of Edinburgh Council and Gray's Mill Coachworks.

13. D. KAUR

Letters to Davidson Chalmers LLP regarding Dalwinder Kaur dated 21 October and 18 November 2005.

14. MRM COACHWORKS

Letter of Closure to Mr. James Gibb from tie dated September 2005

15. NATIONAL CAR PARKS

Letter of Closure to Mr. Sutherland from tie dated 14 November 2005

Draft Minute of Agreement between The City of Edinburgh Council, Norwich Union Life and Pensions Limited, National Car Parks Limited and George Watt Limited.

16. NATS LIMITED

Email from Kate Shudall to Elaine Cropley dated 22 January 2007.

17. NCR VANGUARD

Letter of Closure from tie Limited to Vanguard Rental (UK) Limited dated 11 October 2005.

18. NULAP

Letter to NULAP from tie dated 23 September 2005.

19. PD LABELS

Letter to PD Labels from tie date 16 September 2005

Draft Minute of Agreement between The City of Edinburgh Council and PD Labels.

20. TNT EXPRESS

Letter to AD Pratt regarding TNT Express Services UK and Ireland dated 10 January 2007.

21. VIKING INTERNATIONAL (T/A STEPGRADE MOTOR ACCESSORIES LIMITED)

Letter of Closure from **tie** Limited to Fairhurst Estates Limited in relation to Viking International dated 11 October 2005.

B. COMFORTS AND ASSURANCES

CLG ASSURANCES

Please see separate **tie** summary of CLG Commitments (version 2) dated 24 August 2007 (contained on CD).

1. BAIRD DRIVE CLG

2. CRAIGLEITH CLG

3. DRYLAW TELFORD RESIDENTS

4. ELBG - BADGER GROUP

CPH/CPH/310299/15/19049225.2

5.	FRUWCA - ROSEBURN CORRIDOR
6.	GARSCUBE TERRACE RESIDENTS
7.	GROATHILL AVENUE RESIDENTS
8.	LEITH BLG
9.	LEITH CLG
10.	LOWER GRANTON ROAD CLG
11.	RATHO STATION CLG
12.	ROSEBURN BLG
13.	ROSEBURN CORRIDOR PUBLIC NOTICE (in relation to environmental mitigation)
14.	TRINITY STARBANK CLG
15.	WEST END CLG
	ETL1
22.	ABERCASTLE HOLDINGS - TOWER PLACE
	Letter to Mrs Dewar, Burness, in relation to Abercastle Holdings, from tie dated 5 November
	2007.
23.	ALEXANDER LATTO
	Letter to Derek Latto from tie dated 2 September 2005.
24.	G BARKER
	Letter to G Barker dated 11 October 2005.
25.	BAXTERS
	Letter to Mr McLuckie (Baxters Foodservice Ltd) dated 5 November 2007.
26.	BHS

Letter to Biggart Baillie Solicitors regarding BHS Ltd. dated 21 May 2007.

27. A BOURNE

Letter to Alison Bourne dated 13 January 2005.

28. MR & MRS CAMPBELL

Letter to Mr Ken Robertson dated 5 November 2007.

29. J CAMPBELTON

Letter to John Campbelton regarding Plot 30 - Tower Street dated 20 December 2006.

30. CARDPOINT

Letter to Sharon Riley (Cardpoint) dated 5 November 2007.

31. CAVERSHAM TRADING

Letter to Gillespie MacAndrew WS LLP regarding Caversham Trading Limited dated 10 January 2007.

32. CEC (THOMSON G)

Email to Clare Norman and George Duke regarding CEC buildings on Smith Place dated 21 December 2006.

33. MR AND MRS CLARKE

Letter to MR M and Ms D Clarke dated 22 April 2005.

34. CONELL - GUARINO

Letter to Ms Irene Connel-Guarino regarding Plot 30-Tower Street dated 4 January 2007.

35. MS C CONNOR

Email from Elaine Cropley in relation to Caryn Connor dated 25 October 2007, attaching email from Pauline Goldie to Caryn Connor dated 24 October 2007.

36. MR AND MRS CRASKE

Letter to John and Alison Craske dated 24 March 2005. 37. A DEAN Letter to Anthony White and Ann Dean dated 24 March 2005. 38. DEBENHAMS Letter to Biggart Baillie Solicitors regarding Debenhams Plc dated 21 May 2007. 39. MR DEGG Email to Mr Degg regarding Ocean Drive dated 21 December 2006. 40. MR DONAGHUE Letter to Mr D Donaghue dated 24 March 2005 and letter to Mr D Donaghue dated 22 April 2005. 41. F DOUGLAS Letter to Fiona Douglas regarding Plot 30 - Tower Street dated 11 December 2006. 42. KJ DREW Letter to Ms Kristian Jayne Drew dated 5 November 2007. 43. R DRYSDALE Letter to Mr R Drysdale dated 24 March 2005. 44. G DUFF Email to Graham Duff dated 20 April 2005. 45. G&A DUNCAN Letter to George & Audrey Aileen Duncan dated 21 December 2006. 46. EDINBURGH MASONIC CLUB Letter to Walter Sneddon dated 27 January 2005.

47. MS L FLEMING

Email from Elaine Cropley dated 25 October 2007, attaching email from Alasdair Sim to Laura Fleming dated 24 October 2007.

48. MRS MEM FORREST

Letter to Mrs Forrest dated 22 April 2005.

49. C FOSTER

Letter to Christopher Foster dated 3 November 2006.

50. GARLANDS

Letter to Gillian Nicoll of Garlands Florists dated 10 July 2007.

51. S GAYNOR - TOWER STREET

Email to Sheila Gaynor dated 21 December 2006.

52. F GERMI - ELM ROW

Letter to Francesco Germi dated 17 March 2005.

53. MR GHULAM

Note of meeting between Andy Dixon, Bob Clarke and Mr Ghulam dated 14 November 2006.

54. G GILBERT - OCEAN DR

Letter to Gary Gilbert dated 19 February 2004.

55. AM GILLON

Letter to Anne Marie Gillon dated 11 December 2006.

56. L HAGGERTY & L HILL

Draft Letter to Ms L Haggerty and Ms L Hill dated 17 March 2005.

57. MR HANNAN AND SPENCE

Draft Letter to Ms Spence and Mr Hannan dated 22 April 2005.

58. M HETHERINGTON - TOWER STREET

Letter to Leslie Wolfson & Co regarding Murray Hetherington dated 10 January 2007.

59. MR AND MRS HUDSON

Draft Letter to Lorna and Nick Hudson dated 11 April 2005.

60. E. INNES - CONSTITUTION STREET

Draft Letter to Eric Innes dated 17 March 2005, issued by email on 11 April 2005.

61. IRISH LIFE ASSURANCE

Email to Caroline Hood regarding Ocean Point dated 21 December 2006.

62. MR AND MRS JOY

Letter to Mr and Mrs Joy dated 3 March 2006.

63. MR AND MRS KANE - LEITH WALK

Letter to Mrs Kane dated 10 July 2007

64. R KEEN

Letters to Ms Rachel Keen dated 17 March 2005, 15 January 2007 and 29 January 2007.

65. MR AND MRS LAIRD - OCEAN WAY

Notes of Meeting between Andy Dixon, Bob Clarke and Mr & Mrs Laird dated 14 February 2007.

66. PROF LANG - OCEAN DRIVE

Letter to Professor Margaret Lang dated 21 December 2006.

67. LOTHIAN HEALTHCARE - LEITH WALK

Letter to Murray Duncanson, Chief Executive, Lothian Primary Care NHS Trust dated 20 March 2006.

68. F&G LOW - OCEAN DRIVE

Letter to Georgia Low dated 19 February 2004 and acknowledgement from Fergus Low dated 11 March 2004.

69. MAD JACKS BACK - ELM ROW

Letter to Kate Mackenzie dated 9 July 2007.

70. L MARSH - CONSTITUTION STREET

Letter to Lynne Marsh regarding Plot 30 - Tower Street dated 11 December 2006, and email dated 11 December 2006.

71. MR MCKEOWN - COLTBRIDGE AVENUE

Email to Brian McKeown dated 2 November 2006.

72. C MCLEOD - CRAIGLEITH ROAD

Email to Steve Mitchell regarding Carolyn McLeod dated 12 August 2005.

73. L MCNAUGHT - CONSTITUTION STREET

Letter to Mrs Lee-Anne McNaught dated 18 October 2005.

74. H & O MILNE

Letter to Odell Milne regarding Wester Coates Terrace dated 5 December 2006.

Letter from Odell Milne dated 22 May 2007.

75. MR MINTO

Minute of Meeting regarding Mr Minto dated 26 March 2004.

76. MR & MRS MURPHY

Letter to Ms Jill Murphy dated 27 July 2005.

Letter to Adams Lawyers and Estate Agents dated 1 November 2005.

Letter from tie Limited to Mr and Mrs Murphy dated 22 December 2005.

77. DO'CARROLL

Letter to Derek O'Carroll dated 17 March 2005.

78. MR & MRS PARNELL

Draft letter to Karen Hamilton regarding Andrew & Birgitta Parnell.

79. MS PEIFFER - TOWER STREET

Letter to Doreen Peiffer regarding Plot 30 - Tower Street dated 8 January 2007.

80. MR PENDER

Email to Martin Pender dated 15 March 2005.

81. POLICE BOX COFFEE BARS

Letters to Gordon Coutts Thomson dated 20 January 2005 and various "chasers".

82. A PRITCHARD

Email to Mr Pritchard, undated.

83. F RENNIE

Letter to Mrs F Rennie regarding Plot 30 - Tower Street dated 11 December 2006.

84. C ROONEY

Letter to Ms C Rooney dated 24 March 2005.

85. N SANTER

Email to Nicki Santer dated 18 October 2007.

86. S SCOTLAND

Letter to Miss Samantha Scotland regarding Plot 30 - Tower Street dated 22 January 2007.

87. M SCOTT - OCEAN DRIVE

Letter to Marshall Scott regarding Ocean Drive dated 4 January 2007.

88. SCOTTISH NATURAL HERITAGE

Letter to Jane Sutherland regarding Scottish Natural Heritage dated 26 August 2005 and letter to Iain Rennick, Scottish Natural Heritage, dated 26 August 2005.

89. N SHEEHAN - TOWER STREET

Letter to Natalie Sheehan regarding Plot 20 - 4/6 Constitution Street dated 4 February 2004.

90. I SHIRLEY - TIMBER BUSH

Letter to Ian Shirley dated 19 June 2006.

91. MRS SMITH - RENNIE'S ISLE

Letter to Mrs Smith dated 5 November 2007.

92. C SPROTT - TOWER PLACE

Letter to Ms Sprott dated 20 February 2007.

93. N STANSFIELD

Letter to Nick Stansfield dated 10 July 2007.

94. P TOSH

Letter to Pamela Tosh and Neil Willett dated 22 April 2005.

95. TRADITIONAL BARBERS - LEITH WALK

Letter to Janet Dunbar regarding Traditional Barbers dated 9 July 2007.

96. WEL - WEST HARBOUR ROAD

Letter to Colin MacKenzie from Waterfront Edinburgh Limited dated 3 January 2007.

97. JB WILKEN

Letter to JB Wilken dated 22 April 2005.

98. B WILLIAMS - TOWER STREET

Letter to Gordon D Hamilton regarding Mrs B Williams, Plot 30 - Tower Street dated 22 January 2007.

99. YES INDEED

Letter to Mr David Levy of Yes Indeed t/a Dead Sea Spa dated 5 November 2007.

ETL 1 + 2

100. CLOWES DEVELOPMENTS - COATES CRESCENT

Letter to Ms Alison Welsh regarding Clowes Development (Scotland) Ltd. dated 18 December 2006.

101. MR CULLEN - BALBIRNIE PLACE

Email to Elaine Cropley regarding telephone call between Geoff Duke and Mr Cullen dated 12 December 2006.

102. M DUTHIE - ROSEBURN MALTINGS

Letter to Margaret Duthie dated 21 June 2005.

103. EURO - HOSTELS - PRINCES STREET

Email to Ian Curry regarding Euro-Hostels dated 9 December 2005.

104. A HARKNESS - ATHOLL PLACE

Letter to Alistair Harkness dated 17 March 2005.

105. HAYMARKET YARDS LTD

See Minute of Agreement dated 27 October 2005.

106. HODKINSON & MITCHELL - ROSEBURN MALTINGS

Letter to Darren Hodkinson and Jacqueline Mitchell dated 16 September 2005 and email to Darren Hodkinson dated 26 July 2006.

107. I MUNRO - BALBIRNIE PLACE

Email to Mr Munro dated 12 July 2005.

108. NEW LOOK RETAILERS

Letter to Biggart Baillie Solicitors regarding New Look Retailers Ltd dated 21 May 2007 and email to Anna Veal, New Look dated 22 January 2007.

109. H REYNOLDS - BALBIRNIE PLACE

Letter to Miss H. T. Reynolds dated 30 May 2005.

110. J ROBERTSON - BALBIRNIE PLACE

Letter to Jane Robertson dated 25 July 2005.

111. L SMITH - ROSEBURN MALTINGS

Letter to Lynsey Smith dated 18 October 2005.

112. STARBUCKS

Letter to Biggart Baillie Solicitors regarding Starbucks Coofee Company Ltd dated 21 May 2007.

113. C SYME - BALBIRNIE PLACE

Letter to Christian Syme dated 7 April 2005.

ETL 2

114. EBALL

Letter to Mrs E. J. Ball dated 30 May 2005.

115. D BREWSTER

Letter to Mr D Brewster dated 15 October 2003.

116. CHRIS HOLMES CABINET MAKERS

Letter to Chris Holmes dated 3 November 2005 attaching Schedule of Undertakings.

Meeting between Chris Holmes, Julie Logan and Richard Walker dated 21 September 2005.

117. DAVID FLATMAN LTD

Note of telephone call from Lizzie Flatman dated 3 November 2006.

118. A HAMILTON

Letter to Mr Hamilton and Ms Sansom dated 17 August 2004 and various.

119. L. McTIGHE

Notes of meeting between Geoff Duke, Cliff Hutt, Alasdair Sim and Libby McTighe dated 26 May 2004.

120. ROSEBURN GARAGE

Letter to Mr Khalil, Roseburn Motors, dated 21 October 2005 and letter dated 30 September 2005.

121. MR AND MRS SEATH

Emails between various in March 2005 in relation to badgers at Gogar Castle.

Email from Caroline Stornie to David Milne in relation to Mr and Mrs Seath dated 23 May 2007.

122. SERVISAIR

Letter to Jim Shapton, Servisair (UK) Ltd, dated 16 November 2005 enclosing Schedule of Undertakings.

Preceding correspondence.

123. STAPLES UK RETAIL LTD PLOT

Letter to Richard Smalley dated 21 December 2006.

124. J STEVENSON

Letter to Jeffrey Stevenson dated 23 June 2005.

125. THAMES RICO - NEWBRIDGE SERVICE STATION

Letter to Sarah MacLeod re Thames Rico, dated 21 April 2006 enclosing letter of comfort and draft Side Agreement.

126. P TORRENT

Email to Peter Torrent dated 21 December 2006.

127. K WILSON

Letters to K Wilson dated 3 August 2005, 30 March 2005 and 11 October 2005.

C. LICENCES

128. EAL

Licence between CEC and Edinburgh Airport Limited (undated version)

129. FORTH PORTS

Licence to Occupy by Forth Ports plc in favour of CEC, dated 29 March 2007.

Letter from D & W to tie dated 3 April 2007 enclosing Forth Ports Licence.

130. NIL

Licence to Occupy by New Ingliston Limited in favour of CEC, dated 21 June 2007 and 22 June 2007.

131. WEST CRAIGS

Licence to Occupy by West Craigs Limited in favour of CEC, dated 25 June 2007 and 3 July 2007.

D. UNDERTAKINGS

ETL 1

132. A BOURNE

Letter to Mrs A Bourne dated 30 May 2005.

Letter to "Resident" dated 16 December 2004.

Letter to Mrs Bourne dated 13 January 2005.

133. M CLARKE

Letter to Mark Clarke dated 21 February 2006.

134. P CRAIK

Letter to Patricia Craik dated 29 June 2005.

Letter to P Craik dated 12 January 2005

135. D HARTE - CONSTITUTION STREET

Email to Deirdre Harte dated 18 July 2006.

136. J MURPHY

Letter to Mr and Mrs Murphy dated 22 December 2005.

137. J PEARSON

Letter to Judith Pearson dated 21 February 2006.

138. POLICE BOX COFFEE BARS - PICARDY PLACE

Letter to Gordon Coutts Thomson dated 20 January 2005 and various "chaser" letters.

139. WCTAG - WESTER COATES

Letters to Odell Milne dated 21 February 2006.

140. WESTERN GENERAL HOSPITAL

Letter to Professor James Barbour OBE, NHS Lothian, dated 6 February 2006.

ETL 2

141. BEAUCHAMP INVESTMENTS - RUSSELL ROAD

Letter to Tim Mallett dated 11 August 2005.

Letter to John Lee, ASO Property Services (UK) Ltd, dated 2 May 2007.

Letter to Joanne Plant, Farningham McCreadie Partnership re Royal Mail Sorting Office, dated 2 May 2007.

Emails between D & W and tie and tie and David Marwick.

142. EDINBURGH LEISURE - CARRICK KNOWE GOLF COURSE

Email to Alasdair Dunlop dated 15 January 2007.

143. REDPATH MCLEAN - RUSSELL ROAD

Email in relation to call with Keith McLean dated 23 March 2007.

APPENDIX PART 7

Part A - Letter of Instruction dated 5 May 2008

CPH/CPH/310299/15/19049225.2



Steve Reynolds
Parsons Brinckerhoff
Citypoint
65 Haymarket Terrace
Edinburgh
EH12 5HD

Our Ref: PD.CORR.071SB/JS

Date: 5 May 2008

Dear Steve,

Employer's Requirements Alignment Review

tie instructed SDS to carry out reviews of its design against the Employer's Requirements version 3.5a "to identify areas of misalignment included in the SDS scope". SDS delivered its review to tie on 16 April.

I wrote to you on 23 April setting out **tie**'s clarifications and instructions following your review of the Employer's Requirements. Since that letter my team has been working with yours to provide some further clarification where that has been necessary and helpful. This letter therefore expands on and supersedes that earlier letter.

SDS has subsequently been instructed to update that review to take account of version 4 of the Employer's Requirements (ERs).

As your review was conducted in parallel with the review of the Infraco proposals it highlighted a number of issues that have been tackled in the exercise to align the SDS design with the Infraco proposals. Those issues are dealt with in a separate letter.

The SDS review also raised comments about a number of areas that are not within the scope of work that SDS still needs to complete. Those comments are rendered redundant by agreement on the scope of work to complete and confirmation of omissions and so are not dealt with in this letter.

This leaves a small number of issues where tie needs to clarify issues and/or instruct SDS to change its current design.

Provision of a Standby Generator at the Depot

I can confirm that it is no longer tie's intention to have a permanent diesel standby generator facility (including associated housing) at the depot. Instead there should be provision of hard standing for a temporary generator including the necessary service connections.

tie instructs SDS to update its drawings to reflect this situation.

Tram vehicle

SDS has already had a large amount of information about the chosen CAF tram including DKE analysis, loading information for the vehicle and for structures and confirmation of the tram length.

Following finalisation of the Tram Supply Agreement (which will coincide with signature of the Infraco contract and SDS Novation) tie will issue SDS with the technical information that accompanies the signed Tram Supply Agreement. Where this contains information not previously released to SDS and

tie limited

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web www.tie.ltd.uk

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changes. Where there are subsequent changes to that tram vehicle technical information that impact on the infrastructure design tie will instruct the relevant changes.

Tram Stop Equipment

tie confirms that the tram stop equipment to be included in the design is as set out in the Schedule attached to Scott Ney's e-mail to Neil Renilson of 28 January 2008 at 1346 with the following changes:

- Public Announcement system to be provided at Edinburgh Airport tramstop with the capability of announcements being relayed from the Tram control centre and from the kiosk at Edinburgh Airport
- Cycle parking to be provided at Gogarburn tramstop as part of the detailed design to be undertaken following provision of concept design by the Royal Bank of Scotland
- Ticket machine numbers shall be changed at the following stops:
 - * Ingliston Park & Ride to be 6 not 2
 - Shandwick Place to be 6 not 4
 - McDonald Road to be 4 not 2
 - * Balfour Street to be 4 not 2

tie instructs SDS to complete its design including the changes set out above. tie recognises that the SDS design to date does not include ticket validators. tie does not instruct the inclusion of validators at this time.

Network diagram - ballasted track at tramstops

SDS has commented that the Network diagram issued by Siemens on 22 February 2008 includes ballasted track within certain tramstops. Following earlier consultations with HMRI and the Independent Competent Person SDS does not consider ballasted track at a tramstop to be acceptable and so the SDS design does not align with the network diagram in that respect. tie considers that this is in all probability an issue caused by the scale of the network diagram. However, for the avoidance of doubt, tie instructs SDS to continue with its existing design without ballasted track at tramstops.

Depot staffing

SDS has sought clarification on the number of staff to be allowed for at the depot. **tie** confirms that the 361 staff (rising to 403 once Phase 1b is in operation) would be spread across 3 shifts. **tie** understands that as a result the SDS design is compliant with the ERs.

Crew relief facilities

SDS has sought confirmation of the requirements for crew relief facilities at Ocean Terminal and Edinburgh Airport. At Ocean Terminal tie confirms that it is the intention that crew should use existing facilities within the Ocean Terminal complex.

tie formally withdraws Change Notice CNS109 Rev 1 for Edinburgh Airport Tram Kiosk. Instead tie instructs SDS as follows to align with the ERs:

SDS to design facilities at Edinburgh Airport tram stop as follows:

- CONCOURSE -
 - · area within barriers is the "paid area";
 - · whole platform and exit area to be barriered to enable ticket checking of all arriving

and departing passengers;

- standing capacity for 100 passengers within paid area;
- 2 closable gates required in barrier at entrance point;
- 2 closable gates required in barrier at exit point

TRAVEL SHOP/INFORMATION/TICKET OFFICE

*minimum 12 sq m incorporating -

- 2 Customer Service hatches;
- mains power;
- lighting;
- heating;
- · communications cabling connections;
- 1 external access door from within "paid area";
- 1 internal access door to adjacent staff toilet

STAFF TOILET

*additional to 12 sq m Travel Shop -

- · coterminous with Travel Office:
- single cubicle;
- · wheelchair accessible;
- · wash hand basin;
- hot and cold water;
- · direct "internal" access door to/from Travel Shop;
- separate external access door from "paid area"

TICKET VENDING MACHINES –

- minimum 3 on exit route (within paid area);
- minimum 6 on entrance route (outwith paid area)
- TROLLEY PARK
 - minimum capacity 150 trolleys (stacked)

Design of these facilities (but not track) may extend beyond the Limits of Deviation where necessary up to a nominal 5 metres. This design information is required in the first instance to inform a workshop with BAA to deal with design interfaces and construction methodologies north of Eastfield Road.

Any further change to the SDS design required following that workshop shall be a tie change.

Picardy Place

Following further consideration of development opportunities in the Picardy Place area of Edinburgh, City of Edinburgh Council has instructed **tie** to proceed with a variant to the SDS design for a gyratory. I enclose a letter and drawings provided by CEC.

tie instructs SDS to amend its design for Picardy Place in accordance with the CEC letter and drawings with the following further clarifications and instructions arising from further discussions between CEC and stakeholders since their original letter:

- tie instructs SDS to incorporate the technical information supplied from TSS to develop the finalised roads design
- tie instructs SDS to incorporate the updated bus stop locations at Picardy Place received from TEL

tle instructs SDS urgently to prepare a revised approval plan for Picardy Place that minimises the impact of this change on the production of Issue for Construction drawings for Section 1C. This plan would need to be agreed with tie, BBS and CEC; tie would facilitate the necessary discussions to secure that agreement.

Provision of survey/setting out equipment

tie confirms that, following the recent changes to clause 3.9.3 of the ERs, SDS is required to meet its existing obligation of providing Issue for Construction drawings with setting out information but SDS is not required to provide any survey or setting out equipment – that is the responsibility of Infraco.

Systems branding

tie instructs SDS to continue with its existing design that allows for future branding details to be incorporated once these are confirmed and accepts that incorporation of final branding into SDS design in the future will be a tie change.

Design life

Further to Damian Sharp's letter of 11 March (DES-ADM-1251) on design life and for the avoidance of doubt, tie instructs that no change is required to the SDS design as a result of the relaxation of the design life criteria.

Ingliston Park & Ride

tie instructs SDS to design pedestrian access between Phase 2 of the Ingliston Park & Ride presently under construction and the tram stop in its revised location. tie further instructs SDS to design vehicular and pedestrian access between Phase 2 of the park & ride and the substation building. This design shall allow horizontal latitude for a future turnback halt on the Newbridge line.

Quality management

tie confirms that SDS's existing accreditation to ISO9001 and ISO14001, if maintained, is sufficient compliance with the Quality Management requirements of the ERs. In particular, tie accepts that ISO9004 and ISO10005 - 1995 are not required for the SDS scope of work.

Environmental Management Plan

SDS has expressed concern at the inclusion of a specific sustainability obligation in the ERs which could be interpreted as adding to SDS's existing obligations. SDS already has an obligation to design in accordance with industry good practice which includes consideration of sustainability issues and SDS considers that it has reflected this obligation in its design.

tie accepts that the inclusion of sustainability in Clause 17.3.2 of the ERs as an explicit obligation does not extend SDS's existing obligations to follow industry good practice.

Cabinets

tie clarifies that the use of "cabinets" within Section 19 of the ERs should be read to include what SDS has previously described as "panels" and "cubicles" and the associated housings.

Tramstop platform length

tie has reviewed its specification for platforms in the light of the CAF tram selected by tie and does not instruct any change to the SDS design on these grounds. tie also does not instruct any further validation studies from SDS in relation to the tramstop platform length.

New Technology

tie recognises that SDS has designed the Edinburgh Tram Network taking account of available and proven technology at the time of design development. Where any of the items of equipment that are still to be procured are outwith the technologies for which SDS might reasonably have been expected to allow, tie accepts that any changes to the infrastructure as a result of procurement of new technology would be a tie change.

Standards

Section 8 of the ERs covers standards in general. In addition there are specific references to particular standards throughout the technical sections of the complete document.

Sections 8.1 to 8.3 of the final version of the ERs make clear the obligations of Infraco in delivering the Edinburgh Tram Network as to the use of either nominated standards or, in the event that no specific UK tram standard exists, the requirement to chose an appropriate standard and to justify that choice as being applicable to tramways and to ETN in particular.

The wording of these clauses has been accepted by both BBS and CAF.

There then follows a long list of "Applicable Standards". It is noted that these standards come from a variety of organisations and sources. Originally these standards were only within the main body of the technical sections of the earlier versions of the ERs (v1.2 for example). At a later revision they were gathered together in this table for convenience. However they also remain in their original place in the main document. Therefore the original source and selection of these appropriate standards was made by SDS as a deliverable to tie.

This list has exhaustively been discussed with BBS. Initially it was proposed to alter this table to reflect the actual standards contained within the BBS Technical Proposals. This applied in the main to the Systems (Siemens) part of the proposals. However it was agreed that the table should be left substantially as it was but that elsewhere in the systems requirements part of the ERs alternatives would selectively be allowed. This is reflected in the revised text of later sections.

Separately at Section 17.2.6 Infraco is required to abide by the requirements of ROGS in particular for Safety Verification. Our Independent Competent Person has made the selection and justification of standards a prime issue in the assurance of tie's Safety Verification process. This is no different to the approach the HMRI would have taken under the previous legislation. However it will have to be addressed thoroughly.

Therefore when SDS presents its Design Assurance Statements the following must apply:

- SDS are required to list all of the standards from whatever source they have used in the development of their infrastructure design.
- SDS must further justify the choice of each particular standard or any proposed derogations from them as required by section 8 of the ERs v3.6b. This shall include those standards which SDS may have employed specifically to design the interfaces with the several M&E Systems together with the Trackform and the Trams. All of this will form a part of the Safety

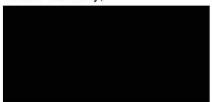
Documentation to be provided by SDS as a part of the Inter Disciplinary Checks of the Design Packages.

BBS will be required to do likewise in developing the detailed design of the trackform and M&E Systems from that in their current proposals. CAF are required to do likewise for the tram.

It will be a BBS responsibility to ensure that overall the choice of standards will give the required System Engineering and Integration of the ETN.

If to meet these overall requirements SDS are required to review or change any standards which up to that point they have used then a Change may be appropriate. However, this will depend on SDS demonstrating that their original choice of applied standard was appropriate given their knowledge and instructions at that time.

Yours sincerely,



Steven Bell

Project Director - Edinburgh Tram

Copy to: Damian Sharp, Dennis Murray, Tony Glazebrook, Andy Steel - TSS

APPENDIX PART 7

		Provider'	•				
1/3102	299/15/1904	9225.2		 	-	 	-

SDS Response to tie request for comments/comparison ER V3.6, V3.5a, 3.6b and the SDS Design & Procurement Documentation.

It is noted that tie have removed a considerable amount of detailed technical information from earlier versions of their document. Such information was originally included to provide readers with clarification in respect of functionality, technical parameters, appearance, operability, etc. Its removal leaves readers to interpret and form opinions as to what is required by tie to provide the Tram service requested. This results in differing interpretations and a number of proposals all of which may be fully compilant with ties generic requirements but differ from each other.

It should also be noted that SDS have provided tie with their recommendations in the form of procurement specifications and drawings all of which have successfully been through the tie review processes during their development and some of which have been used by tie as the basis for their infraco Procurement Process. Whilst SDS have passed comment and observations on the BBS offer (See SDS report dated 26.03.08) within the limited time made available to them SDS remain of the opinion that the responsibility for the choice of alternatives to their procurement documentation.

SDS remain firmly of the opinion that any change impact to the SDS Detail Design and associated documentation as the result of this lie policy will ne

Note

Sheet numbers on this Review Document refer to sheet numbers in ERv3.1.

SDS note changes in the Sheet Numbers of ER v3.6a and again in ER v3.6b

Readers to refer to ER Clause numbers only.

	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for informgation and assistance of tie GREEN - item closed	
	7	1.1	Bullet 1 - UTC	To carry out and or manage the design of UTC is outwith our contract. Non-compliant. UTC Design outwith SDS works		
	7	1.1	Bullet 4 - Tram Supply Agreement	Need SDS to review the Tram Supply Agreement (the signed version). Require tie letter re weight/length/width. Non-compliant	tie have confirmed with SDS that tie accept responsibility of known or unknown impacts tie correspondesnce awaited 3.6b tie deleted 'as a minimum' from opening statement.	
	7	1.1	Bullet 5 - Operators Scope	Need to see "Operators Scope of Supply as summarised". Need to review document to assess compliance. Tie to provide.	SDS awaiting formal issue by tie	
	7	1.1	Bullet 7 - MUDFA	Not clear if it suggests MUDFA nominated to Infraco. Check ITN.Need to have a precise understanding what this bullet point means. Have BBS qualified their tender offer against MUDFA/Utilities work.	SDS awaiting formal issue by tie*	
	8	1.1	Bullet 12 - Geographical Section ? Is this defined and what relevance does it have? Is it intended to have Sectional Completion which will necessitate Sectional testing, commissioning, warranty, payment etc	SDS design does not cater for geographical and for sectional completion. Non-compliant	tie have confirmed with SDS that this is a BBS issue and a BBS risk relating to Systems and equipment capability* SDS remain of the opinion this refers to the introduction into service of geographical sections. SDS repeat that they have not catered for geographical or sectional completion in their work and would require additional cost and time to accommodate any implication to their work on this tie requirment.	
100	8	1.2	Bullet 18 - Stakeholder Management	SDS Stakeholder Management closed out after Detail Design workshops	tie have confirmed with SDS that this is a BBS responsibility*.	
10	9	1,2	Bullet 1 - Tram Supply Agreement	Tram Agreement not viewed by SDS, Compliance check to be done prior to signature	file confirmed as 2 above - tile risk	

Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of the GREEN - Item closed
9	1.2	Bullet 9 - Power Supply	Note no mention of network reinforcing the SP system (or costs).	tie have confirmed this is an Infraco responsibility and not that of SDS, Provisional Sum included by BBS SDS are of the cipinton this is the SP Network Reinforcing that is referred to and not the ETN Traction Power Network reinforcing
10	1.2	Bullet 1 - Free Issue Equipment	Note no list of "free issue" agreed equipment between Imfraco/Tram. Needs confirmation	tie have confirmed this is an infraco responsibility and not that of SDS. BBS/CAF Dialogue ongoing, Impact on Siamens Scope only*.
11	1.2	Bullet 2 - TVMs	Confirm the quantity and location. See comment below (SDS design is based upon agreed quantities of TVM's)*.	tie have advised SDS that tie/TEL to make clear and agree with SDS a process for flexing future quantities or specifications. Nothing yet forthcoming
10	1.2	Bullet 12 - Generator	Still mention of Dissel Generator? Change Order to Change drawings, Non-compliant	tie to write to SDS confirming the way forward SDS remain confused as to which Generator tie are deteting and in what form and where is the hardstanding to be provided. If to provide SDS with clear instructions as to their requirement
1	1 1.2	Bullet 9 - Temp Power Supplies	Temporary power designs not in SDS scope. Note here it only describes "management of" not "design of". So who designs. Non-compliant	the have confirmed with SDS that this is a BBS responsibility* SDS remain confused as to which Power Supplies tile are refering to, le those required to bring the system into service or the site construction supplies? Ite to provide SDS with clear instructions as to their requirement
1	1 1.3	Paragraph 1 - Phase 1a/1b split	SDS Non compilant. Design Change required for Phase 1a/1b design separation. Note item 5 Design Drawings for 1a only to be provided. SDS do not have this. Only 1a/1b combined. Assume SDS do no further design work on Phase 1b from date of Novation and are paid for re-design and documentation of 1a? All design documentation and reports include the Design of Phase 1a & 1b for SDS.	
1	1.3	Points 2,3,4,5	Non compliant. SDS require change order as all designs include designs to be installed as Phase 1a and 1b. Cannot be split as designed. See SDS report on subject.	As 12 above The SDS design continues on the basis of a full 1a/1b construction
		- 19		SDS note that pertain of this Section 2 is incorrectly identified as Section 25 in the headers. SDS note that the Network Diagram - Siemens issue 22.02.08 - proposes ballasted track within certain tramstops. This would not be acceptable to SDS nor, in the opinion of SDS HMRI or the equivalent. See SDS also letter 02.04.08 which indicates a number of other concerns in respect of this Siemens diagram.
11	2.6	Tram length 43.6m?	SDS Non-compliant until instructed on tram length. Non-compliant SDS note that Tram length now quoted by tie as 44.0m	tie confirmed to SDS that tie are to write to SDS confirming earlier instructions (verbal SDS(Dolan/Ennion) tie (Mathew Crose) at meeting) confirming acceptance of Depot as designed by SDS.*
1	4 2.2	Sheet 14 - Operational Timetable - in accordance with Section 1 ?	Not defined in Section 1 of ER	SDS note text has ben corrected by tile
	Genera	Traction power Supply Isolators	The original SDS Operational & Performance Requirement document differs from the ER's in a number of technical areas. An example is Motorised Isolators. Non-compliant	tis have confirmed with SDS that tile to write to SDS confirming that tile do not require Motorised Isolators throughout and that SDS will not be impacted as the result of this tile change." Awaited by SDS - Se to issue a letter to enable SDS to close out this item.

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - Item closed
	17	2.4	Tramstop Schedule	SDS design for Picardy Place is Centre Platform. Non-compliant	SDS note the schedule has been corrected by tie*
	16	2.2	Fig 2. Network diagram	Non-compliant. Examples= Ocean Terminal track configuration/1a/1b split/Depot entry	tile have advised SDS to review BBS/Siemens Network diagram which has subsequently been commented on in the SDS review of the BBS/Siemens bid. SDS have serious concerns in respect of the Siemens proposal to put ballast through Platforms etc. This design aspect is not supported by SDS as previous experience with HMRI has shown acceptance cannot be gained. See also Section 26 trackwork below.
	19	2.5	Bullet 3. Staffing	Implies designed for 361 Staff. Across 3 shifts or all at once? SDS not compliant with 403 Non- compliant	SDS advised tie are to clarify their requirments in a letter to SDS*, awaited.
	32	2.15	"Detail in 8"?	What is "detailed in 8"? Note, four comfort stops. Only Haymarket is designed for facilities. Non- compliant	Whilst the text has been corrected SDS still await instructions as to ties changed requirments
& Performance	33	2,16		Change required for tram punctuality measure of 99%, Not as SDS Contract wording, ("not early" changed to "no more than one minute early") Non-compliant	tie advised SDS this is a 8BS reponsibility and they consider SDS have completed their obligation in this respect. BBS will be obliged to to 'reflect the law of physics'
a colo			Section 2.16 Sheet 33	Last two paragraphs. How can we design such that it operates "safety and effectively" in all modes when "failures and disruptions to transway and/or highway" is included. Non-compliant	As 21 above
u			Section 2.19 bullet 3 "Set out in"?	Still not completed. Non-compilant	SDS note this has been corrected
	9		Phase 1a/1b split	SDS design does not take account of the possible split of Phase 1a & 1b. Non-compliant	As 12 above
Ī	10		TVMs	SDS do not have the necessary details of the TVM's to incorporate the necessary information into their design at Stops and the Depot. Non-compflant	As 12 above
	16	Flg 2	Fig 2 - Network Diagram	SDS design is not compliant with the tie Network Diagram Non-compliant Note non-controlled diagram	As 12 above - See also SDS response in 18 above
	19	2.6	2.6 - Stabling of Trams	Stabling of 27 Trams? Initial accomodation of 361, SDS design for 150 with initial accomodation for 100 as instructed, Non-compliant	As 12 above
	32	2.15	2.15 - Comfort Break Locations	New Comfort Break Locations identified - see also 25.6 Tram Stops - below. Non-compliant	tie have advised SDS that their requirments are to be as SDS design* however SDS remain unclear as to ties requirments and await an instruction.
	33	2.16	2.16 - Performance Monitoring	Are these Performance Monitoring Locations and if so SDS are non compliant as we have not had this information? Non-compliant	tie have confirmed with SDS that this is not an SDS issue and is a BBS obligation* Formal confirmation is awaited
	31	2.12	Electricity consumption linked to run time model.	SDS power simulation runs by SDS only not electricity consumption. Non-compliant.	tie have confirmed with SDS that this is not an SDS issue and is a BBS obligation, also that Power Consumption modelling was not part of SDS rote*
	31	2.12	Update run-time model	3 month frequency update outside SDS Agreement, Non-compliant	tle have confirmed with SDS that this is not an SDS issue and is a BBS obligation".
	32	2.1.3	Operational allowances	Changed to reflect the 1a/1b split. Non-compliant.	te advised this is to be addressed in a later version" and whilst SDS note this is so SDS still require instructions on ties requirements for 1a & 1b Split.

Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - item closed			
50 3.6.2 similar'. Why not specify the Des		1st Para graph - 'using the same' or ' using a similar'. Why not specify the Design approach? - last line 'any' or 'all'	Confirm "similar" not "same".	tile have advised SDS this is to be addressed in a later version* V3.6b wording amended by tile.			
51	3.6.2	Again reference is made to SDS whereas SDS obligations are in the SDS Agreement which is to be novated. The numerous design activities which the Infraco are to carry out appear to have been disregarded.	Require recognition of Infraco design	Even though it may be covered in the proposed Scope Split SDS remain of the opinion that the design responsibilities of the Infraco should be recognised in this clause. As is stated in V3.6 the SDS design appraach' shall be set out in SDS Agreement however for the avoidance of doubt SDS can see no reason why the Infraco Design responsibilities should not be clear and unambiguous. This is an Important and urgent item to be agreeed/confirmed with tie/SDS/Infraco (Prior to novation):			
53	3,6,3	Modelling for Temporary Traffic diversions and impacts	Not an SDS obligation.	tie have advised SDS that this is not an SDS obligation but that BBS may request SDS to manage/procure modelling which will be the subject of a separtate discussion and SDS assume agreement.* SDS consider this can only be progressed by means of a Change Instruction to SDS to carry out any modelling Full scope to be provided by the for SDS consideration. SDS note in ER v3.6b that this obligation has been left in and SDS remain of the opinion, as has been verified by the in thier Email referenced below, this is not an SDS responsibility.			
42	3.1	Section 3.1- The definitions/descriptions are not the same as SDS Agreement. Clarity is required by tie where differences occur. SDS will not be responsible for claims that BBS definition leads in hierarchy when SDS is Novated. Table 19 contains many abbreviations although headed definitions. Non-compliant Novated.		the have confirmed this issue is to be sorted by the Project Director to the satisfaction of SDS* - As at the date of this report SDS still await clarification. Transdev defined as the Operator does this comply with ROGS which SDS note is not referenced?			
42	3.1		Approval and Consents, Non Compliant. This is an example as the ER's Definitions are not in accordance with SDS Agreement Definitions. Other examples.	As 36 above			
42	3.1		Operator. (Read Transdev). No ref to TEL as Operator.	As 36 above			
42	3.1		GSN - Goal Structured Notation In SDS GSN - Global Structured Notation	As 36 above			
42	3.1		Consents	As 36 above			
42	3.1		DDA 1995 missing in ER's	As 36 above			
42	3.1		DKE- Different in content	As 36 above			
42	3.1		EMC- Electromatic Magnetic Current	As 36 above			
42	3.1		Environmental Statement	As 36 above			
42	3.1		IRC	As 36 above			
42	3.1		Review Procedure	As 36 above			
42	3.1		Service Commencement date+	As 36 above			
46	3.5	Submittals Schedule	Not seen by SDS. Cannot sign up to this until viewed/studied. Non-compliant	the have confirmed with SDS that this is not an SDS obligation*. Formal confirmation required			

TO TO TO TO	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie
1	50	36.1	1st bullet point	Co-ordination not the responsibility of SDS. Non-compliant	GREEN - Item closed tie have confirmed with SDS that these words do not oblige SDS to coordinate*
	51	3.6.2	last bullet Point.	Updates to the documents as listed is outwith SDS Scope. Non-compliant.	formal confirmation required the have confirmed with SDS that they are only obliged to fulfil their requirements under their contract however Mathew Crosse will review this particular SDS concern* Nothing has been forthcoming. SDS remain concerned at the wording of this sub clause As BBS are responsible for the 'complete design of the ETN including the achievement of full compliance with the ER's! SDS assumes this includes the responsibility for the SDS work which forms part of the overall design however the have already reviewed significant elements of such work and used it for procurement purposes. Bearing in mind the dilution of the Employers Requirements and the fact that they are now open to numerous interpretations then SDS have a concern that the may put a different interpretation or what has been considered by them to comply with the ER's. Despite the SDS design and procurement documentation having passed through the quite vigorous its review procedure comments have already been made by the that SDS have over-angineered elements their design.
	51	3.6.3	SDS obligations	Reference is made to SDS whereas SDS obligations are in the SDS Agreement which is to be novated. The numerous design activities which the Infraco are to carry out appear to have been disregarded. Non-compliant.	tie advised this is to be addressed in a later version* however PARK pending BBS approval and acceptance of SDS suggested revised wording to these issues SDs remain of the opinion that this issue has not been adequatly addresses even though consideration is being given to theinclusion of a Scope Split document. As was requested by tie, SDS have provided BBS with some proposed revised wording to replace wording in their bid document however the BBS response does not, in the opinion of SDS, provide sufficient protection to ALL parties thus minimising the risk of misunderstandings in the future and impact on the ETN Project.
	53	3.6.3	SDS obligations complete.	Non- compliant. Modelling for Temporary Traffic diversions. TTRO to be the sole responsibility of BBS. Non-compliant	As 35 above
			- (a)	What is meant by 'any new technologies'.? There is much 'new' that the Infraco are to provide as part of their Works. Note	the advised this is to be addressed in a later version* however SDS note wording remains in v 3.6s. SDS cannot be responsible for theimplications of the introduction of new technology whatsoever form it is and would seek cost and time implications of any inpact on their works.
	49	3,5	Section 3.5 - Errors in bookmark	Requires completion before signing. Errors in bookmark.	tie advised this is a "typo" and will be clarified in later version. Appears V3.6a corrected.
.000	50	3.6.2	Section 3.6 - Design	Note. "Design" not defined in Contract Definitions.	tie have advised SDS that they are of the opinion this term does not require to be defined. SDS remain of the opinion that the various roles and responsibilities are to be identified, scheduled and agreed between all parties prior to novation.
100	50	3.6.1	Section 3.6.1. Bullet 1 - Training	Not the same as SDS description. "Taking account of Emp Req". Training plus documents etc. Non- compliant	Be have confirmed with SDS that these words do not oblige SDS to 'train' not provide training deliverables."

Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - item closed
50	3.6.1	Section 3.6.1, Bullet 2 - Power consumption	Our Tram simulation or BBS? We do not have power consumption responsibility. Non compliant. Service Performance and power consumption not defined or specified in ER's	As 30 above
50	3.6.1	Section 3.6.1. Bullet 3	Non-compliant as there are no technical aspects defined within the ER's. See note at head of table. Non-compliant:	tie have confirmed with SDS that the SDS design has been based upon the original tie Requirments Specifications, tie have relaxed some of the specifications to allow flexibility for infraco proposals, in respect of Infraco's design scope Infraco must stand behind the obligations contained within this bullet, but likewise SDS must also underpin their design scope too'. SDS remain firmly of the opinion this this is without SDS incurring additional cost or time to their obligations and expect this issue to be defined within the ite proposed Scope Split document and with the inclusion of suitable wording in the ER's yet to be agreed between all parties. Please provide acceptable additional words to Scope Split document
50	3.6.1	Section 3.6.1, Bullet 5 &6	Ensure the total input is provided by Infraco, They HAVE carried out Due Dilligence on SDS design. Subject is now closed.	See 58 above Please provide acceptable additional words to Scope Split document
	3.8		Buildability Reports	SDS notes these are the responsibility of the Infraco. SDS have a concern as to the implications on their design work. A statement of acceptability is required from BBS (prior to Novation)
	3.9.3	General	Change in wording between 3,5a and 3,5b	SDS note the change in BBS obligations from the 'provision of survey/setting out services' to the 'provision of survey/setting out equipment' SDS confirm with the that that such 'services' do not form part of their obligations under the terms of their Agreement with the that the such 'services' do not form part of their obligations under the terms of their die to acknowledge
	3,12	General	Training - ER v3.6b	SDS note the reference to the Training responsibilities being contained in Section 40 - Maintenance. As an observation, SDS do not understand where the necessary training is specified to cover the operation of the various elemants of the ETN, which SDS would suggest is essnifal before the commencement of any form of energisation or operation. SDS areatso aware of and agree with the early the proposals for the Infraco to be responsible for the maintenace of all elements of the ETN required to be in service during the testing, commissioning and trial running up to the point of the ETN entering commercial service having been prooved by the Infraco to be functioning correctly and to the standard and the requirements of the approving bodies to allow it to enter commercial service. SDS suggest this may not now be the case and seek clarification.

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistence of tie GREEN - Item closed	tie Ref
	61	3.11	Documentation	As -built, construction and manufacturing drawings will be provided by SDS in accordance with the SDS Agreement. Not manufactured drawings or E&M Drawings by Siemens. Non-compliant.	See 34 above SDS are concerned at the suggestion that such documentation should be available 'prior to or on completion of Agreement' SDS are firmly of the opinion it is essential that such documentation is available to all operatives, maintainers and other parties prior to the commencement of any form of operation be it anergisation or whatever to ensure such operatives have been fully trained and in possession of the necessary information to carry out their duties.	60
	74	8.3	Standards	SDS have completed design on standards approved by tie. Non-compliant	tie have confirmed with SDS that this requirement relates to infraco and it is for the infraco to 'sort out' any variance' SDS remain of the opinion this could involve them in cost and time for which they would require reimbursement. A clarification/confirmation statement to be provided by tile (prior to novation)	61
	74	8.3	The infraco's Responsibilities' appears somewhat out of context and must surely extend to more than System Integrator?	Total responsibility of Infraco	tie have confirmed with SDS that their comment is noted* SDS do not understand the implication of this tie response/statement and remain firmly of the opinion that the responsibility for System Integrator must be that of the infraco.	62
	75	8.3.1	Table appears to have been disconected from Sheet 72 which refers to standards	tie to correct	tie advised this is a 'typo' and will be clarified in later version" Appears to have been corrected in V3.6	63
4 Use of industry Standard Equipment			No comments			64

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - the Change Order and/or clarification still required. ORANGE - for informaction and assistance of the GREEN - tem closed	tie Ref
5 System Identity & Branding			New SDS comment 27,03.07.		SDS are concerned at the potential implications of the lie introduction of Branding and their impact on planning approvals in the event lies aspirations do not meet the Planners dealres SDS seek sight of the Appendix 1 as referenced in ER v3.6b which identifies that 'the output of the specialist contractor shall be a documemented set of guidelines while shall incorporated into these Employers requirements as Appendix 1'. SDS would require a change order from the covering the implication of all changes to their designs.	65
6 Design Life	65	6	The infrastructure Systems and Equipments ? If some of the design lives are shorter than the 15 years stipulated as a minimum is the infraco responsible for it's renewal during the 15 Years?	Dasign life is not as per the SDS Agreement Non-compliant	tie have confirmed with SDS that tie will write to SDS 'enabling relaxation' of SDS from their specification obligations where they were more onerous at the time of the Agreement than they are today as noe stated in the ER's. SDS have received a letter (tie letter 11.03.08) however SDS seek assurances that any additional costs and time incurred by SDS resulting from changes to drawings and other documentation will be met by tie Letter to tie in place (Prior to novation)	68
	65	6	Table 21	Non-compliant, See CCTV/PiD's/Sigs/OLE etc	See 66 above.	67
	67	7	Various tables	We cannot confirm compilance to ambiguous statements example is "Unclear if included in initial consruction or "Ductwork to locations where additional signalling MIGHT be provided". Non-compilant	tie advised these will be clarified in later version* SDS seek assurances that any additional costs and time incurred by SDS resulting from changes to drawings and other documentation will be meet by tie* Some wording amended in V3.6a i.e. now reads 'allowance in design where additional signals might be provided' Still considered ambiguous.	68
	67	7	Instruction reg'e re 1a/1b split	SDS design does not take account of the possible split of Phase 1a & 1b. Non-compliant	See 12 above SDs remain confused as to ties requirments as the request is for a full delta deslign at Roseburn Junction. lie to clarify	69
	70	7	SDS not refining Depat design for single type tram	Non-compliant	tie have advised SDS to review wording in susequent issue of ER Wording deleted in V3.6a	70
7 Extensibility	71	7	Ducts minor inconsistancies, See sheet 188, Table 39	SDS-design-does-include for 20% allowance-for-spares. Non-compliant	20% allowance made in SDS design, which is based upon SDS procurement specification requirements. Any required changes (cost & time) to SDS ductwork requirements (drawings, cross sections etc.) would need formal instructions SDS have confirmed with ite* that they are able to achive this 20% allowance based upon thier infrastructure. Design and their Procurement Documentation and not necessarily the BBS proposal, tie to instruct/clarity.	71
	68	7	P&R allowance for termination of Phase 3 service has been added to Scope	Non-compliant	tie have advised SDS to review wording in susequent issue of ER* however SDS have not received format change instructions to accommodate changes in their design.	72

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - item closed	tie Ref
	69	7	Depot - reference to 8 Berths - incorrect only 4 available other 2 are service roads serving Wheel Lathe/Tram wash & sanding plant.	Non-compliant	tie have advised SDS to review wording in susequent issue of ER*. Wording revised in V3.6a	/3
8 Standards	72	8.1/8.2	SDS design is particular to BS where stated in the SDS design documentation.	Non-compliant. Each European Standard must be reviewed to ensure the correct level of technical compliance with the BS as designed. SDS have a concern at the statement that the standards to be used shall be those applicable before the Effective Date. SDS effective date is 19th Dec 2005	tie have advised SDS that any varience will have to be addressed by BBS- SDS advised Project Director that they are of the opinion this will need be resolved by tie/BBS prior to novation SDS now note that references are made to standards specified in the Agreemenmt. SDS have not had sight of such standards. This item to be closed prior to novation	-74
	72	8.1	HMRI versus ROGs	SDS remain Non-compliant SDS also seek clarification as to who are are the relevent parties as defined within ROGS.	tile confirmed with SDS that a Change Order would be required to accommodate any implications to SDS Works SDS seek clarification.	75
	74	8.3	8.3 bullet point conflicts with 8.2	Non-compliant. SDS have completed their design prior to Infraco and will not be changing the design on the Identification and selection of the Infraco equipment without change instruction	tie are of the opinion this is 'sorted' however SDS remain of the opinion that this issue falls into the same category as 75 above This item to be closed prior to novation	78
9 Geotechnical	117	9	Geo surveys to inform the design have previously been carried out by SDS.	Non-compliant with 5th para. The SDS design cannot facilitate the future nature of geotechs.	tie have suggested some wording revisions including 'reasonably practicle'. SDS have difficulty with such wording as such wording still leads to dispute in as much as it fails to deine in whose opinion it is or is not reasonable."	77
10 Environmental			No comments			78
11 Surveys			No comments			79
Nanagement Process			No comments			80

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - the Change Order and/or clarification still required. ORANGE - for information and assistance of the GREEN - item closed	tle Ref
13 Permits & Approvals			No comments			81
14 Human Factors			No comments			82
15 RAMS			The E&M equipment is supplies by Infraco and the minimum availability percentage achievements need to be verified by BBS	Availability percentages to be confirmed by Infraco	SDS observation for the assistance of tie	83
16 EMC	177	16	The responsibility for the design of the Systems and Equipments i.e. those items which may or may not interfere with Network Rail and other Third Party/Stakeholders fies with the Infraco. It follows that the necessary work to manage the EMC interfaces must be provided by the Infraco suppliers and designers.	Infraco EMC Systems Designer responsibility.	tie have confirmed with SDS that the RAMS figures for BBS Equipments are clearly BBS responsibilities tie advised they are to write to SDS - still awaited by SDS Could be defined in Scope Split?	84
	177	16.2	Last paragraph	Non-compliant. Tie have written the EMC Strategy.	tie have confirmed with SDS that EMC obligations are with BBS 'other than that stated in SDS Agreement' SDS believe this to be a contradictory statement and seek ties clarification of EMC responsibilities. Could be defined in Scope Split?	85
Quality &	178	17.1	EMC out of context. Tie to amend.	Incomplete statement	Table 43 contained in this Section does not correctly reflect the the design responsibilities of the various parties. The Infraco are responsible for many aspects of Design as well as being Design Manager. References are made to ROGS whilst ROGS is not referenced elsewhere in the ER's.	86
	178	17.1	Quality Management	Non-compliant. SDS only working to iso 9001 in Agreement.	tie confirmed with SDS that a Change Order would be required to accommodate any implications to SDS Works. No change in v3.6a	87.

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - item closed	tie Ref
	181	17.2.6	SDS design to HMRI requirement.	SDS not aware of safey verification scheme prepared by tie. Require review/study prior to signature	tie confirmed with SDS that a Change Order would be required to accommodate any implications to SDS Works*. No change in V3.6a. Instruction not received.	88
	182	17,3.2	E&AP	SDS are working to their Environmental Management Plan in accordance with Agreement.	SDS are of the opinion tie have added a requirment covering 'sustainability' which is not one of their obligation v3.6 requires BBS to develop the SDS EMPlan to include Sustainability. SDS consider they do not have any involvment in this process.	88
18 Cable & Ducting	188	18.2	SDS are not fully compliant and may also not necessarily be compliant with Infraco interpretaion of Employers Requirements (Drainage).	Not compliant. See note at top of table.	the first still awaited SDS that the would write to clarify their requirements. Letter still awaited SDS note that Section 18 has been omitted from v3.5a and 3.6a and, incorrectly in the opinion of SDS, dispersed within the document reference to cable installation appears to now be limited to Traction Cables contained in Section 31. What about AC cables etc.	90
	189	18.2	SDS do not use, nor would they recommend the use of cable troughs in non segregated areas as is allowable by ER's.	Non-compliant	tile advised this is a 'typo' and will be clarified in later version'. A check v3.6 indicates this may have been deleted as the result of relocating the contents of Section 18. SDS observation remains.	.91
	187	18.1	18.1 SDS cannot find the cable identification requirements.	? Tie to advise	tie have advised SDS that this issue is not set out anywhere and is considered open* SDS remain of the opinion the very detailed work carried out by them on the subject of cable indelification in association with the operator and the tie technical team should be adopted on the ETN system	92
	190	18.4	essential cable joints.	SDS design attempts to avoid cabla jointing.	Se have advised SDS that SDS may have misunderstood this requirement as it relates to maintenance* - SDS are still unable to agree and repeat that their procurrent documentation/design attempts to avoid unnecessary cable joints.	93
19 Cabinets	192/1 93	19	SDS are not fully compliant and may also not necessarily be compliant with Infraco interpretation of Employers Requirements.	For cabinets read panels or cubicles, (As described in SDS documentation)	tle have advised SDS that they may consider reviewing this issue with BBS* Not actioned SDS believe tie to advise	94
20 Advance Works			No comment		Omitted from v3.6a	95
21 Utilities MUDFA	195		Sheet 195, para 7	The design of MUDFA works within the scope of the SDS Agreement is being carried out by SDS.	tie have advised SDS to review new wording in later version of Ear's as this whole section is to be upreved by tie* SDS are of the opinion the following wording should be included in the first line of paragraph 2 as follows to clear the ground where possible, in compliance with the MUDFA Contract, of utilities	96

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - Item closed	tie Ref
	195		Sheet 195, para 8	SDS understood that MUDFA works was not to be novated to INFRACO. The statement "infraco undertakes all utilities	as 96 above	97
	200		Sheet 200. para 1	SDS require to see the technical submission from INFRACO on utilities. The MUDFA Contract is volumous and covers majority of items for utility diversionary works. The INFRACO ER's is a one page document and a table. Nothing is definitive and SDS would advise tie contractual/legal dept's review this point of note.	As 96 above	98
22 Locks & Key Suiting			No comment			99
Testing & Commissioning	216	Fig 7	Figure 7 - Sheet 216 - incorrectly refers to SDS Provider. The obligations contained in this table should apply to The Infraco Inclusive of his Design responsibilities.	Change to Infraco	tie have advised SDS that references to both Infraco and BBS have been removed from a later version of ER* Table 7 removed from v3.6e SDS note the inclusion of wording in Table 46 Sheet 286 - where tie are incorrectly in the opinion of SDS, similing the acceptability of proposed detail design to that of the SDS deliverables. As SDS have emphasised the Infraco have the responsibility to carry out the design of the Systems and equipments which sit within the Infrastructure designed by SDS SDS suggest it is of equal importance to tie that it is these Systems and equipments are prooved to be compliant.	100
23 Testing & C	217	23.2	23.2 - Sheet 217 - Programme & Risk Register. No its not? Its possibly the Testing Programme which should be a sub programme of The Infracos suite of programmes	tie to confirm	Se have advised SDS to review wording in susequent issue of ER REVIEW Needs Project Risk registar Text revised however Fig 10 incomplete	101
	219	23.4.2	23.4.2 Sheet 219 - Why exclude CCTV which is the most hungry data transfer item?	tie to amend	tile have advised SDS to review wording in susequent issue of ER REVIEW	102
24 Trams			Tram Supply agreement to be provided to SDS for review.	tle to supply agreement	See Item 2 above	103
					Note - V3.6 has this Transtop Section 25 incorrectly identified in the header as Section 25. Clause 25.4.7 Sheet 367 - Public Address - incorrectly cross references to 35.13.2 - workstation Capabilities. SDS suggest this should be 35.6.1 - PA Clause 25.4.9 Sheet 370 - PHP's - incorrectly cross references to 35.13.2 as above. SDS suggest this should be 35.8.1 SDS note that Ticket Validators are not being sought at Transtops - SDS seek clarification as Section 36 clearly seeks the provision of Ticket Validators which SDS are not been requested to accompdate. See also TVM's below	
	321	25.2	Nominal Tram vehicle up to 43m + 2m overrun - SDS Scope 40m platforms	Non-compliant	See item 2 above As previously advised to lie the SDS Design does not accommodate * or - 2m	104
stops	324	25.3.2	0	Non-compliant .	tie have advised SDS to review wording in susequent issue of ER v3.6a allows for the SDS design however atternatives can be offered.	105

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25 Tran	326	25.4.2	Glass Roof Shelter - not CEC approved SDS design - avoided on grounds of maintenance	Non-compilant	tie have advised SDS to review wording in susequent issue of ER v3.6a the choice of roof material has been deleted.	106
	332	25.6	Tollet & WHB facilities have not been added at Airport/Ocean Terminal/Granton Sq - SDS are aware of Haymarket only.	Non-compliant	See Item 28 above	107
26 Track			See email and attachment dated 30/01/08 timed 18.18 hrs Chandler/Crosse.	Criteria contained in V3.1 ER's was superseded on 21/02/07. Non compliant	tie are of the opinion SDS should provide justification of their track alignment." No further action from SDS who remain of the opinion the choice of Trackform remains that of the and the infraco. SDS note v3.6a refers to SDS Surface Finishes Documents ULE90130-SW-DRG-00069, 70, 71 the content of which from their review of the BBS Bid SDS believes are not being complied with.	108
27 Roads & Utilities	362/3 64	27.5.2/27 .7	UTC.	UTC not by SDS	See Item 1 above See also Item 21 above 27.3 references are made to consultation with owners of roads under private ownership during the design process. SDs consider they have completed the necessary consultation sufficient to develope their design in all areas where they have not been provented from so doing. 27.5.2 SDs are of the opinion they have consulted with the relavent parties in order to progress their roads design. Any additional work as the result of the accepting a design or a proposal which differs from that provided by SDs and revewed by tie can only be progressed via the change control process thus ensuring SDS are not adversly impacted in terms of cost and time. 27.5.2 - SDS are of the opinion any additional work required to be carried out by SDS as the result of the requirments of this clause shall be the subject of the cahinge controliprocedure to ensure SDS are not adversly impacted in terms of cost and time. 27.9 - SDS seek sight of Schedule 21 (Paragraph 3 refers)	
	365	27.9	11th bullet point. Obtain actual details.	Where actual records exist. Some SUC records missing.	tie have advised SDS to review new wording in later verison of ER's as this whole section is to be upreviewed by tie* Revised wording added by tie in V3,6a	110
	366	27.9	Missing provision of MUDFA	As-built drawings to acceptable design requirement	tie have advised SDS to review new wording in later verison of ER's as this whole section is to be upreviewed by tie? See Item 21 above. This clause says certain utility movements are part of the Infraco Works hower elsewhere in this document. It says they will be the subject of Change orders	111
28 Structures			Tram weight, width, length:	Non compliant	As previous SDS Design of Depot Access Bridge is two structures NOT one as is referenced in Table 80 v3.6a.Sheet 413.	112

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - Item closed
	380	29.8	Boundary Fence Concrete fooling	SDS-teld to delete hence SDS-design non-sempliant.	tie have advised SDS to review wording in susequent issue of ER* SDS note this requirement has now been deleted by tie. Itie are now seeking 'a suitably robust security fence' v3.6 which, bearing in mind the presence of baltast within the depot and the ease of its removal to provide access under such fence, SDS remain of the opinion a concrete footing should be provided.
ot	381	29,8	Service Track states Hand wash Windscreen - SDS instructed Automatic End Wash plant as confirmed later in ERV3 hence SDS design non compliant in this respect.	Non -compliant	tie have confirmed that they are of the opinion that the SDS design exceeded their requirements.* SDS are only able to refer to the various reviews carried out by tie, their operator and their technical representatives when such facilities where agreed as appropriate to the ETN. v3.6a seeks hand and wash. See also item 115 below Additional/revised SDS detailing may be required to meet this requirement.
29 Depot	381	29.8	Spec for Lothian Bus wash	Specification performance required	tile have advised SDS that the provision of of the tram wash plant is with BBS and that any detailed specific adjustments will be during the procurement of this plant* SDS note that the Tram Wash plant (Item 1.4) is to be provided by the infraco and SDS seek early builders information (Physical dimensions, loadings, builders works, drainage, power etc) in profer to accomodate this particular plant within their design. Any impact on the SDS works already carried out may be the subject of the Change Control Procedure.
	388	29.11	29.11 A staff work point Desk etc added to lobby of Control Room Suite hence SDS design non compliant as this facility is not accomodated.	Non -compilant	fie have advised SDS that they are to instruct SDS as to this change in their requirments* Still awaited by SDS
	431	29.17.3	Over door heaters now added to workshop, hence SDS design non compliant	Non -compliant	tis have advised SDS that they are to instruct SDS as to this change in their requirements* Still awaited by SDS. SDS note that v3.6s states that the provision of such heaters is an option lying with the infraco. SDS seek clarification.
	383	29.9	Bullet 8. Fire extinguishing systems throughout the building	Not part of SDS Design other than Depot equip room, Non-compliant	tis have advised SDS that they are to be compliant with the Bidg Regs and that any change to the words will be agreed with BBS and SDS.* SDS remain of the opinion they do comply with the Bidg Regs however their design for Fire Extinguishing Systems is limited to the Depot Equipment Room and NOT throughout the building as tie are now calling for. SDS seek clarification of the new tie v3.6a wording associated with this tie requirement i.e. Extinguishing v Suppression
30 Traction Power			SDS Traction Power very detailed design, produced for tie procurement and planning purposes, does not now comply with tie ER V3.1	Manually operated isolators an example. Non-compliant	tie have confirmed with SDS that the design responsibility for Traction Power is that of BBS* Whitst SDS acknowledge this assurance the issue of impact on the alterations to the SDS work already carried out needs to be resolved Cabling information has been moved from the now redundant Section 16 Cables and SDS note that tie are now requesting that LV cables and Traction Supply cables are drumed to the maximum to minimise cable joints however this does not apply to 11kV Cables which in fact are probably more joint critical than the remainder.
	438	30.2.1	Traction power Supply Isolators	The original SDS Operational & Performance Requirement document differs from the ER's in a number of technical areas. An example is Motorised Isolators. Non-compliant	As 16 above
	437 & 442	30.1	Bullet 1 - Tram Traction Substation enclosure ? Is this the enclosure/security fence surrounding the Traction Substation building?	SDS have provided security fencing as part of the SDS design.	tie have advised SDS that BBS design will be to SDS design in these respects* SDS seek clarification of this statement as their review of the BBS Submission indicates otherwise. SDS seek clarification

pection	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - item closed	tie Ref
	437 & 438	30.1	Builet 2 - Metering etc is usually the responsibility of the consumer not the construction contractor Whilst provision has to be made for the accommodation and connections for metering are tie asking The Infraco to provide this facility? On what basis does he determine the tariff acceptable to TEL?	Non-compliant, SDS make provision for metering and have advised tie that obligation to procure this metering is required. SDS do not specify this from Scottish Power.	tie have confirmed with SDS that lie will ensure appropriate arrangements and responsibilities with BBS and SP and that a Provisional Sum has been included for these purposes, tie suggest detail is to be agreed.SDS note there still appears to be instruction to BBS to arrange for SP to provide the metering*. SDS confirms that such 'detail' has already been the subject of discussions and agreements between tie/SP/SDS and the tie technical advisors and the subject of many minuted meetings which have been copied to all parties. SDS note that such agreements are not being reflected in the tie documentation nor the BBS bid.	713
	438	30.2	Manual - operated track feeder isolators.	Last paragraph - SDS have developed a coordinated protection network between the DC rectifier circuit breaker, AC Rectifier Circuit Breaker and DC Track Feeder Breakers. Non-compliant	tile have confirmed with SDS that the BBS approach to electrical protection, although different to that previously developed and reviewed by SDS/SP/tile and their technical advisors, is considered by tile" to be an acceptable coordinated approach" SDS question of this has been approved by SP.	15
	443	30.5	Scottish Power and manual isolators.	Following a series of detailed operational discussions with the's Operator Transdevtheir technical Advisors and incorporating our own operational experience of other tram systems, the SDS design offers motorised isolators for three principal reasons: 1. To meet the's aspirations for automated full section isolation & earthing regimes. 2. To meet the's aspirations for operational flexibility, speed of response to electrical emergencies, and availability of re-configuration options. 3. To ensure that TPS design is highly available and meets tie's aspirations for RAM and FHA. Whilst manual isolators offer a VE approach, they compromise the achievement of these aspirations. If manual isolators are proposed SDS would question the benefit of motorised eerthing. The track feeder cb is the point of disconnection not isolation under UK practice. For an earth to be applied the system needs be switched at the isolation point. As the isolation point is considered to be the trackside isolator under accepted UK practice, which is manual under this proposal, the operator would need to be present to effect the isolation hence is in a position to manually apply the earth. To apply a motorise would require a re-definition of typical UK practice to define the track feeder circuit breaker as the point (This may present a difficulty for the HMRI ROGS Competent Person).* Non-compliant		140
	438	30.1	Provision for 11kV supply to Depot	SDS design includes the requirment for an 11kV supply to the Depot Services transformer not just 'provision for'.	SDS word preference is noted by tile* SDS ripte that the BBS obligation remains 'provision shall also be made' from which it could be inferred that, even with the addition of the tile wording in Clause 30.2.3 and elsewhere, somebody else will provide the actual supply necessary to power the depo 30.3 Protection still does not refer to the need to comply with the protection requirements discussed and agreed by SDS, ite and lies technical advisors with SP SDS remain concerned that the tile v3.6 ER Clause 30.2.3 still does not reflect the SDS understanding of the SP tetler to tile defining the SP requirements for HV Switchgear and protection. SDS remains of the opinion the diluted wording contailed in v3.6 could lead to differences of opinions as to who is providing what to whose requirements.	

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	441	30.4	Generator	Generator is not now a client requirement. Instruction required to change. Non-compliant	See item 10 above SDS are still not able to fully understand tie requirments in respect of Diesel Emergency Supplies and seek sarty clarification to enable their Depot Design to progress Clause 30.4 Sheet 584 still refers to the 'separate generator' and cross references to Section 29 - sheet 570 Clause 29.17 - which itself refers to a 'fixed standby generator' SDS remain confused as to lies requirments as tie have informally advised this generator has been removed and a hard standing is to be provided (See Item 10 above and Clause 1.2 - Sheet 17 Bullet 12) SDS seek urgent clarification as to ties requirments and suggest lie establish what BBS have allowed for in their price, as any removal of the permaant Diesel Alternator would include all its associated controls, pipework, exhaust, cooling, cabling, building enclosure and have implications to the LV Switchboard - not insignificant potential savings.	150
31 OLE	467	31.5	Environmental Criteria	Environmental Criteria not part of Ers	tie have advised SDS to review wording in susequent issue of ER* Wording not changed SDS suggest this is a cross reference to 3.6.4?	127
	469	31.14.2	Parallel feeders/messenger wire	SDS design only parallel feeders Non-compliant	tle have confirmed with SDS that they believe this approach by BBS to be more competative and robust than that previously agreed by tie and their technicical advisors. SDS would expect to receive costs and time associated with any implication they have to accommodate as the result of this BBS/tie change.	128
Stray			No comment			129
33 Low Voltage Architecture	482		UPS	SDS are non compliant as they have provided for ties requirements in respect of UPS for 3 hours. Non compliant	file have advised SDS to review wording in subsequent issue of ER the suggest their requirement will reflect SDS proposal.* SDS note that the have put the onus on BBS to determine the necessary duration of the various UPS Systems. SDS seek immediate instructions from the advising SDS of the way forward bearing in mind SDS are required to accommodate the necessary UPS Equipments within their Detail Design of the Infrastructure. SDS to be reimbursed with all additional costs and time implications	130
34 Earthing & Bonding			Compliant	The actual requirements for Earthing and Bonding are shown in the SDS Technical Specifications. As elsewhere, a considerable amount of what is considered by SDS as necessary Technical detail has been removed from the V3.1. It follows that the specific SDS design, whilst being compliant with the requirements tie have required in the past may not reflect the principles, proposals and technical solutions now being considered by tie and their Infraco.	tie note this comment and refere to Item 65 above. SDS seek clarification as to any impact on their documentation SDS request tie to note that ULE90130-SW-REP-00071 V3 was issued to tie on 30th March 2007. SDS seek clarification of the version issued to BBS and how the BBS proposals differ from the Detail Design E & B accomodation work carried out by SDS to date.	131

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35 SC&C	489	35.3.2	The only coms link between the TPDS & UTC is for a fraffic signal phase request. No allowance has been made in the SDS design for the monitoring, reporting and logging of a failure which at the same time reverts the road traffic signal to priority signalling.	Non-compliant	tie have confirmed with SDS that tie design of the SC&C is a BBS responsibility. SDS would seek cost and time in respect of any impact on their design documentation SDS note minor changes to the wording in ER v3.6 however these do not impact on the SDS principle already advised to tie. SDS note however that tie propose to use SCADA for the local control of Substations and SDS have commented that they would not be happy with this use of such technology in their review of the BBS/Siemens Bid See SDS document issued to tie. SDS also note the additional statement which appears to relate bandwidth to the number of cameras on the system. (Sheet 650) SDS remain of the opinion that the bandwidth is also a function of the quantity of data being transmitted from each camera in terms of frames per second (camera functionality and picture quality and availability) and this is equally as important as the total number of cameras.	132
6	491	35.4	Bus tracker on PIDs not allowed for in SDS design - neither display nor communication.	Non-compliant	As 132 above	133
	492	35.4.1	No provision has been made for 'trip numbers' nor 'bus service details'	Non-compliant. (Question link provision)		/13/
	512	35.10.4	PB have proposed TCP/IP communications for Status & faults for much of the Tramstop equipment instead of SCADA as called for by tie*	Non-compliant	As 132 above	135
no	550	36.1	SDS design allows for a maximum of 2 TVM's per platform	Non-compliant. Validators not included as part of SDS design.	As 9 above - SDS note the proposal for a MINIMUM of two TVM's per platform tie to issue Change order to SDS.	136
Fare Collection	550	36.2	ER's Ticket Validators or smart card Validators - both are specified?	Non-compliant. Validators not included as part of SDS design.	the have advised SDS that they will investigate this issue and advise* - nothing forthcoming SDS have not allowed for anyTicket validators in theor design, tie* have not quantified the number or dimensions of these items, tie to advise SDS by Change order	137
36 Integrated Fa	550	36.3	Where are TVM Docking Stations to be located?	SDS advise lobby of Depot Control Room. Tie to confirm.	tie have advised SDS that they will write to SDS instructing them as to their requirments* - nothing forthcoming.	138
36 Inte	552	36.5.3	System Interfaces 36.5.3?	Non-compliant. Validators not included as part of SDS design. Equipment on Table 86 not yet part of SDS scope	tie have advised SDS that the IFC interface is an BBS issue and not that of SDS SDS have not allowed for anyTicket validators in theor design, the have not quantified the number or dimensions of these items, the to advise SDS by Change order	159
37 System Integration	554	37.5.1	Management of the design, Should read design.	Within the SDS Agreement SDS are to design (and have designed) the civil and building infrastructure and prepare (and have prepared) Procurement Specifications for the E&M Systems elements of ETN.	As 34 above	140
38	557	38	SUS design process	In accordance with the design as proposed by SDS in accordance with the SDS Agreement, ie the civil and building infrastructure SDS are to prepare (and have prepared) Procurement Specifications for the E&M Systems elements of ETN).	As 34 above	:141

Section	Sheet No	Clause	Issue	Comment	RED - Ongoing - tie Change Order and/or clarification still required. ORANGE - for information and assistance of tie GREEN - item closed	tie Ref
	559	39.2	Incorrectly refers to 'Bidders' and "Tenderer's"	tile to correct	tie have advised SDS to review wording in susequent issue of ER Issue closed	142
			reference to PAB Parsons Brinckerhoff rather than SDS?	tile to correct	tie references to Contracting Parties appears to have been detelled - Sheet 770 v3.5a SDS wonder how the are able to determine who is responsible for a particular Programme activity?	140
me	624	39.9	Phase refers to SDS Design but nothing for Infraco design, Energisation, Training, Testing (Works, Site, Trial Running etc)	tie to correct	tile have advised SDS to review wording in susequent issue of ER* Phase (Sheet 772) now tilled Phase Codes (SDS) SDS seek clarification as to what tile are advising. Before Novation.	14
Project Programme	625	38.1	Again reference to SDS Design but no Infraco Design! No references to other significant WBS activities Procurement, Manufacture, Testing (Works, Site, Trial Running etc) Training, Documentation etc	Coding and phasing to be corrected	tie have advised SDS to review wording in susequent lissue of ER SDS still do not see any references to the many other project critical activities other than Construction in what SDS would consider to be part of the necessary WBS SDS still are unable to see any references to Dynamic Tram Testing and commissioning on site (Test Track, power, energication, training lete).	145
39		39.2		Project Programme	Reference is made in the text to delivery being in accordance with the Programme. SDS resquest clarification as to which Programme - is this the Project Programme?	191
	626	39.14	Only SDS Design shown, Lack of recognision that Infraco do design. Tramco do Design. What relavence has Requirments Definition etc to the Infraco?	tile to correct	tile have advised SDS to review wording in susequent issue of ER* SDS see little improvement in the ER V3.6a as the design work to be done by Tramco does not appear to be monitored LBS, WBS,	146
	626	39.14	TTRO's	TTRO's not SDS Scope. Infraco to provide	tie to write* SDS await receipt of this tie letter.	147
40 Maintenance			No comment.		See 59b above	148
			Vig.	* See tie Project Director (M C) Email to SDS dated 22.02.08 timed at 14.39Hrs in response to SDS comments on v3.1.	SDS await formal confirmation of the contents of this Email as detailed above and the issue of the necessary instructions and change orders from tie to correct the situation.	
				Non compliant - to be interpreted as non-compliant with ER's v3.1, remaining non compliant with v3.6a and v3.6b but compliant with tie/SDS Agreement		

APPENDIX PART 7

Part C - SI	98 Provide	's Report	on Infrac	o Proposa	Is dated 27	March 2	008	
0299/15/190492						THE PARTY NAME OF THE PARTY NA		

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	18	10	10	24	5.A	\ 5E	3 50	7 <i>P</i>	6	PB Comments
Accommodation Works			x	X	X	х	х	х	х	х	х		
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design	x	x	x	x	x	x	x	x	x		PB seeks clarification of this statemer which is used on many occasions. i.e Which IFC Design has BBS allowed for to construct? Is this the SDS design or some varient which BBS is considering when refering to 'finalising design'
Building (Depot)								TITE.		de		х	
Liaison on steelwork design for Depot Building may be required to allow BBS to comply with BAA requirements for notice period to lower crane jibs if BAA require use o the auxiliary runway. Any re-design is unlikely or minimal	f	Liaise with structural steel subcontractor on design of steelwork, where required, to allow BBS to comply with BAA requirements for notice period to lower crane jibs if BAA require use of the auxiliary runway.										x	BAA risks are assumed to remain with tie
Drainage	TO THE REAL PROPERTY OF	THE ART LESS OF SHIPE SHIPE	v	v	v	~	V	~	-	×		No.	CONTRACTOR OF THE PROPERTY OF THE PARTY OF T
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design								x			
Requirements for maximising use of and connection to existing drainage network to be confirmed.		Review and complete design	x	x	x	x	x	x	x	x	x		
Earthworks		Carlo de la companya	X	х	x	x	X	x	х	X	X		The second of the second second second
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design	4	Complete Earthworks Design	x							x			

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	1B	1C	1D	2A	5A	5B	5C	7A 6	PB Comments
Requirements for excavation and filling below Earthworks Outline to be designed and specified and assessment of anticipated formation conditions		Standard Details for treatment of low CBR or Stiffness or Soft Material; excavate and replace with class 6, Lime Modification, Geotextiles	x	x	x	x	x	х	x	x	x	PB has carried out sufficient SI /GI to inform the design. With reference to the Scope Split meetings a rolling
		Extent; length, width and depth of areas requiring earthworks below Earthworks Outline	x	x	х	x	X	х	x	x	x	programme of SI /GI is to be carried out by BBS. PB will provide a suite of treatments which can be applied when the requirements are established by
Formation requirements to be confirmed.		CBR or Stiffness Requirements at Formation for Highways and Track	x	x	x	x	x	x	x	x	x	BBS. Note that this scope of work will be impacted by the lower void spanning capacity of BBS's Trackform offering in comparison with the PB reference design.
Requirements for excavation and disposal of contaminated material, and refilling of void, to be designed and specified.		Extent; length, width and depth of areas requiring earthworks below Earthworks Outline and materials to be used for refilling where required	x	x	x	x	x	x	x	x	x	It is assumed that BBS carries the risl associated with the discovery of contaminated land. It is also assume that BBS carries the risk associated with Archaeological remains.
Special Geotechnical measures, e.g. embankment slope steepening (by selection of fill type, re-inforced earth) cut slope steepening (by slope drains, buttresses, soil nails) soft		embankment slope steepening (by selection of fill type, re-inforced earth) cut slope steepening (by slope drains, buttresses, soil nails) soft ground treatment (by	x			x	x	x	x	x	x	
ground treatment (by surcharging/consolidation, load transfer platforms) to be designed and specified.		surcharging/consolidation, load transfer platforms) to be designed and specified.										

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	18	10	1D	2A	5A	5B	5C	7A 6	PB Comments
Design special Geotechnical measures for Gogar Landfill Site. Solution to be dev		Design solution to be developed with BBS Engineers for surcharge embankment with appropriate consolidation period and excavation and replacement in the vicinity of Gogarburn Bridge East Abutment									x	
Geometry			x	X	X	X	X	x	x	x	x	
Horizontal Alignment			X	X	X	X	X	X	x	X	X	
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design	x	x	x	x	x	x	x	x	x	
Confirmation required that alignment is compatible with CAF Tram DKE and LOD.		Incorporate CAF Tram DKE in Design	x	x	x	x	x	x	x	x	x	Change required to wording. Confirmation required that the CAF Tram is compatible with the alignmen
Landscaping			x	x	X	X	X	x	X	¥	Y	Election massessmin was a will account a const
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design				x						
OLE Foundations			X	x	X	X	Y	Y	Y	Y	Y	
Design to be completed to IFC status, all design consents and approvals obtained and BBS will	Information from BBS to be issued on OLE poles,	Design OLE Foundations	x	x		x	SS			20		PB is preparing a suite of standard OLE base designs which should cove the requirement
construct IFC Design	including loadings.											the requirement
Roads			x	X	x	x	X	X	X	x	X	
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design	x	x	x	x	x	x	x	x	x	

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	1B	1C	1D	2A	5A	5B	5C	7A 6	PB Comments
Subject to survey, pavement design to be developed and finalised to minimise work scope		Pavement design is to be revised to a plane and re-surface (new regulating and surface course only) when survey information is available and where it confirms the feasability of this design solution Note This activity is an alternative to the Vertical Alignment activity above)	x	×	×	x	x	x	x	x		PB cannot identify where this approach may apply. Clarification sought from tie. Any surveys to be carried out and paid for by BBS.
Further pavement surveys and assessments are required.		GPR and/or Pavement Condition surveys as required by xxxx (above)	x	х	х	х	x	x	х	x		Clarification sought from tie.
Site Clearance			X	X	x	X	×	X	x	×	×	
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design	x	x			x					
Design to be completed to IFC status and all design consents and approvals obtained.		Complete Design			x							

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	18	10	1D	2A	5A	5E	3 50	7.	A 6	PB Comments
Sub-station Buildings		, was a second of the second of	x	x	x	х	X	x	X	X	>		
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design	Information on Sub-station equipment to be supplied to SDS by BBS	Complete Design	х	x	×	x	x	×	x	x	x		For the purposes of the Infraco Procurment SDS has provided comprehensive procurement information, including detailed and dimensioned drawings, schematics, wiring diagrams, protection diagrams etc all of which are based upon the many tie/tie technical advisors/Transdev and Scottish Powe meetings. All substation equipment performance and functionality has been approved by SP as have the equipment layouts within the associated substations which themselves have progressed through planning. Completion of the Sub-station designs is to be a BBS responsibility
Sytems and Power Cable Ducts			X	X	х	X	X	x	X	x	X		
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design	supplied to SDS	Design duct group and spacing to accommodate cabling requirements and incorporate information on drawings	x	x	×	x	x	×	x	x	×		Comprehensive SDS cable duct drawings and layouts have been produced based upon the tie approve SDS design and procurement documentation. The cabling requirements may change dependent upon the BBS proprietary solution. Identification of scope and incorporation on drawings to be BBS

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	1B	1C	1D	2A	5A	5B	50	; 7A	6	PB Comments
Trackform			×	×	×	Y	Y	Y	v	v	Х	THE REAL PROPERTY.	
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design			x			x							All Trackform design and developmer issues are to be the responsibility of BBS. PB provides the horizontal and
Cross sections required to reflect BBS's selected Track System, including minimum track construction depths (top of rail to formation) with corresponding formation condition requirements.	loadings are required to enable them to complete	Incorporate BBS selected Trackform on drawings and confirm minimum track construction depth and corresponding formation condition requirement as Pricing Assumption or at some other depth condition measure to be agreed/approved by SDS, BBS, tie and CEC	x										vertical alignment design together wit Civils infrastructure design outwith the Trackform envelope. All design within the envelope is assumed to be the responsibility of BBS. PB (SDS) will not engage in agreement and iapproval in relation to the BBS Trackform design.
ramstops			v	MANAGE	N HANGE	X	Name of Street		SOCIETY OF		X	Х	
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design	х		- Chi	x		10000					
ertical Alignment			x	x	x	X	х	x	×	x	X		A A SAN THE RESERVE OF THE RESERVE O
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Complete Design			ATTE CONTRACT	x		Niesan (C	ill)ichisiu	West	Unable His		
Revise alignment, where possible and where Programme permits for on-street section to minimise Roads work-scope.		Revise, generally raise, vertical alignment of Track	x										It is assumed that PB will complete the SDS Alignment Design as currently agreed and that any changes which are deemed to be possible will be instructed and paid for when they are identified and agreed

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	1B	1C	10	2 <i>A</i>	\ 5A	5E	50	7A	6	PB Comments
Revise alignment, where possible and where Programme permits to minimise Roads work-scope.		Revise, generally raise, vertical alignment of Track		x	x	x	x						The SDS alignment is designed to accommodate the most economical vertical and horizontal passege of the tram throughout its journey. It should also be noted that any change in the track alignment may impact other aspects of the infrastructure e.g tramstops.
Revised alignment required to facilitate direct fixing of rails to structures and guideway.		Revise, lower, vertical alignment of Track	x						x				imasiruciure e.g tramstops.
Revised alignment required to facilitate direct fixing of rails to structures		Revise, lower, vertical alignment of Track					x	x		x	x		Trackform issue - BBS responsibility

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A	11	B 1C 1	D 2A	5A !	5B 5	C 7/	A 6	PB Comments
Structures							den				
Design to be completed to IFC statu	ıs, all design conse	ents and approvals obtained and BB	S wi	11 0	consti	uct IF	CE	Desi	gn		
W1 Lindsay Road		Complete Design	X								
S16 Victoria Dock Entrance		Complete Design	x								
S17 Tower Place		Complete Design	x								
S18 Leith Walk Railway		Complete Design		X							
W3 Russell Road (Wall) No 1		Complete Design					x				
W4 Russell Road (Wall) No 2		Complete Design					x	1			
W18 Murrayfield Tramstop (Wall)		Further GI required to inform Design				11	x				
S21B Murrayfield Stadium (Wall)		Complete Design				11	x	+			
S21C Murrayfield Stadium Underpass		Complete Design					x				
S21D Murrayfield Training Pitches		Complete Design					х				
W8 Baird Drive		-					X				
S22 Balgreen Road (A and B)		-					x		+		
W9 Balgreen Road (Wall)		Complete Design					115-	x	+		
S26 South Gyle Access Road		Complete Design						X			
W11 Bankhead Drive Tramstop (Wall)		Complete Design						x			
W19 Gyle Tramstop (Wall)		Complete Design						,	K		
S29 Gogar Burn		Complete Design					+	-	X		
S30, 31 and 34 Gogarburn Culverts 1,2 and 3		Complete Design							x		
W14 and 15 Gogarburn Walls 1 and 2		Complete Design							x		

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A 1B 1C 1D 2A 5A 5B 5C 7A 6	PB Comments
Possible Re-design S21A Roseburn Street Viaduct			×	
Possible re-design to reduce scope and cost.		Re-Design to 2 separate single span structures with re-inforced earth walled embankments replacing removed spans		
Further GI required to confirm foundation design.		Further GI, in conjunction with GI for W18 (see above) to ascertain extent of soft layer		Clarification sought from tie on what has been accepted in relation to this part of the BBS Civils Offer.
Re-design required to allow cost efficient fabrication of structural steel.	Appoint steelwork sub-contractor	Liaise with BBS and steelwork sub- contractor and re-design/re-detail accordingly		
S21E Water of Leith			×	Was Company of the Co
Subject to Programme allowance, redesign pier foundations to improve buildability.		Re-design with 2 No larger dia bored piles (mono-piles), one per column. Design a direct connection to the columns, to be made within the pile casing. Pile casings will be cut off at river bed level		Clarification sought from tie on what has been accepted in relation to this part of the BBS Civils Offer.
Re-design required to allow cost efficient fabrication of structural steel.	Appoint steelwork sub-contractor	Liaise with BBS and steelwork sub- contractor and re-design/re-detail accordingly		
S23 Carrick Knowe			x	
Completed design to have foundations outwith Track Support Zone?		Review and Revise Design		Clarification sought from tie on what has been accepted in relation to this part of the BBS Civils Offer.

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A 1B 1C 1D 2A 5A 5B 5C 7A	6 PB Comments
S27 Edinburgh Park Station Viaduct			x	
Possible re-design to reduce scope and cost		Redesign piers with flared tops and/or crossheads so that pre-cast deck beams can be placed without the need for Temporary Works (temporary beam supports)		Clarification sought from tie on wha has been accepted in relation to this part of the BBS Civils Offer.
Completed design to have foundations outwith Track Support Zone		Review and Revise Design		part of the BBS Civils Offer.
S28 A8 Underpass			x	n ingletier fallete met int
Subject to Programme allowance, re-design to incorporate a more economical piling solution along with further GI to confirm ground water regime.		subject to programme allowance, re- design secant piles as contiguous piles		Clarification sought from tie on what has been accepted in relation to this part of the BBS Civils Offer.
Re-design for BT duct crossing (over structure)		re-design section of underpass to facilitate construction under BT duct		
S19 Haymarket Viaduct			×	
Requirements for a design condition survey of the existing wall.				Clarification sought from tie on what has been accepted in relation to this
Requirements for special foundations at Pier 4 and Abutment E to be confirmed.				part of the BBS Civils Offer.
S20 Russell Road	I section at	THE RESERVE OF SHIPE STATE	×	
Possible re-design (subject to programme allowance) of sub- structure to improve buildability				Clarification sought from tie on what has been accepted in relation to this part of the BBS Civils Offer.
S32 Depot Access Bridge (or Depot Access Bridges)				x

Scope of Work	Information from BBS to SDS	Description of Design completion activities	1A 1B 1C 1D 2A 5A 5B 5C 7A	PB Comments
Design to be completed to IFC status, all design consents and approvals obtained and BBS will construct IFC Design		Design to be completed from basic information, discussed at meeting on xxxx between BBS and SDS. The DABs are to be 2 separate structures. BBS will work with SDS to develop a cost effective Design		Clarification sought from tie on what has been accepted in relation to this part of the BBS Civils Offer.

APPENDIX PART 8

SDS Hourly Rates

The table of rates for provisional additional work to be used for the pricing of changes to scope is as follows:-

Role	Hourly Rate
Graduate Designer	£55.00
Senior Designer	£78.00
Principal Designer	£95.00
CAD Technician	£38.00
Senior CAD Technician	£49.00
Technical Support	£38.00
	Graduate Designer Senior Designer Principal Designer CAD Technician Senior CAD Technician

APPENDIX PART 9

LOD Register

CPH/CPH/310299/15/19049225.2

Schedule of Works Outwith the LOD

Section	Description	Reference	Source	Temporary Permanent
1A	Footway along Lindsay Road adjoing Forth Ports area (to be confirmed)	CR253, ULE90130-01- HRL00001, 2	Roads	Permanent
1A	Lindsay Road - required for lowering of Roadway	CR253, ULE90130-01- HRL00001, 2	Roads	Permanent
1A	Lindsay Road Retaining Wall (revised as part of Forth Ports change - to be confirmed with detailed design)	CR253, ULE90130-01- HRL00001, 2	Structures	Permanent
1A	Realigned Ocean Drive and footpath / cycleway	CR253, ULE90130-01- HRL00002	Roads	Permanent
1A	Connection to Access Drive 1 (as part of Forth Ports change - to be confirmed with detailed design)	CR253, ULE90130-01- HRL00002	Roads	Permanent
1A	Connection to Access Drive 2 (as part of Forth Ports change - to be confirmed with detailed design)	CR253, ULE90130-01- HRL00002	Roads	Permanent
1A	Footpath along Scottish and Southern Substation	CR253, ULE90130-01-	Roads	Permanent
1A	Realignment of Bus loop at Cruise Berth	HRL00002 CR253, ULE90130-01-	Roads	Permanent
1A	Pavements along revised Ocean Drive (to be confirmed	HRL00002 CR252, 253 ULE90130-01-	Roads	Permanent
	due to Forth Ports change) Ocean Drive 'bypass' road and associated elements,	HRL00002, 3, 4	Troddy	1 GITIGHTEIL
1A	subject to instruction to proceed with layout agreement with Forth Ports / CEC	CR252, ULE90130-01- HRL00004	Roads	Permanent
1A	Rennies Isle Road markings, kerb line, paving	ULE90130-01-HRL00005	Roads	Permanent
1A	Tower Place Bridge - widen to include footpath (to be confirmed with detailed design)	CR 278, ULE90130-01- HRL00005	Structures	Permanent
1A	Tower Place Bridge - steps, ramp, ancillaries	ULE90130-01-HRL00005	Structures / Accommodati on works	Permanent
1A	Stanley Casino Car Park - Road Markings, signage, kerbing, fencing, landscaping (to be finalised)	ULE90130-01-HRL00006, 7	Roads / Accommodati on works	Permanent
1A	Pavements along Ocean Drive	ULE90130-01-TAL-00002 to 00006	Roads	Permanent
1A	Ocean Drive / Tower Place Paving	ULE90130-01-HRL00006	Roads	Permanent
1A	Casino Car Park	CR254, ULE90130-01- HRL00007	Roads	Permanent
175	Constitution Street, Tower Street - Road surface / Markings, signal infrastructure, signage, kerbing	ULE90130-01-TAL-00006	Roads	Permanent
1A	Constitution Street, Baltic Street - Road Markings, signage	ULE90130-01-TAL-00007	Roads	Permanent
173	Baltic Street - closure of the side street (remedial works, signing)	Comments from CEC walkthrough 31 July (A. Conway) / ULE90130-01-TAL- 00007	Roads	Permanent
12.4	Bernard Street - roadworks to tie into existing condition / CEC project.	CR259, ULE90130-01- HRL00007	Roads	Permanent / Temporary
DEA.	Constitution Street, Bernard Street- Road Markings, signage	ULE90130-01-HRL00007	Roads	Permanent
	Constitution Street, Mitchell Street - Road Markings, signage	ULE90130-01-HRL00007	Roads	Permanent
	Constitution Street, Maritime Lane - Road Markings, signage	ULE90130-01-HRL00007	Roads	Permanent
	Constitution Street, Queen Charlotte Street - Road Markings, signage	ULE90130-01-TAL-00008	Roads	Permanent
1A		ULE90130-01-TAL-00001, 00006 to 00009	Lighting	Permanent
1A	Constitution Street east side north of Queen Charlotte Street, opposite Bernard Street Tramstop - paving	ULE90130-01-HRL00008	Roads	Permanent
1A	Constitution Street, Coatfield Lane - paving	ULE90130-01-HRL00008	Roads	Permanent
1A	Constitution Street, Kirkgate - signage and paving	ULE90130-01-HRL00008	2122222222	Permanent
1B	FOTW Junction - Road Markings, kerbing, signage	ULE90130-01-TAL-00010		Permanent
1B	Great Junction Street - Site clearnace, surfacing	ULE90130-01-HRL00010		Permanent
1B	Duke Street - Road surfacing	ULE90130-01-HRL00010		Permanent
1B		ULE90130-01-HRL00010		Permanent

Section	Description	Reference	Source	Temporary of Permanent
1B	Basestation at James Street (Leith Walk area) to provide coverage in and around this area.	HB#40411	scc	Permanent
1B	Leith Walk, Crown Place - Road Markings, signage	ULE90130-01-TAL-00010	Roads	Permanent
1B	Leith Walk, Casselbank Street - Road Markings, signage	ULE90130-01-TAL-00010	Roads	Permanent
1B	Leith Walk, Crown:Street - Road Markings, signage	ULE90130-01-TAL-00010	Roads	Permanent
1B	Leith Walk, Jane Street - Road Markings, signage	ULE90130-01-TAL-00010	Roads	Permanent
1B	Leith Walk, Manderston Street - Road Markings, signage	ULE90130-01-TAL-00010	Roads	Permanent
1B	Leith Walk, Springfield Street - Road Markings, signage	ULE90130-01-TAL-00011	Roads	Permanent
1B	Leith Walk Depot - within LLAU		Substation	Permanent
1B	Leith Walk, Steads Place - Road markings	ULE90130-01-HRL00011	Roads	Permanent
1B	Leith Walk, Smiths Place - Road Markings, signage	ULE90130-01-TAL-00011	Roads	Permanent
1B	Leith Walk, Lorne Street - Road Markings, signage	ULE90130-01-TAL-00011	Roads	Permanent
1B	Leith Walk, Jameson Place - Road Markings, signage	ULE90130-01-HRL00012	Roads	Permanent
1B	Leith Walk, Balfour Street - Road Markings, signage	ULE90130-01-HRL00011	Roads	Permanent
1B	Leith Walk, Arthur Street - Road Markings, signage	ULE90130-01-TAL-00012	Roads	Permanent
1B	Leith Walk, Dalmaney Street - Road Markings, signage	ULE90130-01-HRL00013	Roads	Permanent
1B	Leith Walk, Iona Street - Road Markings, signage	ULE90130-01-TAL-00012	Roads	Permanent
1B	Leith Walk, Pilrig Street - Road Markings, signage	ULE90130-01-HRL00013	Roads	Permanent
1B	Leith Walk, McDonald Street - Road Markings, signage	ULE90130-01-TAL-00013	Roads	Permanent
1B	Leith Walk, Brunswick Street - Road Markings, signage	ULE90130-01-TAL-00013	Roads	Permanent
1B	Leith Walk, Gayfield Square - Road Markings, signage	ULE90130-01-TAL-00015	Roads	Permanent
1B	Street Lighting Section 1B	ULE90130-01-TAL-00010 , 00011 and 00013	Lighting	Permanent
1C	Annadale Street - Road Markings	ULE90130-01-HRL00016	Roads	Permanent
1C	London Road - Road Markings, signage	ULE90130-01-TAL-00015	Roads	Permanent
1C	Ancillary works for closure of Blenheim Place on London Road (to be confirmed)	ULE90130-01-TAL-00015	Roads	Permanent
1C	Union Place - road surfacing	ULE90130-01-HRL00016	Roads	Permanent
10	interfacing with Central Monitoring Facility (CFM) to extend CCTV coverage to/from that location. This connection will be made from Cathedral Sub-station where it will then be transported via 3rd Party Service Provision such as BT.	HB#40411	scc	Permanent
	Picardy Place - road surfacing	ULE90130-01-HRL00015, 16	Roads	Permanent
1C	Broughton Street - road markings	ULE90130-01-HRL00016	Roads	Permanent
1C	Cathedral Substation and associated ducting on Elder Street and Catherdral Lane	ULE90130-01-TAL-00016	Substation / Roads	Permanent
1C	Street lighting along York Place	ULE90130-01-TAL-00016 and 00017		Permanent
1C	Queen Street - road markings	ULE90130-01-HRL00017	Roads	Permanent
1C	North East Lane- Road markings, site clearance	ULE90130-01-HRL00017	Roads	Permanent
1C	N St Andrew Lane - Road markings, site clearance	ULE90130-01-HRL00017	Roads	Permanent
	Clyde Street - Road markings	ULE90130-01-HRL00017	Roads	Permanent
	St Andrew Square - Road markings, site clearance, surfacing	ULE90130-01-HRL00018	Roads	Permanent
	George Street - Road markings, site clearance	ULE90130-01-HRL00018	Roads	Permanent
	Rose Street - Road surfacing	ULE90130-01-HRL00018	Roads	Permanent
	Register Street - Road markings	ULE90130-01-HRL00018	Roads	Permanent
	Waverley Bridge - Road markings	ULE90130-01-HRL00018	Roads	Permanent
1C	Meuse Lane - Road markings and surfacing	ULE90130-01-HRL00019	Roads	Permanent
	Princes Street east of LOD - Road markings	ULE90130-01-HRL00019	Roads	Permanent
	Street Lighting Section 1C	ULE90130-01-TAL-00014, 00016, to 00020	Lighting	Permanent
1C	A STATE OF		The same of the sa	
10	Princes Street, Hanover Street - Road Markings, signal	ULE90130-01-TAL-00019	Roads	Permanent
1C	Princes Street, Hanover Street - Road Markings, signal infrastructure, signage, kerbing	ULE90130-01-TAL-00019	Deede	Permanent Permanent

Section	Description	Reference	Source	Temporary o
1D	Charlotte Square - south side - Road Signage	HB#71652, ULE90130-01- TAL-00021	Roads	Permanent Temporary or Permanent
1D	Charlotte Square junction with South Charlotte Street - Road Signage	HB#71652, ULE90130-01- TAL-00021	Roads	Temporary or Permanent
1D	Princes Street, South Charlotte Street - Road Markings, signal infrastructure, signage, kerbing	ULE90130-01-TAL-00021	Roads	Permanent
1D	Princes Street, Lothian Road - Roadmarkings, signage and kerbing	ULE90130-01-TAL-00022	Roads	Permanent
1D	North side of Princes Street opposite junction with Lothian Road - Road signage	HB#71652	Roads	Permanent
1D	Northern end of Lothian Road - Road Signage	HB#71652	Roads	Temporary or Permanent
1D	Princes Street, Queensferry Street - Road markings, signage, kerbing	ULE90130-01-TAL-00022	Roads	Permanent
1D	Basestation at Edinburgh Castle (an existing radio site that gives coverage to an large portion of the Tram Network for radio coverage and towards any future requirements)	HB#40411	scc	Permanent
1D	Street Lighting - Section 1D	ULE90130-01-TAL-00021 00023 and 00024	Lighting	Permanent
1D	Canning Street - Road markings, signage, taxi stance	ULE90130-01-TAL-00023	Roads / TRO	Permanent
1D	Atholl Crescent, Canning Street - Road markings, signage		Roads	Permanent
1D	Atholl Crescent, Canning Street Lane - Road markings, signage	ULE90130-01-HRL00023	Roads	Permanent
1D	Manor Street - Road markings, signage, signal infrastructure	ULE90130-01-HRL00023	Roads	Permanent
1D	Palmerston Place - Road markings, signage, signal infrastructure	ULE90130-01-HRL00023	Roads	Permanent
1D	Palmerston Place opposite junction with Palmerston Place Lane - Road signage	HB#71652	Roads	Permanent
1D	Palmerston Place at junction with West Maitland Street - Road signage	HB#71652	Roads	Permanent
1D	South end of Manor Place - Road Signage	HB#71653	Roads	Permanent
1D	Atholl Crescent Lane - Road markings West Maitland Street, Manor Place - Road markings,	ULE90130-01-TAL-00023	Roads	Permanent
	signage, lighting, signal infrastructure Clifton Terrace, Morrison Street - Road markings, lighting,	ULE90130-01-TAL-00023	Roads / Lighting	Permanent
1D	signage, signal infrastructure Clifton Terrace, Grosvenor Street - Road markings,	ULE90130-01-TAL-00024	Roads / Lighting	Permanent
1D 1D	signage, kerbing Clifton Terrace, Dalry Road - Road markings, signage	ULE90130-01-TAL-00024	Roads	Permanent
	Torphican Place / Palmerston Place to two-way and street	ULE90130-01-TAL-00024	Roads	Permanent
	lighting Torphichen Street - Road markings, signage, signal	CR258	Roads	Permanent
1D	infrastructure	ULE90130-01-HRL00023	Roads	Permanent
1D	Torphichen Place - street lighting	ULE90130-01-HRL00023	Lighting	Permanent
10	Morrison Street - Road markings, signage, signal infrastructure	ULE90130-01-HRL00024	Roads	Permanent
10	Morrison Street close to junction with the Morrison Link - Road signage	HB#71652	Roads	Permanent
		HB#71652	Roads	Permanent
	Dalry Road (opposite Caledonian Place) - Road signage	HB#71652	Roads	Permanent
(0)	Relocation of taxi stances (to be confirmed upon instruction to work outwith LOD)	To be confirmed upon Instruction from tie	Roads	Permanent
10	Lothian Road, South Charlotte Street)	To be confirmed upon instruction from tie	Roads	Permanent
Section Wide		To be confirmed upon detailed design	TRO	Permanent
44100	wider area works (to be irrialised upon issuance of vo)	To be confirmed upon instruction from tie	Roads	Permanent
		To be confirmed upon instruction from tie, CR 315	Roads	Permanent

Section	Description	Reference	Source	Temporary of Permanent
2A	Street Lighting Section 2A	ULE90130-02-OLE-00001	Lighting	Permanent
2A	OLE Section 2A - feed	ULE90130-02-OLE-00002	OLE	Permanent
2A	Drainage connection point at Haymarket Yards (2A-2)	HB# 59917	Ralph Shackleton	Permanent
2A	New access to east of Haymarket Tramstop - road markings and kerb / road works outside LOD within LLAU	02-HRL-00100	Roads	Permanent
2A	Haymarket Terrace north of Citypoint road kerb / markings outside LOD	02-HRL-00100	Roads	Permanent
2A	Haymarket Terrace north of Citypoint road sign outside LOD	02-HRL-00100	Roads	Permanent
2A	Haymarket Terrace north of Citypoint ped signals on north side outside LOD	02-HRL-00501	Roads	Permanent
2A	Haymarket Terrace north of Citypoint Limit of Construction outside LOD	02-HRL-00001	Roads	Permanent
2A	Haymarket Terrace north east Haymarket Tramstop ped signals and pavement on north side outside LOD	02-HRL-00501	Roads	Permanent
2A	Haymarket car park - kerbs / markings outside LOD - within LLAU	02-HRL-00501	Roads	Permanent
2A	Haymarket car park - ducting outside LOD - within LLAU	02-HRL-00801	Roads	Permanent
2A	Road / access south of ICAS Building - road markings and surfacing outside LOD within LLAU	02-HRL-00501 and 00901	Roads	Permanent
2A	Road / access south of ICAS Building -Limit of Construction outside LOD within LLAU	02-HRL-00001	Roads	Permanent
2A	South east of ICAS Building - sign outside LOD	02-HRL-00501	Roads	Permanent
2A	South west end of Haymarket Yards - Limit of Construction outside LOD but within LLAU	02-HRL-00002	Roads	Permanent
-2/3	South west end of Haymarket Yards - Dropped kerb partly outside LOD but within LLAU	02-HRL-00902	Roads	permanent
20	West arm of Roseburn Delta Junction - Limit of Construction outside LOD and LLAU	02-HRL-00501	Roads	Permanent
2A	road and retaining wall at the back of Verity House, on NWR land for new access road outwith LoD and LLAU due to NWR Platform zero retaining wall and fencle line encroaching into the LLAU	02-HRL-00002	Roads	Permanent
34	Street Lighting - Wester Coates Terrace & Easter Drylaw Drive (within LLAU)	ULE90130-03-LTG-00002 and	Lighting	Permanent
	Roads - Proposed footpath to Telford Drive (within LLAU)	03-HRL-00909		Permanent
Or t	Roads - Roseburn Terrace - Road/ped. crossing markings	03-HRL-00100		Permanent
370	Roads - Roseburn Terrace - ped. crossing cabling (within LLAU)	03-HRL-00800		Permanent
	Landscaping - West of Roseburn Tramstop - proposed landscaping	HB# 51851	LHMP	Permanent
JA	Structures - Coltbridge Viaduct - Proposed cantilevered walkway extends over airspace of LLAU (<1m)			Permanent
0/1	(edst side)	03-HRL-00006		Permanent
	Roads - Wester Coates Terrace - Road surfacing/sign (within LLAU)	03-HRL-00502 and 00902		Permanent
		03-HRL-00507		Permanent
0/4	Roads - Maidencraig Crescent - New ped. access proposed signage	03-HRL00506		Permanent
1	LLAU)	03-HRL00906		Permanent
3A I	Landscaping Outwith LOD at Maidencraig Crescent	HB# 51851	LHMP	Permanent
5	stepped ped, access	03-STP-00027		Permanent
		ULE90130-03-LTG-00011 and 00014	Lighting	Permanent
3B [Orainage connection point (3B-1)	HB# 59917	Ralph	Permanent

Section	Description	Reference	Source	Temporary of Permanent
3B	Roads - Ferry Road east and west of tramway - junction detector loops	03-HRL-00011		Permanent
3B	Roads - West Granton Road east and west of tramway - junction detector loops	03-HRL-00014 & 00831		Permanent
3B	Substations - Granton Mains East substation (within LLAU)			Permanent
3B	Roads - footpath from West Granton Access to West Pilton March (partially extends into LLAU from LoD)	03-HRL-00014		Permanent
3C	Street Lighting - Lighting column to south side of Waterfront Avenue, East of tram crossing	ULE90130-03-LTG-00016	Lighting	Permanent
3C	Drainage connection point (3C-1)	HB# 59917	Ralph Shackleton	Permanent
3C	Drainage connection point (3C-2)	HB# 59917	Ralph Shackleton	Permanent
3C	Junction 104 - Road markings & kerb re-alignment	03-HRL-00016		Permanent
3C	Roads - Junctions 105-108 - Road markings/HF surfacing, kerb re-alignment ped. crossing & traffic signal detector loops	03-HRL-00016 to 00018		Permanent
3C	Roads - Junctions 105 - Crown re-grading of Waterfront Avenue to both sides of the tramway crossing			Permanent
3C	Roads - Junction 108a (north of) - Road markings, kerb re alignment & traffic signal detector loops	03-HRL-00018 and 00867		Permanent
3C	Roads - Junction 108b (north of) - Road markings, kerb re alignment & traffic signal detector loops	03-HRL-00018 and 00865		Permanent
3C	Tramstops - Caroline Park - landscape tie-in	03-STP-00061		Permanent
3C	Tramstops - Saltire Square - paving tie-in	03-STP-00071		Permanent
3C	Roads - Junction 109 - Kerb line (partially) for stopped-up Oxcraig Street	03-HRL-00018		Permanent
3C	Roads - Oxcraig Street signage	03-HRL-00564		Permanent
3C	Roads - Junctions 110 - Road markings/HF surfacing, re- grading, kerb re-alignment ped, crossing & traffic signal detector loops	03-HRL-00019		Permanent
3C	Substation - Granton View Substation (within LLAU)			Permanent
3A	Landscaping design - west of Roseburn Tramstop (within LLAU)			T. S. Marior II.
07.	Structures - cantilever walkway to west side of Coltbridge Viaduct (in mid-air)			
3A	Landscaping - between Craigleith Tramstop and Maidencraig Crescent/Maidencraig Court			
3A	Roads - Stepped access from Telford Drive to Roseburn Cycle/footway to north of existing substation			
3A	Lighting - exection of lighting column on footpath between Roseburn Corridor/Easter Drylaw Drive (within LLAU)			
	Landscaping - Drylaw Recreation ground Roads - realignment (vertical/horizontal) of footpath from			
3B	West Pilton March to West Granton Road (within substation LLAU) where LOD is too narrow.			
3B	Roads - Creation of public space. Extension of footpath design and width beyond LOD into substation LLAU, including design of low level wall at northeast comer of LLAU for Granton Mains East substation.			
36	Roads - crown regrading of road for short distance beyond LoD at both crossings of Waterfront Avenue			
3C	Spine Road - Tram route crosses Spine Road where LOD is too narrow. New traffic islands, signal heads and road markings outwith LOD			
3C	Roads - installation of traffic signalisation, road markings for 3 no. minor access roads to north side of Waterfront Avenue (Spine Road) and associated pedestrian crossing points	1100		

ection	Description	Reference	Source	Temporary Permanent
3C	Roads - installation of pedestrian crossing signalisation at corner of junction of Waterfront Avenue/West Harbour Road and associated pedestrian crossing point tactile paving and kerbing			- January
3C	Roads - Chestnut Street, road markings			
3C	Roads - installation of traffic signalisation at junction of West Harbour Road/Pickfords entrance and associated pedestrian crossing point tactile paving. Relocation of existing gated access (boundary and accomodation)			
3C	Roads - regrading of southern 50m (approx.) of Middle Pier Road and footways			
3C	Granton Square - bus interchange			
5A	Street Lighting Section 5A	ULE90130-05-LTG-00001 to 00003	Lighting	Permanent
5A	OLE Section 5A - feed	ULE90130-05-OLE-00001	OLE	Permanent
5A	Russell Road and sorting office boundary - Limit of Construction outside of LOD but within LLAU	05-HRL-00002	Roads	Permanent
5A	To east of offices near Haymarket Central Junction - Limit of Construction outside LOD and LLAU	05-HRL-00002	Roads	Permanent
5A	Kerb / road works and Limit of Construction to the south of the Bowling Green outside LOD - most within LLAU	05-HRL-00002	Roads	Permanent
5A	Kerb / road works and Limit of Construction to the north of Murrayfield Tramstop including new footway and ped crossing outside LOD - some within LLAU	05-HRL-00002 800 and 902	Roads	Permanent
5A	Murrayfield: Temporary- replacement/maintenance of existing Scotrail fence on the outbound platform to be undertaken on the boundary of the LOD.	#70512	Ian Brown	Temporary
5A	Murrayfield Training pitch moves.		Ian Brown	Permanent
5A	Turnstiles at Murrayfield Stadium - Accomodation works	ULE90130-05-ACC-00034	Mungo Stacy	Permanent
5B	Street Lighting Section 5B	ULE90130-05-LTG-00009, 00011, 00012, 00014, 00018 and 00019	Lighting	Permanent
58	Carrick Knowe Earthworks north of railway spill outwith LoD as advised by CEC - do not build retaining wall - this is CEC Leisure land.	ULE90130-05-	David Raeside	Permanent
5B	Saughton: Permanent - 2 proposed foothpaths are being introduced to provide access to tramstop. These are introduced either end of stop southwards to join existing foothpath on Broomhouse Drive. These are completely outside the LOD but there is the need to provide pedestrians access to the tram without having to constrain them to using the access within LOD on Saughton Road North. (see attached PDF). Limit of Construction - 2 Footpaths are being demolished - outside the LOD but within the LLAU.	#70512 05-HRL-00010, 11 and 12	lan Brown	Permanent
5B	Saughton Tramstop - landscape tie in	05-STP-00027	John Ramsay	Permanent
5B	We are proposing to relocate two bus stops on Bankhead Avenue (opposite South Gyle Access). Current and proposed locations are outside of the LoD. le Limit of Construction outside the LOD	ULE90130-05-HRL-00015	Roads	Permanent
5B	Immediately SE of South Gyle Tramstop - Limit of Construction and road markings outside LOD some in LLAU	ULE90130-05-HRL-00015 and 00134	Roads	Permanent
5B	South Gyle Tramstop - associated Pedestrian crossing	05-STP-00038	Roads	Permanent
5B	Bankhead Drive SE of South Gyle Access - Limit of Construction and road works outside LOD	ULE90130-05-HRL-00015 and 00135	Roads	Permanent
5B	Edinburgh Park Station - zone behind outbound platform- interface works with NR land	HB#70467	lan Brown	Permanent
5B	Edinburgh Park Station Tramstop - paving tie in	05-STP-00048	Ian Brown	Permanent

Section	Description	Reference	Source	Temporary of Permanent
5B	Edinburgh Park Station:- Permanent Works - Remodelled access footpath link to Currys to be constructed outside the LOD but within the LLAU. Limit of Construction outside the LOD some within LLAU.	HB #72057 05-HRL-00018	lan Brown	Permanent
5B	East of Junction 202A - Roadworks / marking / footway relaignment outside LOD	05-HRL-00132 00943	Roads	Permanent
5B	West of Junction 202A - limit of Construction outside the LOD/LLAU	05-HRL-00017	Roads	Permanent
5B	Bollard outside LOD (only just)	05-HRL-00535	Roads	Permanent
5B	Bankhead Drive / Bankhead Avenue Traffic Signals and Associated Ducting outside the LOD some within LLAU.	05-HRL-00834	Roads	Permanent
5B	Bankhead Drive substation - limit of Construction outside the LOD some within LLAU.	05-HRL-00014	Roads	Permanent
5B	Bankhead Drive substation - road realignmentoutside the LOD some within LLAU.	05-HRL-00014	Roads	Permanent
5B	Bankhead Drive junction - limit of Construction outside the LOD some within LLAU.	05-HRL-00017	Roads	Permanent
5B	Stenhouse Drive - road markings outside the LOD and LLAU	05-HRL-00009	Roads	Permanent
5B	Stenhouse Drive - pavement works outside the LOD and LLAU	05-HRL-00934 and 00935	Roads	Permanent
5C	Street Lighting Section 5C	ULE90130-05-LTG-00022, 00023, 00025 and 00026	Lighting	Permanent
5C	Edinburgh Park- relocation works to the footpath link ramped structure	HB#70467	lan Brown	Permanent
5C	Edinburgh Park- Limit of Construction re above relocation works to the footpath link ramped structure	05-HRL-00021	lan Brown	Permanent
5C	Trees planting outwith LoD at NEL's request north of Lochside ave	HB#70468	Kate Shudall	Permanent
	South west of Gyle Tramstop - kerb realignment outside LOD - within LLAU	05-HRL-00563	Roads	Permanent
5C	Gyle Tramstop - landscape tie in	05-STP-00064	Roads	Permanent
00	South of Gyle Tramstop - ducting outside LOD - some within LLAU	05-HRL-00861	Roads	Permanent
5C	South of junction of Lochside Crescent Lochside Avenue - footway works outside LOD	05-HRL-00962	Roads	Permanent
	East of junction 205 - Limit of Construction outside LOD	05-HRL-00023	Roads	Permanent
30	Northwest of junction 205 - Limit of Construction outside LOD - within LLAU	05-HRL-00023	Roads	Permanent
00	East end, north side of Lochside Avenue - sign outside LOD	05-HRL-000562	Roads	Permanent
5C	South east and north of Gogarburn Tramstop - Limit of Construction outside LOD some within LLAU	05-HRL-00026	Roads	Permanent
30	Depot Earthworks - potentially soil nails will be required outwith the LOD - underneath the A8 Underpass - TBC	TBC	David Raeside	Permanent
0	Gogarburn Roundablout - Signage outside LOD some in LLAU	06-HRL-00007	Roads	Permanent
	or roundabout, depot access and w or juriculon)	06-HRL-00501	Roads	Permanent
		06-HRL-00800	Roads	Permanent
0	outside LOD but within LLAU	06-HRL-00901	Roads	Permanent
.0	LOD but within LLAU	06-HRL-00001	Roads	Permanent
	Some within LLAG Some outside	06-HRL-00002	Roads	Permanent
.00	didentaken outside the LOD.	HB #70741	Andy Groves	Temporary
30	broduway	HB# 59917	Ralph Shackleton	Permanent
5C	Temporary works to construct the A8 Underpass required due to Utility routes and diversions	HB#70402 HB#70403	Paul McQuade	Temporary

Section	Description	Reference	Source	Temporary o
5C	Earthworks/construction work to be undertaken outside the LOD (but within the LLAU). This is to remove earth bund on current Gogarburn tramstop location in order to achieve the level which the Pway design has been based on	HB #70741	lan Brown	Temporary
5C	LOD issue at Gogarburn. Options are highlighted below (refer source for sketches): - ask tie to amend the LOD/LLAU as the present location of the foothpath is the "natural desire line" for pedestnans. (Option 1) - ammend the footpath to follow the back of the LOD as shown in Option 2 (although it is not preferred). -get the road moved eastwards and narrow the foothpath (Option 3)	HB #72056	lan Brown	Permanent
7A	Earthworks may be required to go outwith the LOD at the Gogar Landfill site due to extent of contaminted land	TBC	David Raeside	Permanent
7A	Earthworks may be required to go outwith the LOD along NIL and FSH land	ТВС	David Raeside	Permanent
7A	Street Lighting Section 7A	ULE90130-07-LTG-00007 and 00008	Lighting	Permanent
7A	Any works to outfalls eg headwalls and scour protection, may be outside the LOD since the LOD follows the water line on the West bank.	HB# 59917	Ralph Shackleton	Penmanent
7A	Badger fencing along Gogar Farm Access Road	ULE90130-SW-ENV-00038	Kat Dennis (HB#69860)	Permanent
7A	Marking out of badger and otter exclusion areas during construction works	ULE90130-SW-ENV-00037, ULE90130-SW-ENV-00040, ULE90130-SW-ENV-00047	Kat Dennis (HB#69860)	Temporary
7A	Archaeological Investigation Works around Nether Gogar (Church, old mill and pill box sites) as specified in the "Edinburgh Tram: Specification for Archaeological Works Line 2" and drawings ULE90130-07-DRG-00072, ULE90130-07-DRG-00073, and ULE90130-07-DRG-00074. This report has not yet been formally issued to tie but is expected to be finalised by the end of next week following a review by CEC archaeologist John Lawson.	Edinburgh Tram: Specification for Archaeological Works Line 2 and drawings ULE90130-07-DRG-00072, ULE90130-07-DRG-00073, and ULE90130-07-DRG-00074		Temporary
7A	Badger fencing (temporary) across the unfenced section of the A8 south of the Gogar Drain as specified in the parliamentary agreement with the Edinburgh and Lothians Badger Group (subject to agreement with the landowner) see extract in KD email (HB# 69860).	ELBG Agreement	Kat Dennis (HB#69860)	Temporary
7A	Airport Trämstop - Kiosk and ticketing facility and pedestrian links	CNS109	lan Brown	Pemanent
Line 2	There may be some localised works along the Network rail corridor outwith the LoD between the Tram route and the Network rail lines, although this may be minimal.	HB#70402	Paul McQuade	Temp & Perm
7A	Gogar Farm Access Road - Limit of Construction outside LOD some within LLAU	07-HRL-00003	Roads	Permanent
7A	Gogarbum Tramstop - Limit of Construction outside LOD some within LLAU	07-HRL-00001	Roads	Permanent
7A	Ingliston Park and Ride - Limit of Construction ouside LOD some within LLAU	07-HRL-00007	Roads	Permanent
7A	Hilton Hotel - works to car park (including kerb and marking alterations) outside LOD some within LLAU some outside	07-HRL-00800 / 00507	Roads	Permanent

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