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Our ref: 25.1.201/IB/9541

27 June 2012

**The City of Edinburgh Council** 9 Lochside Avenue Edinburgh EH12 9DJ

For the attention of Julian Weatherley, Director of Project Delivery – Edinburgh Tram

Dear Julian,

Edinburgh Tram Network Infraco Infraco Contract – Closure of Secondary Phase 1a Integrated Design Report Post Mediation Change (PMC) No. 084

Please find attached the BBS Closure of Secondary Phase 1a Integrated Design Report.

The Integrated Design Report is a 'Top-Level' document with references to two other documents, being the System Design Closure Report for Secondary Phase 1a (ETN(SPM)CEC#051702) from Siemens, and the Civil Design Closure Report for Secondary Phase 1a (ULE90130-01-REP-00175) from the SDS Provider.

Yours sincerely

martin Forder **Project Director** Bilfinger Berger Siemens Consortium

cc: ABr, KRu, SRo, SNe, MWi, SDe, PSc Colin Smith (Hg Consulting); Alan Coyle (CEC)

Enc: Closure of Secondary Phase 1a Integrated Design Report - Hard Copy & CD-ROM

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# **Closure of Secondary Phase 1a**

# **Integrated Design Report**

# **York Place to Newhaven**

BBS	Consortium	
	Date	Agrood
BBS General Project Director	2012/6/19	
BBS Deputy Project Director	2012/6/	

This document was produced electronically and requires no signature. It may not be amended manually.

	Name	Department	Date	Signature
Released by	Michael Wilken	System Engineering Manager	2012/06/15	
Checked by	Stefan Rotthaus	Civil Engineering Manager	2012/6/15	
Checked by	Martin Brady	SDS Project Manager	2012/6/15	
Author	lan Brazenall	Design Coordinator	2012/6/15	

Rev.	Issue Date	Description of Change	Author
Α	2012/06/15	First Issue	lan Brazenall

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## 1 INTRODUCTION

#### 1.1 PURPOSE AND SCOPE

The purpose of this document is to provide the Integrated Design Closure Report for the Secondary Phase 1a (York Place to Newhaven).

Following a cost engineering exercise between the Infraco and CEC, the parties determined to cease any further Design work on the Secondary Phase 1a (York Place to Newhaven) and package up the design in its current form and provide an Integrated Design Closure Statement indicating what elements of the design have not been completed.

The Settlement Agreement executed on 15 September 2011 sets out Infraco's obligations in respect of the design, viz. to complete the design for Phase 1a. Phase 1a consists of the Initial Phase 1a (Airport to York Place) and Secondary Phase 1a (York Place to Newhaven).

Further, it has been agreed that Infraco shall only construct Initial Phase 1a and as such Infraco shall provide an Integrated Design Assurance Statement for this element of the Infraco Works.

In respect of the cessation of the design for Secondary Phase 1a Infraco propose to issue to CEC a "**Closure of Secondary Phase 1a Design Report**" which will replace an Integrated Design Assurance Statement for the Secondary Phase 1a Design. The report will comprise a '**Civils Design Closure Report**' for the Civils Design and a '**System Design Closure Report**' for the Systems Design.

The Civils Design Closure Report will wrap up geographical Sections 1A, 1B, and 1C.1 (the position of which has been modified to suit the termination point) and summarise elements of the Civil Design that remain to be completed. Similarly the System Design Closure Report will represent the status of design for all systems disciplines.

Infraco will also include in the "Closure of Secondary Phase 1a Design Report" a liability disclosure statement as the Design will not be assured for Secondary Phase 1a.



### 1.2 APPLICABLE AND REFERENCE DOCUMENTS

Ref	Title	Rev.	Issue Date
RD01	Infraco Contract, Schedule 2 – "Employer's Requirements"	5.0	2011/09/15
RD02	BSC Infraco Project Management Plan, Section 7.3.12, Change and Claim Management Plan ETN(SPM\$Q&ADB#050704 (Siemens only)	А	16/04/2009
RD03	BSC Preliminary Case for Safety, Ref ETN(BSC)&TE&ABB_053066	В	27/10/2010
RD04	BSC Infraco Project Management Plan, Section 11, Design Management Plan, Ref BSC/25.1.201/DMP/001	С	27/07/2010
RD05	PMP Section 25, BSC Verification and Validation Plan, Ref ETN(BSC\$MC&ADB#050410	Α	06/05/2010
RD06	ETN Detailed Design Assurance Plan (DDAP), Ref ETN(BSC)\$TE&ADB_050058	F	24/09/2009
RD07	ETN System Hazard Log, Ref ETN(BSC)\$TE&ABB_05283	Α	Not Issued
RD08	BSC, Infraco EMC Management Plan, Ref RSC118-R-001	A1	07/04/2011
RD09	BSC Infraco EMC Matrices, Ref ETN(SPM\$TEE&ADB#053091	B1	06/04/2011
RD010	Interdisciplinary Design Check (IDC) - Design Assurance Statement (DAS), Ref BSC/25.1.201/PSP/003	2	15/04/2011
RD011	BSC System Integration Plan, Ref ETN(BSC\$TE&ADB#053638	А	22/03/2010
RD012	Safety Verification Scheme (SVS), Ref DEL.HSQE.521	2	22/01/2009
RD013	Infraco Construction Phase Health and Safety Plan, Ref BSC/25.1.201	6	29/11/2011
RD014	Operational Design Review Tracker	Ongoing	26/06/2012
RD015	Interdisciplinary Design Review (IDR) Action Register	Ongoing	26/06/2012
RD016	ETN OCC HF issues List, Ref ETN(BSC)\$TE&ADB 050920	Ongoing	26/06/2012
RD017	BSC Infraco Project Management Plan, Section 25, Requirements Management Plan, Ref. ETN(BSC\$MC&ADB#050401	В	10/05/2010
RD018	ETN – PSCC Sub-Committee Tram Vehicle Hazard Log Review Meeting, Ref PSCC 31	В	03/03/2010
RD019	PSCC Sub-committee Review of Design Phase Hazard Mitigation Arguments, (Under construction)	Ongoing	03/03/2010

Table 1: Reference Documents

Closure of Secondary Phase 1a Integrated Design Report INT-DCR-PH1A Revision A, Date 2012/06/15 Page 5 of 9

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#### 1.3 GLOSSARY OF TERMS, ABBREVIATIONS AND ACRONYMS

Unless otherwise explicitly stated, the terms, abbreviations and acronyms that are used in this document are those defined in the Infraco Agreement.

The following abbreviations and acronyms are supplied only for the ease of reading the document.

Abbreviations / Acronym	Definition
BAA	British Airports Authority
BBS	Bilfinger Berger/Siemens
CAF	Construcciones Y Auxiliar de Ferrocarriles
CEC	City of Edinburgh Council
CDM	Construction Design Management
client	Proxy term for tie/CEC/T&T/ETL
DAS	Design Assurance Statement
DMP	Design Management plan
EMC	Electro-Magnetic Compatibility
ER	Employers Requirements
ESM	Engineering Safety Management
ETL	Edinburgh Trams Limited
ETN	Edinburgh Tram Network
IDC	Interdisciplinary Design Check
IDR	Interdisciplinary Design Review
MAN	Maintenance
ODR	Operational Design Reviews
OPS	Operator
PSCC	Project Safety Certification Committee
RoR	Record of Review
SDS	System Design Services
SFAIRP	So Far As Is Reasonably Practicable
tie	Transport initiative Edinburgh
V&V	Verification and Validation

Table 2: Terms and Definitions List

The above definitions have been used throughout the period of Client Design and recognise the definitions as defined in the Employers Requirements Schedule 2 (Definitions and Interpretation) Doc. No. PRO-INFRACO-1399 Version 5.0 dated 14/09/2011 Sheets 47 - 51 inclusive. The sections of the definitions and abbreviations listed therein have been used within design communications amongst the respective internal and external design teams.

Closure of Secondary Phase 1a Integrated Design Report INT-DCR-PH1A Revision A, Date 2012/06/15 Page 6 of 9

## 2 BRIEF DESCRIPTION OF SECONDARY PHASE 1A

#### 2.1 ROUTE DESCRIPITION

The Secondary Phase 1a of the Edinburgh Tram Project comprises a line between Newhaven and York Place; it is approximately 4.640 kilometres in length, here follows a more detailed description.

#### Newhaven - Port of Leith

The terminus in Newhaven is positioned on Lindsay Road close to the developing Western Harbour district. The route is adjacent to the carriageway at Ocean Terminal where an additional platform face is provided for operational flexibility. The tramway shares the carriageway past the Victoria Dock, minimising the impact on the Scheduled Monument, Victoria Bridge. The route continues in the centre of the carriageway along Ocean Drive with the Port of Leith Tramstop provided with an island platform.

#### Port of Leith – York Place

From here the route continues in the carriageway along Constitution Street with Tramstops at Bernard Street and the Foot of the Walk. The Bernard Street Tramstop has an island platform and the constrained width of the carriageway means that general traffic must use the tramway in the stop area. The Foot of the Walk Tramstop will have side platforms that double as footpaths. General traffic will not be able to pass through the Foot of the Walk Tramstop which will have a significant calming effect on traffic using Constitution Street.

The Foot of the Walk Tramstop will be an important tram/bus interchange and pedestrian movement is facilitated to allow this. A cross-over is provided near the Foot of the Walk to allow tram turn-back in emergency/exceptional circumstances.

In Leith Walk the tramway will occupy the centre of the carriageway with a central island to carry traffic signals and signage. Buses will share the tramway with general traffic occupying a separate lane. Where possible, over most of the length of Leith Walk, kerbside space is left available for parking, loading/unloading and bus stops, etc. Footpath widths are generally retained.

Traffic will be prohibited from making right turns along Leith Walk except where junctions are traffic signal controlled.

Tramstops are to be provided at Balfour Street and Macdonald Road, both with island platforms.

The junction of Leith Walk and London Road will be converted to traffic signal control.

The Picardy Place Tramstop will have an island platform and bus stop facilities will be adjacent to provide good tram/bus interchange.

The tramway in York Place will be in the centre of the carriageway and a cross-over is provided to provide a turn-back facility.

3.1

# **3 INTEGRATED DESIGN CLOSURE REPORT**

### **CONTRIBUTING DESIGN CLOSURE REPORTS**

Civil Design Closure Report:

• Secondary Phase 1a – ULE90130-01-REP-00175 v2

System Design Closure Report:

• Secondary Phase 1a - ETN(SPM)CEC#051702 Rev A

The contributing Design Closure Reports can be found in Attachment I.

# 4 STATUS OF DESIGN INTEGRATION EFFORT

Prior to the decision to cease all design on the Secondary Phase 1a section, the process of design integration had been proceeding in accordance with the BBS Interdisciplinary Design Check (IDC) Process (RD10) and BBS System Integration Plan (RD11). Interdisciplinary Design Reviews (IDR) and Interdisciplinary Design Checks (IDC) had been undertaken with the partial completion of IDC Certificates. A summary of the progress of the relevant IDC Certificates is given in **Attachment II**.

Closure of Secondary Phase 1a Integrated Design Report INT-DCR-PH1A Revision A, Date 2012/06/15 Page 8 of 9



### Attachment I. Contributing Design Closure Reports

Civil Design Closure Report:

• Secondary Phase 1a - ULE90130-01-REP-00175 v1

System Design Closure Report:

• Secondary Phase 1a - ETN(SPM)CEC#051702 v5

# **Edinburgh Tram Network**

# Closure of Secondary Phase 1A Design Report

Doc. Ref: ULE90130-01-REP-00175 v2



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#### **Revision History**

Ver No	Date	Description	Prepared By
1	11 <sup>th</sup> May 12	Formal Issue	C Reid
2	13 <sup>th</sup> Jun 12	Final Issue	C Reid
			0.00

### Distribution

Ver No	Date	Name	Role	Company
1	11 <sup>th</sup> May 12	Martin Foerder	Project Director	BSC
2	13 <sup>th</sup> Jun 12	Martin Foerder	Project Director	BSC



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# EDINBURGH TRAM NETWORK DESIGN CLOSURE REPORT

#### a) SUBMISSION DETAILS / TITLE:

Section / Sub-Section to which this Closure Report Relates: Section 1A, Section 1B and section 1C to Project Chainage 120658.694

#### Date of Issue: 09/05/2012

Purpose of this report is to define the limits of design completion and identify the drawings and documentation to be handed over to Client, City of Edinburgh Council (CEC) following the cessation of the operational route from York Place to Newhaven. The route has been curtailed at York Place to allow a termination and tunrback facility to be installed, limiting the scope of works in this first phase of construction. Design drawings and specifications moving forward include the design of this facility, however to complete the route at a point in time in the future, previous designs will require to be referred to instead of current IFC drawings for the turnback and tramstop facility. These previous designs will tie in with the designs for section 1C2 as detailed in this report.

#### History:

On 14th March 2012, under cover of tie Notice of Change No. 084, RDC 225 CEC instructed Infraco to immediately cease all further design on or in connection with the Secondary Phase 1a Design (save for the provision of a 'Closure of Secondary Phase 1a Design Report') notwithstanding that as at 14th March 2012 the Secondary Phase 1a Design had not been wholly completed, reviewed and/or approved.

tie Notice of Change No. 084, RDC 225 expressly provides that Infraco shall also include in the "Closure of Secondary Phase 1a Design Report" a liability disclosure statement for agreement with CEC in recognition of the fact that the design will not be assured for Secondary Phase 1a.

The parties have agreed the following liability disclosure statement:

"It is mutually agreed and understood that, further to tie Notice of Change No. 084, RDC 225 dated 14th March 2012, Infraco shall immediately cease all Infraco Works required to deliver the Secondary Phase 1a Design in accordance with the Infraco Contract.

It is hereby agreed that Infraco shall not be required to provide a Design Assurance Statement in respect of the Secondary Phase 1a Design or otherwise warrant confirm or certify compliance with or in respect of the matters and requirements detailed in paragraph 4 ('Design Assurance Statement') of Schedule Part 14 (Design Review). It is further agreed that notwithstanding the express provisions of the Infraco Contract, the following shall also be deemed to be 'Secondary Phase 1a Design Exclusions':

- 1. The provision of a Design Assurance Statement in respect of the Secondary Phase 1a Design in accordance with Schedule Part 14 (Design Review);
- 2. Design validation and verification, including design validation test procedures in respect of the Secondary Phase 1a Design;
- 3. The provision of a warrant of buildability and/or maintainability for or in respect of the Secondary Phase 1a Design;
- 4. The preparation and updating of the requirements traceability matrix for the Secondary Phase 1a Design;
- 5. The management of configuration control of Secondary Phase 1a and the compatibility of the Secondary Phase 1a Design with system integration;
- 6. The compliance of any design Deliverables in respect of Secondary Phase 1a with the requirements of Third Parties and /or Approval Bodies;
- 7. System Integration of the Secondary Phase 1a Design including integration of design elements and Tram Supplier Integration;
- 8. Any amendments to the Deliverables including any documents, drawings, specifications etc identified in the 'Closure of Secondary Phase 1a Design Report' resulting from the cessation of the Secondary Phase 1a Design including amendments made as a result of design modification and design



assumptions in respect of cessation of the Secondary Phase 1a Design ;

For the avoidance of doubt the Deliverables including any documents, drawings, specifications etc identified in the 'Closure of Secondary Phase 1a Design Report' shall not be subject to further review and/or approval by CEC or of tie's Representative or any Approval Bodies or Third Parties."

#### Ongoing Design Work within Secondary Phase 1a:

There are several changes that have previously been instructed within the Secondary Phase 1a Infrastructure Design. Clear written instruction is required by CEC to demobilise the SDS Design Teams from completing these designs within the Secondary Phase 1A zone.

#### **Outstanding Requirements:**

The below listed items are requirements of information still awaited such that completion of design for Secondary Phase 1A may be closed out.

- CEC Closeout of Roads Design within the Forth Ports Area. (By-pass road interface). Road 8 Scheme –as drawn does not reflect the agreed scheme. Refer AECOM Drg. 60143993 SK 101 Rev B refers. Action CEC. Statement/Instructions to be advised by CEC.
- Ramp/steps decision on Tower Place steps. CEC Technical/Planning/Forth Ports to agree design requirement. Action CEC. Statement/Instructions to be advised by CEC.
- CEC and Forth Ports to agree that CEC may connect to Forth Ports surface water drainage system until adoption by CEC. Action CEC. Statement/Instructions to be advised by Action CEC. Statement/Instructions to be advised by CEC.
- Cycleway required by CEC to the area north of Lindsay Road retaining wall. Action CEC. Statement/Instructions to be advised by CEC.
- CEC to review and mark up the signage design in accordance with Forth Ports clarifications and requirements. Action CEC. Statement/Instructions to be advised by CEC.
- SDS need confirmation of any further change/modification to the TRO order previously submitted such that the road areas within Secondary Phase 1a may be brought back to their original order regulation. Action CEC. Statement/Instructions to be advised by CEC. Action CEC. Statement/Instructions to be advised by CEC.
- Finalise interface with Constitution Street Graveyard Wall (CEC project) 1A4 Action CEC. Statement/Instructions to be advised by CEC.
- Picardy Place scope requirements at the Cathedral steps to be clarified. SDS awaiting discussions between CEC and Diocean regarding acceptance of encroachment to steps and pavement frontage. Action CEC. Statement/Instructions to be advised by CEC.

#### b) Summary of Section / Sub-Section Submission:

**Subsection 1A** is 2.7km in length and contains the Tram alignment from the junction of Lindsay Road and Newhaven Place along Ocean Drive and Constitution Street to north east of the junction of Constitution Street, Leith Walk, Great Junction Street and Duke Street. The tram alignment is within the borough of Leith and is linear in shape, entirely along the roadway with a Traction Power Substation located at North Leith Sands.

The site is approximately 3km north of Edinburgh City Centre. The section also includes junctions and accesses; Annfield, ADM Milling, Ocean Terminal, Rennie's Isle, Tower Place, Tower Street, Baltic Street, Bernard Street, Maritime Lane, Mitchell Street, Charlotte Street, Coalfield Lane, Links Lane, Kirkgate House and Laurie Street. It is generally bounded by a mix of mostly residential developments from proposed to completed, and business including the Scottish Executive and Retail at Ocean Terminal.

The port of Leith is a historic area under redevelopment.

There is one scissors crossover just east of Newhaven Tram Stop to facilitate regular turnback operations. Additionally there are two crossovers in the vicinity of Ocean Terminal Tram Stop to facilitate operations. Track and OLE have been established not to preclude the future installation of a scissors crossover to the north of Ocean Terminal Tram Stop.

The application also includes Newhaven, Ocean Terminal, Port of Leith, Bernard Street and Foot of the Walk Tram



Stops, North Leith Sands Substation, Lindsay Road Retaining Wall, Ocean Drive Retaining Walls, Tower Place Bridge and Victoria Docks Entrance Bridge.

Newhaven Tram Stop is located at the junction of Lindsay Road and Annfield to the north of the roadway. Ocean Terminal Tram Stop is located opposite the main (pedestrian) entrance to Ocean Terminal Shopping Centre. Port of Leith Tram Stop is located in the eastern end of Ocean Drive. Bernard Street Tram Stop is located on Constitution Street within the roadway south of the junction of Constitution Street / Bernard Street and Baltic Street, in front of the Assembly Buildings. Foot of the Walk Tram Stop is located at the south end of Constitution Street at the junction with Leith Walk, Great Junction Street and Duke Street.

North Leith Sands Substation is located to the north west of the junction of North Leith Sands and Portland Road, adjacent to other substations owned by others.

There is new soft landscaping proposed as part of the Tram within this subsection at the new junction of Lindsay Road and Ocean Drive, outside Ocean Terminal, at the casino, and within the new public realm at Bernard Street.

There are several Category "A", "B" and "C" Listed Buildings in Subsection 1A, some of which are also listed in Schedule 10 of the Tram (Line 1) Act:

#### A Listed

29-31a (odd nos) and 35 Constitution Street and 9 Baltic Street, Former Corn Exchange

37-43 (odd nos) Constitution Street and 49 Assembly Street, Exchange Buildings - Schedule 10

29-41 (odd Nos) Queen Charlotte Street, Leith Police Station, Former Town Hall And Railings - Schedule 10

92 Constitution Street and 27 Queen Charlotte Street

Robert Burns Statue - Schedule 10

B Listed

Leith Docks, Victoria Dock and Lock Gates

Leith Docks, Victoria Swing Bridge

Leith Docks, Alexandra Dry Dock

Leith Docks, Alexandra Dry Dock Hydraulic Station

Leith Docks, Albert Dock with Swing Bridge

Leith Docks, Prince of Wales Dry Dock, Hydraulic Station

Leith Docks, Prince of Wales Dry Dock

Leith Docks, Edinburgh Dry Dock Pumping House

2 Bernard Street and 28 Constitution Street

Bernard Street, Robert Burns Statue - Schedule 10

1-13 (odd nos) Bernard Street, 30-34 (even nos) Constitution Street, Waterloo Buildings

- 36-42 (even nos) Constitution Street
- 45-53 (odd nos) Constitution Street

44, 44a, 46 and 46a Constitution Street

55 Constitution Street with Boundary Walls and Railings

57 Constitution Street and 47 Mitchell Street, Leith Post Office 042

59-65 (odd nos) Constitution Street with Railings

60 Constitution Street

68 Constitution Street with Gatepiers and Railings

84 Constitution Street

86-90 (even nos) Constitution Street

28-42 (even nos) Queen Charlotte Street and 94 Constitution Street and 1 Queen Charlotte Lane

C Listed

1-19 (inclusive nos) Annfield

Leith Docks, Tower Place, Harbour and Dock Offices



69 and 71 Constitution Street, Former St John's East Church (c of S) – Schedule 10

74 and 76 Constitution Street

78 and 80 Constitution Street

The Victoria Docks Swing Bridge is a Scheduled Ancient Monument.

The Dock Entrance Gates located at the junction of Constitution Street and Tower Street are to be retained.

There are a number of monuments / pieces of public art which will be located as part of the Tram scheme:

- Ocean Terminal Sign relocated (as part of Forth Ports Development)
- Ocean Terminal Statue relocated (as part of Forth Ports Development)
- Robert Burns Statue at the junction of Constitution Street and Bernard Street to be relocated slightly north as agreed with CEC (Listed Building Consent is required for this relocation)

Building Fixings are proposed along Constitution Street and the approach to the north end of Leith Walk, and Ocean Drive at the north end of Constitution Street. Building Fixings proposed on Listed Buildings within Schedule 10 of the Tram (Line 1) Act require Listed Building Consent (LBC):

Harbour and Dock Office, Ocean Drive (2 fixings)

4 Constitution Street (2 fixings)

6-10a Constitution Street (1 fixing)

10b-12 Constitution Street (1 fixing)

28 Constitution Street (1 fixing)

29-35 Constitution Street (2 fixings)

35 Constitution Street (1 fixing)

30-34 Constitution Street (1 fixing)

37-41 Constitution Street (1 fixing)

2 Bernard Street (1 fixing)

37-43 Constitution Street Leith Assembly Rooms (2 fixings) Schedule 10 (LBC Required)

42 Constitution Street (1 fixing)

55 Constitution Street (1 fixing)

- 57 Constitution Street (1 fixing)
- 59 Constitution Street (1 fixing)
- 60 Constitution Street (1 fixing)
- 64 Constitution Street (1 fixing)
- 75-79 Constitution Street (1 fixing)

81 Constitution Street Leith Police Station (Formerly Leith Town Hall) (1 fixing) (LBC Required)

87 Constitution Street (1 fixing)

88-90 Constitution Street (1 fixing)

92 Constitution Street (1 fixing)

93-95 Constitution Street (1 fixing)

94 Constitution Street (1 fixing)

101-103 Constitution Street (1 fixing)

- 108 Constitution Street (1 fixing)
- 125 Constitution Street (1 fixing)



133 Constitution Street (2 fixings)

137 Constitution Street (1 fixing)

141 Constitution Street (1 fixing)

149 Constitution Street (1 fixing)

159 Constitution Street (1 fixing) 161 Constitution Street (1 fixing)

165-181 Constitution Street (1 fixing)

170-174 Constitution Street (2 fixings)

181 Constitution Street (1 fixing)

183 Constitution Street (1 fixing)

In general and when practical, OLE poles are centre poles. Where space does not exist for centre poles, side poles are used. All poles will be tapered in shape and painted grey in accordance with the requirements of CEC Planning Authority.

There are two bridges in 1A. Tower Place Bridge will be widened to the south to support a new pedestrian footway / cycleway as part of the Tram works. Victoria Docks Entrance Bridge will not be widened, but will have the parapets upgraded to meet current requirements as part of the Tram works. The existing Lindsay Road retaining Wall is to be removed and 4 new walls will be constructed in the area to accommodate the levels changes.

As part of the Tram works / operations bus stops / shelters will be rationalised / relocated in accordance with the locations agreed with TEL.

TROs and TTROs are relevant to this section.

Drainage and Utilities design form part of this technical submission.

As part of the curtailment of the Scheme, SDS were instructed to review

and consider a "tie in detail" for the main through alignment of Lindsay

Road/ Ocean Drive junction.

The IFC design for the roads in this area (shown on Plates

ULE90130-01-hrl-00001 and 00002) reflects the scheme with a n operating

tram network.

In addition there is a suite of 8 detail drawings that carry a design

tying the new junction alignment (Junction 6) into the existing

infrastructure, without the development of the tram areas.

The drawings listed below have not been incorporated into the full IFC but should be used to

provide the "non-tram" solution of this junction.

ULE90130-01-hrl-00191 ULE90130-01-hrl-00291 ULE90130-01-hrl-00491 ULE90130-01-hrl-00791 ULE90130-01-hrl-01191 ULE90130-01-hrl-01292 ULE90130-01-hrl-01293



**Subsection 1B** is 1.26 km in length and contains the Tram alignment from immediately north east of the junction of Constitution Street, Leith Walk, Great Junction Street and Duke Street, to immediately south of the junction of Leith Walk and Brunswick Street. The tram alignment includes a mix of on-street integrated with bus and general traffic, and on-street segregated in areas entirely within the roadway. There is one traction power substation located in this subsection.

The site is located on Leith Walk, approximately 2 km north of Edinburgh City Centre. The section also includes junctions and accesses; Duke Street, Great Junction Street, Kirk Street, Crown Place, Cassellbank Street, Crown Street, Jane Street, Manderston Street, Stead's Place, Springfield Street, Lorne Street, Jameson Place, Orchard Field Place, Balfour Street, Dalmeny Street, Iona Street, Pilrig Street, Middlefield, Albert Street, Shrub Hill Lane, Brunswick Road and McDonald Road. It is bounded to the east and west by the curtilage of the buildings on Leith Walk.

Leith Walk is one of the main streets in the capital and is of an impressive scale and width. It is a busy traffic and pedestrian thoroughfare and major bus route connecting the City Centre and Leith. The site is located in Leith Conservation Area, which was established in 1998.

There is one crossover and associated points in subsection 1B, located adjacent to Crown Street at the northern end of Leith Walk. Guidance to date has indicated that this crossover will be used for emergency situations / maintenance purposes.

This Section also includes Balfour Street Tram Stop and Leith Walk Substation. For the purposes of the design and reviews, Foot of the Walk Tram Stop, on the boundary of subsections 1A and 1B, is not included in Section 1B as the implications mainly lie with the traffic management north of the tram Stop in subsection 1A.

Balfour Street Tram Stop is an island tram stop located south of the junction of Leith Walk and Balfour Street and is sited in the centre of Leith Walk roadway.

Leith Walk Substation is located at 167 Leith Walk adjacent to an abandoned depot building.

There is no soft landscaping proposed as part of the Tram within this subsection. The existing trees in the centre of Leith Walk and along the Leith Walk kerb line will be removed as part of the Tram scheme. Removed trees will be replaced on a two for one basis according to the Environmental Statement and placed into a 'Tree Bank' established for CEC by the project. The trees in the bank will be replaced at other locations around Edinburgh as determined by CEC.

There are a number of Listed Buildings bounding within this application. These include:

A Listed - Schedule 10

Leith Walk and Pilrig Street, Pilrig Dalmeny Church and Halls (Church of Scotland) Leith Walk, Queen Victoria Statue – Schedule 10

7-23 (odd numbers) Leith Walk and 2 - 22 (even numbers) Duke Street, Former Leith Central Station Offices, including Central and Northern Bars

1-5 (odd numbers) Great Junction Street, 2 Leith Walk and 2, 4 Kirk Street

12 Leith Walk 3 and 5 Kirk Street and 1 Cassel's Lane with Boundary Walls and Railings

20 and 22 Leith Walk and 3 Cassel's Lane with Boundary Walls and Railings

26 Leith Walk with Boundary Walls and Railings

34, 36 and 38 Leith Walk with Boundary Walls and Railings

42 Leith Walk with Boundary Walls and Railings

52 Leith Walk with Boundary Walls and Railings

60 and 62 Leith Walk with Boundary Walls, Lamp Standards and Railings

68-76 (even numbers) Leith Walk

80-90 (even numbers) Leith Walk

169-177 (odd numbers) Leith Walk and 1 Smith's Place

185-193 (odd numbers) Leith Walk

234-242 (even numbers) Leith Walk, Former Victoria India Rubber Mills Buildings

314 and 316 Leith Walk

372-376 (even numbers) Leith Walk (formerly 1-3 George Place), including Boundary Walls



Leith Walk, Shrub Place, Shrubhill Tramway Workshops and Power Station 2 McDonald Road Library Including Nelson Hall - Schedule 10 C Listed 1-5 (odd numbers) Duke Street 55-59 Leith Walk, TSB and 61 Leith Walk and Crown Street, Bank of Scotland 165 Leith Walk, Community Centre 172 Leith Walk, Craig and Rose Plc 214 Leith Walk with Railings 244-252 (even numbers) Leith Walk 276, 278 Leith Walk and 1, 3 Balfour Street 280-284 (even numbers) Leith Walk 296 Leith Walk 302 Leith Walk 306 Leith Walk with Boundary Wall 308 and 312 Leith Walk 318, 320 and 322 Leith Walk with Boundary Wall

328 Leith Walk

334, 336c-340 and 346a Leith Walk with Railings and Lamp Standards

Building fixings are proposed at the north end of Leith Walk and Constitution Street at the following locations:

1-3 Leith Walk (2 fixings)

4 Leith Walk (1 fixing)

7-9 Leith Walk (1 fixing)

Where there are Overhead Line Equipment (OLE) poles, they are generally centrally located within the tramway and will be tapered in shape and painted grey in accordance with the requirements of CEC Planning Authority. There are exceptions where, due to Road Safety concerns, side poles are required in lieu of centre poles.

There are a number of monuments / pieces of public art which will be removed / relocated as part of the tram scheme. In this section, there are iron balls in the centre of Leith Walk between Dalmeny Street and Brunswick Street. These will be permanently removed as agreed with CEC. The Millennium Sculpture and Queen Victoria Statue at the junction of Great Junction Street and Leith Walk / Constitution Street will remain in their existing locations.

There is one bridge in Subsection 1B, Leith Walk Rail Bridge, at Shrub Hill Lane. No works are required to this structure as part of the Tram works and a structural assessment has been completed.

As part of the tram works / operations, bus stops / shelters will be rationalised / relocated in accordance with the locations agreed with TEL and approved by CEC.

TROs and TTROs are relevant to this section.

Utilities design forms part of the technical works completed.

Subsection 1C is to Project chainage 120 660 and contains the Tram alignment from south of the junction of Leith Walk and Brunswick Street to the Project chainage 120 660. The tram alignment is a mix of on street integrated with bus and taxi, and with general traffic.

Subsection 1C is in the World Heritage Site (the boundary is Annadale Street – Leith Walk – London Road) and the New Town Conservation Area. Thus the dominant characteristics of the application are historic. The area of the application is generally linear and bounded by the buildings on either side of the roadway, and also includes at grade junctions of roads intersecting with relevant sections of Leith Walk, Picardy Place, and into York Place.

This subsection also includes part of the designated High Load Route, this including Princes Street from South St. Andrew Street to (up to and including) the junction with Lothian Road.



The subsection includes a bus interchange at Elm Row.

The subsection includes two tram stops: McDonald Road Tram Stop is located within the centre of Leith Walk immediately south of the junction of Brunswick Street and Leith Walk. Picardy Place Tram Stop is located between the east and west arms of the existing junction approximately where the statue of Sherlock Holmes is presently located. It is located between a new island and a carriageway taking traffic from York Place / Broughton Street to Leith Walk.

Soft landscaping proposed at Elm Row as part of the Tram within this subsection. The existing trees in the centre of Leith Walk will be removed as part of the Tram scheme and replaced outwith the tram project at other locations throughout Edinburgh as determined by CEC.

There are numerous Listed Buildings within this application, some of which are listed Schedule 10 of the Tram (Line 1) Act:

A Listed Schedule 10:

York Place, St Paul's and St George's (Scottish Episcopal) Church, including Lamp and Railings

#### A Listed

28-32a (inclusive numbers) Haddington Place with 30 and 32 Annandale Street Lane

17a-27a (inclusive numbers) Haddington Place with 26 and 28 Annandale Street Lane

Gayfield Place 1-6 and 33, 33a Gayfield Square

Leopold Place 1-11 and 2-4 Windsor Street (corner Block:- 1 Leopold Place and 1-4 Elm Row)

Blenheim Place 1-5

Blenheim Place 6-10 and 2 and 3 Greenside End

1-8 (inclusive numbers) Baxter's Place Including Railings

A Listed

28-32a (inclusive numbers) Haddington Place with 30 and 32 Annandale Street Lane

17a-27a (inclusive numbers) Haddington Place with 26 and 28 Annandale Street Lane

Gayfield Place 1-6 and 33, 33a Gayfield Square

Leopold Place 1-11 and 2-4 Windsor Street (corner Block:- 1 Leopold Place and 1-4 Elm Row)

**Blenheim Place 1-5** 

Blenheim Place 6-10 and 2 and 3 Greenside End

1-8 (inclusive numbers) Baxter's Place Including Railings

A Listed

28-32a (inclusive numbers) Haddington Place with 30 and 32 Annandale Street Lane

17a-27a (inclusive numbers) Haddington Place with 26 and 28 Annandale Street Lane

Gayfield Place 1-6 and 33, 33a Gayfield Square

Leopold Place 1-11 and 2-4 Windsor Street (corner Block:- 1 Leopold Place and 1-4 Elm Row)

Blenheim Place 1-5

Blenheim Place 6-10 and 2 and 3 Greenside End



1-8 (inclusive numbers) Baxter's Place Including Railings

#### B Listed Schedule 10

18-22 (even numbers) Greenside Place, The Playhouse Theatre

4 Broughton Street, St James Place, And Chapel Lane, St Mary's (Roman Catholic) Cathedral, With St Andrew's Hall,

#### B Listed

Haddington Place, 1-8 and 1 Annandale St.

Elm Row 1-23 and 2 Montgomery Street (comer Block - 1-4 and 1 Leopold Place)

Antigua Street 7-1

Antigua Street 1-6 and 1-3 Union Street

23-27 (inclusive numbers) Greenside Place

Picardy Place 2-22 (even numbers) and 16,17 Union Place and 19, 19a Broughton Street with Mews To Broughton Street Lane

#### C Listed

Elm Row, 40-44 Inclusive.

Elm Row 25-29 (inclusive) and Montgomery Street, 1, 3, 5.

Where there are OLE poles, they are centrally located within the tramway and will be tapered and painted grey, in accordance with CEC Planning Authority Requirements.

In order to accommodate the Tram, the existing junction at Picardy Place is to be remodelled including the junction of Broughton Street and York Place/Picardy Place.

Picardy Place junction has been re-designed in accordance with Change Instruction DCR 0278. A Planning Package of this design is to be submitted to CEC but will not go through formal Prior Approval/Planning process. This Planning submission package is covered by the following documentation list.

ULE90130-01-PLG-00034

ULE90130-01-PLG-00035

ULE90130-01-PLG-00200

- ULE90130-01- PLG-00201
- ULE90130-01- PLG-00202
- ULE90130-01- PLG-00203
- ULE90130-01- PLG-00204
- ULE90130-01- PLG-00205

ULE90130-01- PLG-00206

ULE90130-01- PLG-00207

ULE90130-01- PLG-00208

ULE90130-01- PLG-00413



#### ULE90130-01- PLG-00414

Picardy Place junction has been re-designed in accordance with Change Instruction DCR 0278. A TAA Technical Submission Package of this design is to be submitted to CEC but will not go through formal Technical Approval process. This TAA Technical Submission Package is covered by the following documentation list.

ULE90130,12.148.02 – Picardy Place, Section 1C, Redesign Status Summary memorandum

ULE90130-01-HRL-00415

ULE90130-01- HRL-00715

ULE90130-01- HRL-01115

ULE90130-01- HRL-01215

ULE90130-01- HRL-01245

ULE90130-01- HRL-01275

ULE90130-01- DNE-00015

ULE90130-01- LTG-00015

ULE90130-01- HRL-00045

ULE90130-01- PLG-00420

The Picardy section of design is at present on hold and awaiting scope clarification on the amount of infringement to be made to the Cathedral Steps. (Outcome of discussions between CEC and Diocean awaited). Scope clarification is required from CEC prior to any further design amendments being made. The tram stop position has remained constant within the re-design and is still positioned against the north side of the island.

There are many existing junctions that will be remodelled as part of the Tram scheme within this section. The existing roundabout at the junction of Leith Walk and London Road is to become a T-junction with the main flow of traffic north / south along Leith Walk. The junction of Blenheim Place and London Road is closed to motor traffic. CEC have issued Change Instruction DCR 0324 to have this junction re-designed but have further instructed this work not to be progressed at this present time.

As part of the Tram works / operations bus stops / shelters will be rationalised / relocated in accordance with the locations agreed with TEL and the geometric constraints of the area. Negotiations with Adshel (in accordance with the existing agreement) or any other 3<sup>rd</sup> parties with respect to these relocations are not part of the SDS scope.

There are no bridge / retaining structures proposed as part of the Tram works in Subsection 1C.

TROs and TTROs are relevant to this section.

#### SECTION 1A/c) Submission Specific Design Documents:

Newhaven Tram Stop Batch 1 / 01a Design Statement - ULE90130-01-REP-00072 v3 Lindsay Road Retaining Walls Batch 1 / 01b Design Statement - ULE90130-01-REP-00112 v2 Ocean Drive Retaining Walls Batch 1 / 01c Design Statement - ULE90130-01-REP-00113 v2 Ocean Terminal Tram Stop Batch 1 / 02 Design Statement - ULE90130-01-REP-00065 v1 Bypass Road Batch 1 / 02a Design Statement – ULE90130-01-REP-00115 v2 North Leith Sands Substation Batch 1 / 03 Design Statement - ULE90130-01-REP-00049 v2 Line of Route – Ocean Drive Batch 1 / 04 Design Statement - ULE90130-01-REP-00114 v1 Victoria Docks Entrance Bridge Batch 1 / 04a – ULE90130-01-REP-00066 v2 Tower Place Bridge Batch 1 / 05 Design Statement - ULE90130-01-REP-00067 v2



Port of Leith Tram Stop Batch 1 / 06 Design Statement - ULE90130-01-REP-00064 v2 Bernard Street Tram Stop Batch 1 / 07 Design Statement - ULE90130-01-REP-00061 v2 Leith Assembly Rooms Batch 1 / 07a Listed Building Consent - Design Statement - ULE90130-01-REP-00098 v2 Leith Police Station Batch 1 / 07b Listed Building Consent - Design Statement - ULE90130-01-REP-00099 v2 Robert Burns Statue Relocation Batch 1 / 07c Listed Building Consent - Design Statement - ULE90130-01-REP-00107 v1 Foot of the Walk Tram Stop Batch 1 / 08 Design Statement - ULE90130-01-REP-00063 v2 Roads Roads Technical Design Statement Section 1A - ULE90130-01-REP-00011 v1 Roads Technical Design Statement Section 1A - ULE90130-01-REP-00057 v2 Stage 1 Road Safety Audit Report Section 1 - ULE90130-01-REP-00038 v2 Stage 1 Road Safety Audit Report Section 1 - Designer's Response - ULE90130-01-REP-00041 v1 Stage 2 Road Safety Audit Report Section 1A1 & 1A2 - TMUSDSrsa2 S1A-01 rev2 Stage 2 Road Safety Audit Report Section 1A1 & 1A2 - Designers Response - ULE90130-01-REP-00121 v4 Stage 2 Road Safety Audit Report Section 1A3 - TMUSDSrsa2 S1A-03 rev1 Stage 2 Road Safety Audit Report Section 1A3 - Designers Response - ULE90130-01-REP-00151 v3 Stage 2 Road Safety Audit Report Section 1A4 - TMUSDSrsa2 S1A-02 (1A4) rev3 Stage 2 Road Safety Audit Report Section 1A4 - Designers Response - ULE90130-01-REP-00137 v5

#### Drainage

Schedule ULE90130-01-SCH-00010 v8

Structures

Lindsay Road Retaining Walls

Condition Survey

ULE90130-01-01-REP-00031 v1

Approval in Principle

ULE90130-SW-REP-00055 v4

Schedules

ULE90130-01-RTW-00032 v3

ULE90130-01-RTW-00033 v3

ULE90130-01-RTW-00034 v3

ULE90130-01-RTW-00035 v3

ULE90130-01-RTW-00036 v3

ULE90130-01-RTW-00037 v3

ULE90130-01-RTW-00038 v3

ULE90130-01-RTW-00039 v3

ULE90130-01-RTW-00043 v3

ULE90130-01-RTW-00064 v3

ULE90130-01-RTW-00068 v3



CAT Check Certificates
ULE90130-01-FOR-00007 v1
ULE90130-01-FOR-00127 v1
Victoria Docks Entrance Bridge
Condition Survey
<u>ULE90130-01-REP-00032 v1</u>
Approval in Principle
ULE90130-SW-REP-00042 v6
Assessment Report
ULE90130-01-REP-00119 v1
Schedules
ULE90130-01-BRG-00024 v3
ULE90130-01-BRG-00025 v2
CAT Check Certificates
ULE90130-01-FOR-00006 v1
ULE90130-01-FOR-00123 v1
ULE90130-01-FOR-00135 v1
Tower Place Bridge
Condition Survey
<u>ULE90130-01-REP-00033 v1</u>
Approval in Principle
ULE90130-SW-REP-00026 v5
Structures Departure Report – 2.50m Footway / Cycleway Width
ULE90130-01-FOR-00164 v1
Structures Departure Report – Termination of North East Vehicle Parapet
ULE90130-01-FOR-00165 v1
Structures Departure Report – 0.45m Northern Verge Width
ULE90130-01-FOR-00166 v1
Structures Departure Report – Brief Trief Kerbs
ULE90130-01-FOR-00167 v
Structures Departure Report – Termination of South West Vehicle Parapet
ULE90130-01-FOR-00168 v1
Schedules
ULE90130-01-BRG-00110 v6
ULE90130-01-BRG-00111 v6
ULE90130-01-BRG-00112 v7
ULE90130-01-BRG-00113 v7
ULE90130-01-BRG-00114 v8
ULE90130-01-BRG-00115 v9



ULE90130-01-BRG-00116 v6 ULE90130-01-BRG-00117 v7 ULE90130-01-BRG-00118 v5 ULE90130-01-BRG-00119 v6 ULE90130-01-BRG-00120 v5 ULE90130-01-BRG-00121 v5 ULE90130-01-BRG-00122 v8 ULE90130-01-BRG-00123 v3 **CAT Check Certificates** ULE90130-01-FOR-00004 v2 ULE90130-01-FOR-00005 v2 ULE90130-01-FOR-00136 v1 **Street Lighting** Calculations - ULE90130-01-CAL-00127 v3 Earthworks ULE90130-SW-REP-00207 v5 Utilities **Diversion Schedules** ULE90130-01-CAL-00022 ULE90130-01-CAL-00028 ULE90130-01-CAL-00029 ULE90130-01-CAL-00030 ULE90130-01-CAL-00031 ULE90130-01-CAL-00032 ULE90130-01-CAL-00033 ULE90130-01-CAL-00034 ULE90130-01-CAL-00035 ULE90130-01-CAL-00103 ULE90130-01-CAL-00104 ULE90130-01-CAL-00105 ULE90130-01-CAL-00107 ULE90130-01-CAL-00108 ULE90130-01-CAL-00109 ULE90130-01-CAL-00110 ULE90130-01-CAL-00111 ULE90130-01-CAL-00112 ULE90130-01-CAL-00113 ULE90130-01-CAL-00114 ULE90130-01-CAL-00115



ULE90130-01-CAL-00116 ULE90130-01-CAL-00117 ULE90130-01-CAL-00118 ULE90130-01-CAL-00119 ULE90130-01-CAL-00120

### SECTION 1B/c) Submission Specific Design Documents:

Balfour Street Tram Stop Design Statement - ULE90130-01-REP-00062 v2 Tram Leith Walk 163 Substation Design Statement - ULE90130-01-REP-00055 v2 Roads Roads Technical Design Statement Section 1B - Detailed Design - ULE90130-01-REP-00058 v4 Stage 1 Road Safety Audit Report Section 1 - ULE90130-01-REP-00038 v2 Stage 1 Road Safety Audit Report Section 1 - Designer's Response - ULE90130-01-REP-00041 v1 Stage 2 Road Safety Audit Report Section 1B - TMUSDSrsa2 S1B-01 rev4 Stage 2 Road Safety Audit Report Section 1B - Designers Response - ULE90130-01-REP-00108 v5 Structures Leith Walk Rail Bridge Leith Walk Railway Bridge S18 Form AA Approval In Principle - ULE90130-SW-REP-00025 v3 Leith Walk Railway Bridge S18 Assessment Report - ULE90130-01-REP-00069 v2 Leith Walk 163 Substation Leith Walk Substation Engineering Notes - ULE90130-01-CAL-00122 v1 Street Lighting Calculations - ULE90130-01-CAL-00124 v3 **TRO Schedules** ULE90130-SW-SCH-00142 ULE90130-SW-SCH-00143 ULE90130-SW-SCH-00144 ULE90130-SW-SCH-00145 ULE90130-SW-SCH-00146 ULE90130-SW-SCH-00147 ULE90130-SW-SCH-00148 ULE90130-SW-SCH-00149 ULE90130-SW-SCH-00150 ULE90130-SW-SCH-00151 ULE90130-SW-SCH-00152 ULE90130-SW-SCH-00153 ULE90130-SW-SCH-00154

ULE90130-SW-SCH-00155

Utilities



**Diversion Schedules** ULE90130-01-CAL-00036 v7 ULE90130-01-CAL-00037 v5 ULE90130-01-CAL-00038 v6 ULE90130-01-CAL-00039 v5 ULE90130-01-CAL-00040 v5 ULE90130-01-CAL-00041 v6 ULE90130-01-CAL-00042 v5 ULE90130-01-CAL-00043 v5 Record of Review ULE90130-01-COR-00213 ULE90130-01-COR-00214 ULE90130-01-REV-00714 ULE90130-01-REV-00715 ULE90130-01-REV-00716 ULE90130-01-REV-00717 ULE90130-01-REV-00718 ULE90130-01-REV-00719 ULE90130-01-REV-00720 ULE90130-01-REV-00721 ULE90130-01-REV-00722 ULE90130-01-REV-00723

#### SECTION 1C/c) Submission Specific Design Documents:

McDonald Road Design Statement Batch 1/ 11 - ULE90130-01-REP-00075 v2 Picardy Place Tram Stop Design Statement Batch 1/12 - ULE90130-01-REP-00074 v2 Roads

Roads Technical Design Statement Section 1C - ULE90130-01-REP-00059 v3 Stage 1 Road Safety Audit Report Section 1 - ULE90130-01-REP-00038 v2 Stage 1 Road Safety Audit Report Section 1 – Designer's Response – ULE90130-01-REP-00041 v1 Stage 2 Road Safety Audit Report Section 1C - TMUSDSrsa2 S1C-02 rev 5 Interim Stage 2 Road Safety Audit Report 1C2, York Place – ULE90130/YP, TASK 12.163/RSA2/0 Stage 2 Road Safety Audit Report Section 1C: Designers Response - ULE90130-01-REP-00110 v8 Comments

Documents and versions to be confirmed with final version of document.

SECTION 1A d) Submission Specific Drawings:

#### Planning

Newhaven Tram Stop Batch 1 / 01a ULE90130-01-PLG-00107 v2



ULE90130-01-PLG-00144 v2
ULE90130-01-PLG-00147 v2
ULE90130-01-PLG-00157 v2
ULE90130-01-PLG-00164 v3
ULE90130-01-PLG-00167 v3
ULE90130-01-PLG-00177 v3
ULE90130-01-PLG-00187 v2
ULE90130-01-PLG-00214 v2
ULE90130-01-PLG-00218 v2
Lindsay Road Retaining Wall Batch 1 / 01b
ULE90130-01-PLG-00094 v3
ULE90130-01-PLG-00095 v2
ULE90130-01-PLG-00108 v4
ULE90130-01-PLG-00145 v2
ULE90130-01-PLG-00165 v3
Ocean Drive Retaining Walls Batch 1 / 01c
ULE90130-01-PLG-00109 v2
ULE90130-01-PLG-00149 v2
ULE90130-01-PLG-00169 v3
ULE90130-01-PLG-00188 v3
ULE90130-01-PLG-00189 v3
Ocean Terminal Tram Stop Batch 1 / 02
ULE90130-01-PLG-00002 v2
ULE90130-01-PLG-00023 v3
ULE90130-01-PLG-00024 v2
ULE90130-01-PLG-00053 v5
ULE90130-01-PLG-00054 v4
ULE90130-01-PLG-00140 v4
ULE90130-01-PLG-00142 v3
ULE90130-01-PLG-00143 v4
ULE90130-01-PLG-00215 v1
Bypass Road Batch 1 / 02a
ULE90130-01-PLG-00150 v1
ULE90130-01-PLG-00181 v5
ULE90130-01-PLG-00184 v5
ULE90130-01-PLG-00185 v5
ULE90130-01-PLG-00186 v5
ULE90130-01-PLG-00289 v1
Tram North Leith Sands Substation Batch 1 / 03



ULE90130-01-PLG-00210 v2
ULE90130-01-PLG-00211 v2
ULE90130-01-PLG-00212 v2
ULE90130-01-PLG-00213 v2
Line of Route – Ocean Drive Batch 1 / 04
ULE90130-01-PLG-00148 v1
ULE90130-01-PLG-00158 v1
ULE90130-01-PLG-00178 v2
Victoria Docks Entrance Bridge Batch 1 / 04a
ULE90130-01-PLG-00247 v2
ULE90130-01-PLG-00248 v2
ULE90130-01-PLG-00249 v2
ULE90130-01-PLG-00250 v2
Tower Place Bridge Batch 1 / 05
ULE90130-01-PLG-00272 v4
ULE90130-01-PLG-00273 v3
ULE90130-01-PLG-00274 v2
ULE90130-01-PLG-00280 v2
ULE90130-01-PLG-00281 v2
ULE90130-01-PLG-00285 v3
Port of Leith Tram Stop Batch 1 / 06
ULE90130-01-PLG-00003 v2
ULE90130-01-PLG-00025 v3
ULE90130-01-PLG-00055 v4
ULE90130-01-PLG-00152 v2
ULE90130-01-PLG-00153 v1
ULE90130-01-PLG-00154 v3
ULE90130-01-PLG-00155 v3
Bernard Street Tram Stop Batch 1 / 07
ULE90130-01-PLG-00004 v3
ULE90130-01-PLG-00026 v3
ULE90130-01-PLG-00027 v3
ULE90130-01-PLG-00056 v4
ULE90130-01-PLG-00057 v4
ULE90130-01-PLG-00162 v3
ULE90130-01-PLG-00163 v3
Foot of the Walk Tram Stop Batch 1 / 08
ULE90130-01-PLG-00005 v3
ULE90130-01-PLG-00171 v3



ULE90130-01-PLG-00172 v3 ULE90130-01-PLG-00173 v4 ULE90130-01-PLG-00174 v3 ULE90130-01-PLG-00175 v5 ULE90130-01-PLG-00176 v4 **Scheduled Ancient Monument** Victoria (Swing) Bridge ULE90130-01-PLG-00255 v 1 ULE90130-01-PLG-00256 v 1 ULE90130-01-PLG-00257 v 1 ULE90130-01-PLG-00258 v 1 ULE90130-01-PLG-00259 v1 ULE90130-01-PLG-00272 v4 **Listed Building Consents** Leith Assembly Rooms Batch 1 / 07a ULE90130-01-PLG-00080 v2 ULE90130-01-PLG-00082 v2 Leith Police Station Batch 1 / 07b ULE90130-01-PLG-00083 v1 ULE90130-01-PLG-00085 v2 Robert Burns Statue Batch 1 / 07c ULE90130-01-PLG-00077 v1 ULE90130-01-PLG-00079 v1 **Building Warrants** Newhaven Place (Batch 1 / 01d) ULE90130-01-DRG-00244 v1 33 Ocean Drive (Batch 1 / 02b) ULE90130-01-DRG-00258 v1 ULE90130-01-ACC-00028 v1 **Tram Stop** Newhaven Tram Stop ULE90130-01-STP-00005 v9 ULE90130-01-STP-00006 +8 ULE90130-01-STP-00007 +6 Ocean Terminal Tram Stop ULE90130-01-STP-00012 v1 v2 Port of Leith Tram Stop ULE90130-01-STP-00025 +9 ULE90130-01-STP-00026 +8



ULE90130-01-STP-00027 +6 Bernard Street Tram Stop ULE90130-01-STP-00039 +9 ULE90130-01-STP-00040 +9 Foot of the Walk Tram Stop ULE90130-01-STP-00045 +9 ULE90130-01-STP-00046 +8 ULE90130-01-STP-00047 +6 Substation Tram North Leith Sands Substation ULE90130-01-SUB-00001 v3 Superseded ULE90130-01-SUB-00002 v4 Superseded ULE90130-01-SUB-00003 v1 Superseded ULE90130-01-SUB-00004 v1 Superseded ULE90130-01-SUB-00005 +5 ULE90130-01-SUB-00006 24 Superseded ULE90130-01-SUB-00060 v2 ULE90130-01-SUB-00061 v2 Structures Lindsay Road / Ocean Drive Retaining Walls (W1) ULE90130-01-RTW-00020 v4 ULE90130-01-RTW-00021 v4 ULE90130-01-RTW-00022 v4 ULE90130-01-RTW-00023 v4 ULE90130-01-RTW-00024 v4 ULE90130-01-RTW-00025 v4 ULE90130-01-RTW-00026 v4 ULE90130-01-RTW-00027 v4 ULE90130-01-RTW-00028 v4 ULE90130-01-RTW-00029 v4 ULE90130-01-RTW-00030 v4 ULE90130-01-RTW-00031 v4 ULE90130-01-RTW-00032 v4 ULE90130-01-RTW-00033 v4 ULE90130-01-RTW-00034 v4 ULE90130-01-RTW-00035 v4 ULE90130-01-RTW-00036 v4 ULE90130-01-RTW-00037 v4



ULE90130-01-RTW-00038 v4 ULE90130-01-RTW-00039 v4 ULE90130-01-RTW-00040 v5 ULE90130-01-RTW-00041 v4 ULE90130-01-RTW-00042 v4 ULE90130-01-RTW-00043 v4 ULE90130-01-RTW-00060 v5 ULE90130-01-RTW-00061 v5 ULE90130-01-RTW-00064 v4 ULE90130-01-RTW-00066 v5 ULE90130-01-RTW-00067 v5 ULE90130-01-RTW-00068 v4 Victoria Docks Entrance Bridge (S16) ULE90130-01-BRG-00013 v9 ULE90130-01-BRG-00014 v9 ULE90130-01-BRG-00015 v9 ULE90130-01-BRG-00016 v8 ULE90130-01-BRG-00017 v8 ULE90130-01-BRG-00018 v9 ULE90130-01-BRG-00019 v8 ULE90130-01-BRG-00020 v8 ULE90130-01-BRG-00021 v11 ULE90130-01-BRG-00022 v9 ULE90130-01-BRG-00023 v9 ULE90130-01-BRG-00024 v4 ULE90130-01-BRG-00025 v9 Tower Place Bridge (S17) ULE90130-01-BRG-00081 v7 ULE90130-01-BRG-00082 v14 ULE90130-01-BRG-00083 v12 ULE90130-01-BRG-00084 v8 ULE90130-01-BRG-00085 v7 ULE90130-01-BRG-00086 v12 ULE90130-01-BRG-00087 v7 ULE90130-01-BRG-00088 v7 ULE90130-01-BRG-00089 v7 ULE90130-01-BRG-00090 v13 ULE90130-01-BRG-00091 v7 ULE90130-01-BRG-00092 v11



ULE90130-01-BRG-00093 v9 ULE90130-01-BRG-00094 v8 ULE90130-01-BRG-00095 v7 ULE90130-01-BRG-00096 v8 ULE90130-01-BRG-00097 v7 ULE90130-01-BRG-00098 v8 ULE90130-01-BRG-00099 v9 ULE90130-01-BRG-00100 v7 ULE90130-01-BRG-00101 v8 ULE90130-01-BRG-00102 v10 ULE90130-01-BRG-00103 v8 ULE90130-01-BRG-00104 v8 ULE90130-01-BRG-00105 v8 ULE90130-01-BRG-00106 v8 ULE90130-01-BRG-00107 v8 ULE90130-01-BRG-00108 v10 ULE90130-01-BRG-00110 v6 ULE90130-01-BRG-00111 v6 ULE90130-01-BRG-00112 v7 ULE90130-01-BRG-00113 v7 ULE90130-01-BRG-00114 v8 ULE90130-01-BRG-00115 v9 ULE90130-01-BRG-00116 v6 ULE90130-01-BRG-00117 v7 ULE90130-01-BRG-00118 v5 ULE90130-01-BRG-00119 v6 ULE90130-01-BRG-00120 v5 ULE90130-01-BRG-00121 v5 ULE90130-01-BRG-00122 v8 ULE90130-01-BRG-00123 v3 Track **Track Horizontal Alignment** ULE90130-01-TAL-00001 v7 ULE90130-01-TAL-00002 v5 ULE90130-01-TAL-00003 +7 v8 ULE90130-01-TAL-00004 +7 v8 ULE90130-01-TAL-00005 v6 ULE90130-01-TAL-00006 v6 ULE90130-01-TAL-00007 v7



ULE90130-01-TAL-00008 v7 ULE90130-01-TAL-00009 v8 **Track Vertical Alignment** ULE90130-01-TVA-00001 v7 ULE90130-01-TVA-00002 v5 ULE90130-01-TVA-00003 +7-v8 ULE90130-01-TVA-00004 +6 v7 ULE90130-01-TVA-00005 v6 ULE90130-01-TVA-00006 +6-v7 ULE90130-01-TVA-00007 v7 ULE90130-01-TVA-00008 v7 ULE90130-01-TVA-00009 v8 Roads Road Scheme Layout ULE90130-01-HRL-00001 v9 ULE90130-01-HRL-00002 v9 ULE90130-01-HRL-00005 +6 v9 ULE90130-01-HRL-00006 v9 ULE90130-01-HRL-00007 v9 ULE90130-01-HRL-00008 v8 ULE90130-01-HRL-00009-v11 Road Junction and Crossings ULE90130-01-HRL-00025 v3 v4 ULE90130-01-HRL-00026 v5 ULE90130-01-HRL-00031 +3 v5 ULE90130-01-HRL-00032 +3-v6 ULE90130-01-HRL-00033 ¥3 v5 ULE90130-01-HRL-00034 +3 v5 ULE90130-01-HRL-00036 +3 v4 ULE90130-01-HRL-00039 v3 ULE90130-01-HRL-00040 v3 ULE90130-01-HRL-00041-v6 **Typical Cross Sections** ULE90130-01-HRL-00093 v3 ULE90130-01-HRL-00094 +3 v5 ULE90130-01-HRL-00096 +3 v4 ULE90130-01-HRL-00097 +3 v4 ULE90130-01-HRL-00098 +3 v4 **Road Restraint Systems** 



ULE90130-01-HRL-00401 v7 ULE90130-01-HRL-00402 v7 ULE90130-01-HRL-00405 +3 v4 ULE90130-01-HRL-00406 v5 ULE90130-01-HRL-00407 v6 ULE90130-01-HRL-00408 v5 ULE90130-01-HRL-00409 v6 Traffic Signal Ducting ULE90130-01-HRL-00501 v3-v4 ULE90130-01-HRL-00502 v3-v5 ULE90130-01-HRL-00507 +3 v5 ULE90130-01-HRL-00508 +3 v6 ULE90130-01-HRL-00509 +3 v5 ULE90130-01-HRL-00510 +3 v5 ULE90130-01-HRL-00511 +3 v4 Traffic Signal Layout ULE90130-01-HRL-00512-v2 v3 ULE90130-01-HRL-00513 +2 v3 ULE90130-01-HRL-00514 v6 **Pavement Design** ULE90130-01-HRL-00701 v6 ULE90130-01-HRL-00702-v7 ULE90130-01-HRL-00705 v4 ULE90130-01-HRL-00706 +3 v5 ULE90130-01-HRL-00707 +3 v4 ULE90130-01-HRL-00708 +3 v4 ULE90130-01-HRL-00709 v7 Kerbs, Footways and Paved Areas ULE90130-01-HRL-01101 v8 ULE90130-01-HRL-01102 v7 ULE90130-01-HRL-01105 +3 v5 ULE90130-01-HRL-01106 v6 ULE90130-01-HRL-01107 v7 ULE90130-01-HRL-01108 v6 ULE90130-01-HRL-01109 v7 **Footway Construction Standard Details** ULE90130-01-HRL-01130-v6 v10 ULE90130-01-HRL-01131-v8 v13 ULE90130-01-HRL-01132 +4 v11



ULE90130-01-HRL-01133 +4 v8 ULE90130-01-HRL-01134 v14 ULE90130-01-HRL-01138 +2 v7 ULE90130-01-HRL-01141-v1 v4 **Road Markings** ULE90130-01-HRL-01201-v6 ULE90130-01-HRL-01202-v6 ULE90130-01-HRL-01205-v4 v6 ULE90130-01-HRL-01206 +4-v6 ULE90130-01-HRL-01207 +4 v5 ULE90130-01-HRL-01208 +4 v6 ULE90130-01-HRL-01209 v8 Traffic Signs ULE90130-01-HRL-01231 v5 ULE90130-01-HRL-01232 v6 ULE90130-01-HRL-01235 +2 v4 ULE90130-01-HRL-01236 v5 ULE90130-01-HRL-01237 v4 ULE90130-01-HRL-01238 +2 v4 ULE90130-01-HRL-01239 v5 **Pavement Surface Colour** ULE90130-01-HRL-01261 v6 ULE90130-01-HRL-01262 v7 ULE90130-01-HRL-01265 +3 v4 ULE90130-01-HRL-01266-v5 ULE90130-01-HRL-01267-v5 ULE90130-01-HRL-01268 +3 v4 ULE90130-01-HRL-01269 v7 Non Standard Road Signs ULE90130-01-KRB-00009 v1 **Site Clearance** ULE90130-01-HRL-00201 v6 ULE90130-01-HRL-00202 v7 ULE90130-01-HRL-00203 v4 ULE90130-01-HRL-00204 v3 ULE90130-01-HRL-00205 +3-v5 ULE90130-01-HRL-00206 +3 v5 ULE90130-01-HRL-00207 v6 ULE90130-01-HRL-00208 +3 v5



ULE90130-01-HRL-00209 v6

Street Lighting

Layout

ULE90130-01-LTG-00001 v6

ULE90130-01-LTG-00002 v7

ULE90130-01-LTG-00005 v7 ULE90130-01-LTG-00006 v7

ULE90130-01-LTG-00007 v7

ULE90130-01-LTG-00008 v7

ULE90130-01-LTG-00009 v6

Schematic

ULE90130-01-LTG-00101 v7

ULE90130-01-LTG-00105 v6

ULE90130-01-LTG-00106 v6

ULE90130-01-LTG-00107 v6

#### OLE

ULE90130-01-OLE-00001 v8 Superseded by Siemens OLE Pole Location Plans ULE90130-01-OLE-00002 v8 Superseded by Siemens OLE Pole Location Plans ULE90130-01-OLE-00003 v10 Superseded by Siemens OLE Pole Location Plans ULE90130-01-OLE-00004 v9 Superseded by Siemens OLE Pole Location Plans ULE90130-01-OLE-00005 v11 v13 Superseded by Siemens OLE Pole Location Plans

OLE Pole Location Plans ULE90130-01-DRG-00771\_rev3 ULE90130-01-DRG-00772\_rev3 ULE90130-01-DRG-00773\_rev3 ULE90130-01-DRG-00774\_rev3 ULE90130-01-DRG-00775\_rev3 ULE90130-01-DRG-00776\_rev3 ULE90130-01-DRG-00778\_rev3 ULE90130-01-DRG-00779\_rev3

#### Drainage

ULE90130-01-DNE-00001 v6 ULE90130-01-DNE-00002 v6 ULE90130-01-DNE-00005 v7 ULE90130-01-DNE-00006 v8 ULE90130-01-DNE-00007 v7 ULE90130-01-DNE-00008 v7 ULE90130-01-DNE-00009 v7 Cable and Ducting



ULE90130-01-DCT-00001 v8 ULE90130-01-DCT-00002 v7 ULE90130-01-DCT-00003 v8 ULE90130-01-DCT-00004 v8 ULE90130-01-DCT-00005-v7 ULE90130-01-DCT-00006 v7 ULE90130-01-DCT-00007-v7 ULE90130-01-DCT-00008 v7 ULE90130-01-DCT-00009-v8 Utilities All Utilities ULE90130-01-UTL-00001 v5 ULE90130-01-UTL-00002 v5 ULE90130-01-UTL-00003 v6 ULE90130-01-UTL-00004 v5 ULE90130-01-UTL-00005 v5 ULE90130-01-UTL-00006 v6 ULE90130-01-UTL-00007 v6 ULE90130-01-UTL-00008 v6 ULE90130-01-UTL-00009 v6 ULE90130-01-UTL-00010 v6 ULE90130-01-UTL-00011 v5 ULE90130-01-UTL-00012 v5 ULE90130-01-UTL-00013 ULE90130-01-UTL-00014 ULE90130-01-UTL-00015 ULE90130-01-UTL-00016 ULE90130-01-UTL-00017 ULE90130-01-UTL-00018 ULE90130-01-UTL-00019 ULE90130-01-UTL-00020 ULE90130-01-UTL-00021 **BT** Openreach ULE90130-01-UTL-00506 ULE90130-01-UTL-00507 ULE90130-01-UTL-00508 ULE90130-01-UTL-00509 ULE90130-01-UTL-00510 ULE90130-01-UTL-00511



ULE90130-01-UTL-00512 ULE90130-01-UTL-00513 ULE90130-01-UTL-00514 v6 ULE90130-01-UTL-00515 v6 Cable and Wireless ULE90130-01-UTL-00806 ULE90130-01-UTL-00807 ULE90130-01-UTL-00808 ULE90130-01-UTL-00809 ULE90130-01-UTL-00810 v2 ULE90130-01-UTL-00811 v2 ULE90130-01-UTL-00812 ULE90130-01-UTL-00813 ULE90130-01-UTL-00814 ULE90130-01-UTL-00815 Forth Ports ULE90130-01-UTL-01706 ULE90130-01-UTL-01707 ULE90130-01-UTL-01708 ULE90130-01-UTL-01709 ULE90130-01-UTL-01710 ULE90130-01-UTL-01711 ULE90130-01-UTL-01712 ULE90130-01-UTL-01713 ULE90130-01-UTL-01714 ULE90130-01-UTL-01715 Scotland Gas Networks ULE90130-01-UTL-00106 ULE90130-01-UTL-00107 ULE90130-01-UTL-00108 v5 ULE90130-01-UTL-00109 v5 ULE90130-01-UTL-00110 v5 ULE90130-01-UTL-00111 v5 ULE90130-01-UTL-00112 v5 ULE90130-01-UTL-00113 v4 ULE90130-01-UTL-00114 v4 ULE90130-01-UTL-00115 Scottish Power ULE90130-01-UTL-00206



ULE90130-01-UTL-00207 v6 ULE90130-01-UTL-00208 ULE90130-01-UTL-00209 ULE90130-01-UTL-00210 v6 ULE90130-01-UTL-00211 v6 ULE90130-01-UTL-00212 v6 ULE90130-01-UTL-00213 v6 ULE90130-01-UTL-00214 v6 ULE90130-01-UTL-00215 v5 Scottish Water - CLEAN ULE90130-01-UTL-00306 ULE90130-01-UTL-00307 ULE90130-01-UTL-00308 v5 ULE90130-01-UTL-00309 ULE90130-01-UTL-00310 ULE90130-01-UTL-00311 v5 ULE90130-01-UTL-00312 v5 ULE90130-01-UTL-00313 v5 ULE90130-01-UTL-00314 v5 ULE90130-01-UTL-00315 v5 Scottish Water - SEWER ULE90130-01-UTL-00406 v2 ULE90130-01-UTL-00407 v1 ULE90130-01-UTL-00408 v3 ULE90130-01-UTL-00409 v3 ULE90130-01-UTL-00410 v3 ULE90130-01-UTL-00411 v3 ULE90130-01-UTL-00412 v3 ULE90130-01-UTL-00413 v3 ULE90130-01-UTL-00414 v3 ULE90130-01-UTL-00415 v3 ULE90130-01-UTL-00416 v3 ULE90130-01-UTL-00417 v3 ULE90130-01-UTL-00418 v3 ULE90130-01-UTL-00419 v3 ULE90130-01-UTL-00420 v3 ULE90130-01-UTL-00421 ULE90130-01-DRG-00300 ULE90130-01-DRG-00301



ULE90130-01-DRG-00302 ULE90130-01-UTL-02111 ULE90130-01-UTL-02112 ULE90130-01-UTL-02113 ULE90130-01-UTL-02114 ULE90130-01-UTL-02115 ULE90130-01-UTL-02116 ULE90130-01-UTL-02117 ULE90130-01-UTL-02118 ULE90130-01-UTL-02119 ULE90130-01-UTL-02120 ULE90130-01-UTL-02121 ULE90130-01-UTL-02122 ULE90130-01-UTL-02123 ULE90130-01-UTL-02124 ULE90130-01-UTL-02133 Thus ULE90130-01-UTL-00906 ULE90130-01-UTL-00907 ULE90130-01-UTL-00908 ULE90130-01-UTL-00909 ULE90130-01-UTL-00910 ULE90130-01-UTL-00911 ULE90130-01-UTL-00912 ULE90130-01-UTL-00913 v1 ULE90130-01-UTL-00914 v1 ULE90130-01-UTL-00915 Virgin Media ULE90130-01-UTL-00706 ULE90130-01-UTL-00707 ULE90130-01-UTL-00708 ULE90130-01-UTL-00709 ULE90130-01-UTL-00710 ULE90130-01-UTL-00711 ULE90130-01-UTL-00712 ULE90130-01-UTL-00713 v6 ULE90130-01-UTL-00714 ULE90130-01-UTL-00715 ULE90130-01-UTL-00716 v6



ULE90130-01-UTL-00717 v6 ULE90130-01-UTL-00718 v6 ULE90130-01-UTL-00719 v6 **TROs** ULE130-01-TMG-00001 v6 ULE130-01-TMG-00002 v6 ULE130-01-TMG-00003 v5 ULE130-01-TMG-00004 v5 ULE130-01-TMG-00006 v5 ULE130-01-TMG-00006 v5 ULE130-01-TMG-00007 v6 ULE130-01-TMG-00008 v5 **Landscaping** ULE90130-01-LDS-00001 v3

Landscaping ULE90130-01-LDS-00001 v3 ULE90130-01-LDS-00002 v6 ULE90130-01-LDS-00005 v2 ULE90130-01-LDS-00006 v2 ULE90130-01-LDS-00007 v2

ULE90130-01-LDS-00025 v4

#### Supervisory, Control and Communications

ULE90130-SW-SCC-00031 v3 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00032 v3 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00246 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00261 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00262 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00263 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00264 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00264 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00264 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00265 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00265 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00265 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00265 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design ULE90130-SW-SCC-00265 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design

ULE90130-SW-TSU-00009 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design

SECTION 1B d) Submission Specific Drawings:

#### Planning

Balfour Street Tram Stop Batch 1 / 09 ULE90130-01-PLG-00006 v3 ULE90130-01-PLG-00029 v3 ULE90130-01-PLG-00030 v3 ULE90130-01-PLG-00031 v3 ULE90130-01-PLG-00059 v3



ULE90130-01-PLG-00060 v3
ULE90130-01-PLG-00061 v3
ULE90130-01-PLG-00182 v3
ULE90130-01-PLG-00183 v2
Leith Walk Substation Batch 1 / 10
ULE90130-01-PLG-00220 v3
ULE90130-01-PLG-00221 v4
ULE90130-01-PLG-00222 v4
ULE90130-01-PLG-00223 v3
ULE90130-01-PLG-00224 v1
ULE90130-01-PLG-00225 v1
Building Warrant
Leith Walk 163 Substation Batch 1 / 10a
ULE90130-01-DRG-00238 v1
Tram Stop
Balfour Street Tram Stop
ULE90130-01-STP-00052 v18
ULE90130-01-STP-00056 v10
ULE90130-01-STP-00057 v8
Substation
Leith Walk Substation
ULE90130-01-SUB-00016 v4 Superseded
ULE90130-01-SUB-00017 v4 Superseded
ULE90130-01-SUB-00019 v2 Superseded
ULE90130-01-SUB-00020 v4 Superseded
ULE90130-01-SUB-00021 v2 Superseded
ULE90130-01-SUB-00022 v2 Superseded
ULE90130-01-SUB-00023 v3 Superseded
ULE90130-01-SUB-00046 v4
ULE90130-01-SUB-00047 v4
ULE90130-01-SUB-00048 v2 Superseded
ULE90130-01-SUB-00049 v2 Superseded
ULE90130-01-SUB-00050 v5
ULE90130-01-SUB-00051 v2 v5
ULE90130-01-SUB-00070 v1
ULE90130-01-SUB-00071 v1
ULE90130-01-SUB-00072 v1
ULE90130-01-SUB-00073 v1
Track



Track Horizontal Alignment ULE90130-01-TAL-00010 v7 ULE90130-01-TAL-00011 v7 ULE90130-01-TAL-00012 v7 ULE90130-01-TAL-00013 v6 **Track Vertical Alignment** ULE90130-01-TVA-00010 v8 ULE90130-01-TVA-00011 v8 ULE90130-01-TVA-00012 v8 ULE90130-01-TVA-00013 v7 Roads **Road Scheme Layout** ULE90130-01-HRL-00010 v11 ULE90130-01-HRL-00011 v11 ULE90130-01-HRL-00012 v11 ULE90130-01-HRL-00013 +9 v10 **Typical Cross Sections** ULE90130-01-HRL-00074 v5 ULE90130-01-HRL-00075 v5 ULE90130-01-HRL-00076 v5 ULE90130-01-HRL-00077 +6 v8 Road Restraint Systems ULE90130-01-HRL-00410 v8 ULE90130-01-HRL-00411 v7 ULE90130-01-HRL-00412-v8 ULE90130-01-HRL-00413 +5 v7 **Pavement Design** ULE90130-01-HRL-00710 v7 ULE90130-01-HRL-00711-+5 v6 ULE90130-01-HRL-00712-v5 v6 ULE90130-01-HRL-00713 +5 v6 Kerbs, Footways and Paved Areas ULE90130-01-HRL-01110 v10 ULE90130-01-HRL-01111 +6 v7 ULE90130-01-HRL-01112 +6 v7 ULE90130-01-HRL-01113 +6 v8 **Construction Standard Details** ULE90130-01-HRL-01130 v10 ULE90130-01-HRL-01131 ++2 v13



ULE90130-01-HRL-01132 v8-v11 ULE90130-01-HRL-01133 v8 ULE90130-01-HRL-01134 v14 ULE90130-01-HRL-01138 v7 ULE90130-01-HRL-01141 v4 **Road Markings** ULE90130-01-HRL-01210 v9 ULE90130-01-HRL-01211 +6 v7 ULE90130-01-HRL-01212 +6 v8 ULE90130-01-HRL-01213 +6 v7 **Traffic Sign** ULE90130-01-HRL-01240 v9 ULE90130-01-HRL-01241-v5 v7 ULE90130-01-HRL-01242 +5-v7 ULE90130-01-HRL-01243-v9 Pavement Surface Colour ULE90130-01-HRL-01270 v10 ULE90130-01-HRL-01271 +7 v9 ULE90130-01-HRL-01272 +7 v9 ULE90130-01-HRL-01273 +6 v8 **Road Junction and Crossings** ULE90130-01-TMG-00027 +6 v7 ULE90130-01-TMG-00028 v10 ULE90130-01-TMG-00029 +6 v7 ULE90130-01-TMG-00030 v6 ULE90130-01-TMG-00031 +7-v8 ULE90130-01-TMG-00032 +6 v8 ULE90130-01-TMG-00033 v6 **Traffic Signal Ducting** ULE90130-01-TMG-00035 v6 v7 ULE90130-01-TMG-00036-v10 ULE90130-01-TMG-00037 +6 v7 ULE90130-01-TMG-00038 v6 ULE90130-01-TMG-00039 +7 v8 ULE90130-01-TMG-00040 +6 v8 ULE90130-01-TMG-00041 v6 Non Standard Signs and Markings ULE90130-01-KRB-00010 v2 ULE90130-01-KRB-00011 v2



ULE90130-01-KRB-00012 v2 ULE90130-01-KRB-00013 v2 Site Clearance ULE90130-01-HRL-00210 v7 ULE90130-01-HRL-00211 +5 v6 ULE90130-01-HRL-00212 +5 v6 ULE90130-01-HRL-00213 +5 v6 Street Lighting Lighting Layout Plans ULE90130-01-LTG-00010 v11 ULE90130-01-LTG-00011 v9 ULE90130-01-LTG-00012 v9 ULE90130-01-LTG-00013 v9 Lighting Schematic ULE90130-01-LTG-00110 v7 ULE90130-01-LTG-00111-v7 ULE90130-01-LTG-00112 v7 ULE90130-01-LTG-00113-v7 OLE ULE90130-01-OLE-00005 v13 Superseded by Siemens Pole Location Plans ULE90130-01-OLE-00006 v10 Superseded by Siemens Pole Location Plans ULE90130-01-OLE-00007 v10 Superseded by Siemens Pole Location Plans **OLE Pole Location Plans** ULE90130-01-DRG-00780 rev3 ULE90130-01-DRG-00781\_rev3 ULE90130-01-DRG-00782 rev3 ULE90130-01-DRG-00783\_rev3 Drainage ULE90130-01-DNE-00010 v13 ULE90130-01-DNE-00011 v13 ULE90130-01-DNE-00012 v14 ULE90130-01-DNE-00013-v13 Landscaping ULE90130-01-LDS-00010 v3 ULE90130-01-LDS-00011 v4 ULE90130-01-LDS-00012 v4 ULE90130-01-LDS-00013 v4 **Cabling and Ducting** ULE90130-01-DCT-00010 v11



ULE90130-01-DCT-00011 v11 ULE90130-01-DCT-00012 v1-v10 ULE90130-01-DCT-00013 v11 Utilities Standard Drawings ULE90130-01-UTL-00009 v4 Superseded ULE90130-01-UTL-00017 v7 Superseded ULE90130-01-UTL-00018 v7 Superseded All Utilities ULE90130-01-UTL-00022 v9 Superseded ULE90130-01-UTL-00023 v7 Superseded ULE90130-01-UTL-00024 v7 Superseded ULE90130-01-UTL-00025 v7 Superseded ULE90130-01-UTL-00026 v7 Superseded ULE90130-01-UTL-00027 v10 Superseded ULE90130-01-UTL-00028 v10 Superseded ULE90130-01-UTL-00029 v10 Superseded ULE90130-01-UTL-00030 v10 Superseded ULE90130-01-UTL-00031 v10 Superseded **BT** Openreach ULE90130-01-UTL-00522 v5 ULE90130-01-UTL-00523 v5 ULE90130-01-UTL-00524 v5 ULE90130-01-UTL-00525 v5 ULE90130-01-UTL-00526 v5 ULE90130-01-UTL-00527 v5 ULE90130-01-UTL-00528 v5 ULE90130-01-UTL-00529 v5

ULE90130-01-UTL-00530 v5 ULE90130-01-UTL-00531 v5 Cable and Wireless

ULE90130-01-UTL-00822 v5

ULE90130-01-UTL-00823 v5

ULE90130-01-UTL-00824 v5

ULE90130-01-UTL-00825 v5

ULE90130-01-UTL-00826 v5

ULE90130-01-UTL-00827 v5

ULE90130-01-UTL-00828 v5



ULE90130-01-UTL-00829 v5 ULE90130-01-UTL-00830 v5 ULE90130-01-UTL-00831 v5 Scottish Power ULE90130-01-UTL-00222 v5 ULE90130-01-UTL-00223 v5 ULE90130-01-UTL-00224 v5 ULE90130-01-UTL-00225 v5 ULE90130-01-UTL-00226 v5 ULE90130-01-UTL-00227 v6 ULE90130-01-UTL-00228 v6 ULE90130-01-UTL-00229 v6 ULE90130-01-UTL-00230 v6 ULE90130-01-UTL-00231 v6 ULE90130-01-UTL-00259 v3 Scottish Water - Clean ULE90130-01-UTL-00322 v6 ULE90130-01-UTL-00323 v5 ULE90130-01-UTL-00324 v5 ULE90130-01-UTL-00325 v5 ULE90130-01-UTL-00326 v5 ULE90130-01-UTL-00327 v10 ULE90130-01-UTL-00328 v10 ULE90130-01-UTL-00329 v10 ULE90130-01-UTL-00330 v10 ULE90130-01-UTL-00331 v10 Scottish Water - Sewer ULE90130-01-UTL-00422 v4 ULE90130-01-UTL-00423 v4 ULE90130-01-UTL-00424 v4 ULE90130-01-UTL-00425 v4 ULE90130-01-UTL-00426 v4 ULE90130-01-UTL-00427 v5 ULE90130-01-UTL-00428 v5 ULE90130-01-UTL-00429 v5 ULE90130-01-UTL-00430 v5 ULE90130-01-UTL-00431 v5 ULE90130-01-UTL-02101 v2 ULE90130-01-UTL-02103 v2



ULE90130-01-UTL-02104 v2 ULE90130-01-UTL-02105 v2 ULE90130-01-UTL-02106 v2 ULE90130-01-UTL-02107 v2 ULE90130-01-UTL-02108 v2 ULE90130-01-UTL-02109 v2 SGN ULE90130-01-UTL-00122 v7 ULE90130-01-UTL-00123 v5 ULE90130-01-UTL-00124 v5 ULE90130-01-UTL-00125 v5 ULE90130-01-UTL-00126 v5 ULE90130-01-UTL-00127 v7 ULE90130-01-UTL-00128 v7 ULE90130-01-UTL-00129 v7 ULE90130-01-UTL-00130 v7 ULE90130-01-UTL-00131 v7 Thus ULE90130-01-UTL-00922 v5 ULE90130-01-UTL-00923 v5 ULE90130-01-UTL-00924 v5 ULE90130-01-UTL-00925 v5 ULE90130-01-UTL-00926 v5 ULE90130-01-UTL-00927 v5 ULE90130-01-UTL-00928 v5 ULE90130-01-UTL-00929 v5 ULE90130-01-UTL-00930 v5 ULE90130-01-UTL-00931 v5 Virgin Media ULE90130-01-UTL-00722 v6 ULE90130-01-UTL-00723 v6 ULE90130-01-UTL-00724 v6 ULE90130-01-UTL-00725 v6 ULE90130-01-UTL-00726 v6 ULE90130-01-UTL-00727 v5 ULE90130-01-UTL-00728 v5 ULE90130-01-UTL-00729 v5 ULE90130-01-UTL-00730 v5 ULE90130-01-UTL-00731 v5



#### TRO

ULE130-01-TMG-00009 +5 v7 ULE130-01-TMG-00010 +5 v6 ULE130-01-TMG-00011 +5 v6 ULE130-01-TMG-00012 +5 v7 Leith Walk Rail Bridge ULE90130-01-BRG-00121 v5 ULE90130-01-BRG-00122 v8

#### Supervisory, Control and Communications

ULE90130-SW-SCC-00032 v3 Superseded by Siemens Design. See Siemens Systemwide Design. ULE90130-SW-SCC-00033 v3 Superseded by Siemens Design. See Siemens Systemwide Design. ULE90130-SW-SCC-00126 v3 Superseded by Siemens Design. See Siemens Systemwide Design. ULE90130-SW-SCC-00247 v2 Superseded by Siemens Design. See Siemens Systemwide Design. ULE90130-SW-SCC-00266 v2 Superseded by Siemens Design. See Siemens Systemwide Design. Traction Power Single Line Diagram Tram Leith Walk 163 TSS

ULE90130-SW-TSU-00008 v2 Superseded by Siemens Design. See Siemens Systemwide Design. Withdrawn

SECTION 1C d) Submission Specific Drawings:

#### Planning

McDonald Road Tram Stop Batch 1/11 ULE90130-01-PLG-00032 v3 ULE90130-01-PLG-00033 v3 ULE90130-01-PLG-00062 v3 ULE90130-01-PLG-00063 v3 ULE90130-01-PLG-00190 v3 ULE90130-01-PLG-00192 v3 ULE90130-01-PLG-00193 v2 Picardy Place Tram Stop Batch 1/12 ULE90130-01-PLG-00034 v2 ULE90130-01-PLG-00035 v2 ULE90130-01-PLG-00064 v4 ULE90130-01-PLG-00065 v5 ULE90130-01-PLG-00200 v2 ULE90130-01-PLG-00201 v2 ULE90130-01-PLG-00202 v4 ULE90130-01-PLG-00203 v3 ULE90130-01-PLG-00204 v2 ULE90130-01-PLG-00205 v4



ULE90130-01-PLG-00206 v2 ULE90130-01-PLG-00207 v3 ULE90130-01-PLG-00208 v1 **Building Warrant** Police Box Coffee Bar Batch 1 / 12a ULE90130-01-DRG-00261 v1 ULE90130-01-DRG-00262 v1 Cathedral Lane Substation Batch 1 / 14a ULE90130-01-DRG-00237 v1 ULE90130-01-DRG-00239 v1 ULE90130-01-DRG-00240 v1 Tram Stop McDonald Road ULE90130-01-STP-00062 v13 ULE90130-01-STP-00066 v10 ULE90130-01-STP-00067-v9 **Picardy Place** ULE90130-01-STP-00075 v12 ULE90130-01-STP-00076 v9 ULE90130-01-STP-00077 v9 Track **Track Horizontal Alignment** ULE90130-01-TAL-00014 v9 ULE90130-01-TAL-00015 v8 ULE90130-01-TAL-00016 v9 **Track Vertical Alignment** ULE90130-01-TVA-00014 v9 ULE90130-01-TVA-00015 v8 ULE90130-01-TVA-00016 v9 Roads Road Scheme Layout ULE90130-01-HRL-00014 v11 ULE90130-01-HRL-00015 v9 ULE90130-01-HRL-00016 v8 **Typical Cross Sections** ULE90130-01-HRL-00081 v5 ULE90130-01-HRL-00082 v4 ULE90130-01-HRL-00083 v5 ULE90130-01-HRL-00084 v3



ULE90130-01-HRL-00085 v3 **Road Restraint Systems** ULE90130-01-HRL-00414 v8 ULE90130-01-HRL-00415 v4 ULE90130-01-HRL-00416 v4 Pavement Design ULE90130-01-HRL-00714 v7 ULE90130-01-HRL-00715 v4 ULE90130-01-HRL-00716 v4 Kerbs, Footways and Paved Areas ULE90130-01-HRL-01114 v6 ULE90130-01-HRL-01115 v4 ULE90130-01-HRL-01116 v4 **Footway Construction Standard Details** ULE90130-01-HRL-01126 v5 ULE90130-01-HRL-01130 +9 v10 ULE90130-01-HRL-01131-v11 v13 ULE90130-01-HRL-01132 +7 v11 ULE90130-01-HRL-01133 +7 v8 ULE90130-01-HRL-01134 v14 ULE90130-01-HRL-01136 +2-v3 ULE90130-01-HRL-01137 +2 v3 ULE90130-01-HRL-01138 v7 ULE90130-01-HRL-01139 v2 Withdrawn ULE90130-01-HRL-01140 +2 v3 ULE90130-01-HRL-01141 v4 ULE90130-01-HRL-01142 v2 ULE90130-01-HRL-01143-v1 v2 **Road Markings** ULE90130-01-HRL-01214 v7 ULE90130-01-HRL-01215 v4 ULE90130-01-HRL-01216 v4 **Traffic Signs** ULE90130-01-HRL-01244 v5 ULE90130-01-HRL-01245 v3 ULE90130-01-HRL-01246 v3 **Pavement Surface Colour** ULE90130-01-HRL-01274 v8 ULE90130-01-HRL-01275 v5



ULE90130-01-HRL-01276 v5 Road Junction and Crossings ULE90130-01-TMG-00034 v5 ULE90130-01-TMG-00083 v4 ULE90130-01-TMG-00084 v4 ULE90130-01-TMG-00085 v7 ULE90130-01-TMG-00086 v7 ULE90130-01-TMG-00044 v6 ULE90130-01-TMG-00046 v3 Traffic Signal Ducting ULE90130-01-TMG-00050 v5 ULE90130-01-TMG-00051 v5 ULE90130-01-TMG-00052 v6 ULE90130-01-TMG-00053 v7 ULE90130-01-TMG-00054 v7 ULE90130-01-TMG-00055 v6 ULE90130-01-TMG-00056 v8 ULE90130-01-TMG-00057 v6 ULE90130-01-HRL-00061 v10 ULE90130-01-HRL-00063 v6 ULE90130-01-HRL-00517 v6 ULE90130-01-HRL-00519 v3 ULE90130-01-HRL-00521 v4 ULE90130-01-HRL-00524 v4 ULE90130-01-HRL-00525 v4 ULE90130-01-HRL-00535 v9 ULE90130-01-HRL-00537 v6 Non-Standard Signs and Markings ULE90130-01-KRB-00014 v4 ULE90130-01-KRB-00016 v4 **Site Clearance** ULE90130-01-HRL-00214 v7 ULE90130-01-HRL-00215 v4 ULE90130-01-HRL-00216 v4 **Street Lighting** Scheme Layout ULE90130-01-LTG-00014 v9 ULE90130-01-LTG-00015 v6 ULE90130-01-LTG-00016 v10



Schematics
ULE90130-01-LTG-00114 v8
ULE90130-01-LTG-00115 v2
ULE90130-01-LTG-00116 v8
OLE
ULE90130-01-OLE-00007 v9 v10 Superseded by Siemens Pole Location Plans
ULE90130-01-OLE-00008 v8 v11 Superseded by Siemens Pole Location Plans
ULE90130-01-OLE-00009 v9 Superseded by Siemens Pole Location Plans
ULE90130-01-OLE-00010 v10 Superseded by Siemens Pole Location Plans
ULE90130-01-OLE-00011 v12 Superseded by Siemens Pole Location Plans
OLE Pole Location Plans
ULE90130-01-DRG-00784_rev3
ULE90130-01-DRG-00785_rev3
ULE90130-01-DRG-00786_rev3
Drainage
ULE90130-01-DNE-00014 v9
ULE90130-01-DNE-00015 v12
ULE90130-01-DNE-00016 v12
Cable and Ducting
ULE90130-01-DCT-00014 <del>v1</del> v8
ULE90130-01-DCT-00015 v10
ULE90130-01-DCT-00016 v9
Boundary and Accommodation Works
ULE90130-01-ACC-00014 v1
ULE90130-01-ACC-00015 v1
ULE90130-01-ACC-00016 v1
Utilities
All Utilities
ULE90130-01-UTL-00032
ULE90130-01-UTL-00033
ULE90130-01-UTL-00034
ULE90130-01-UTL-00035
ULE90130-01-UTL-00036
ULE90130-01-UTL-00037
ULE90130-01-UTL-00038
ULE90130-01-UTL-00039
ULE90130-01-UTL-00040
ULE90130-01-UTL-00041
ULE90130-01-UTL-00042



ULE90130-01-UTL-00043 ULE90130-01-UTL-00044 ULE90130-01-UTL-00045 ULE90130-01-UTL-00046 ULE90130-01-UTL-00047 ULE90130-01-UTL-00048 **BT** Openreach ULE90130-01-UTL-00539 ULE90130-01-UTL-00540 ULE90130-01-UTL-00541 ULE90130-01-UTL-00542 ULE90130-01-UTL-00543 ULE90130-01-UTL-00544 Cable and Wireless ULE90130-01-UTL-00832 ULE90130-01-UTL-00833 ULE90130-01-UTL-00834 ULE90130-01-UTL-00835 ULE90130-01-UTL-00836 ULE90130-01-UTL-00837 ULE90130-01-UTL-00838 ULE90130-01-UTL-00839 ULE90130-01-UTL-00840 ULE90130-01-UTL-00841 ULE90130-01-UTL-00842 ULE90130-01-UTL-00843 ULE90130-01-UTL-00844 Scotland Gas Network ULE90130-01-UTL-00132 ULE90130-01-UTL-00133 ULE90130-01-UTL-00134 ULE90130-01-UTL-00135 ULE90130-01-UTL-00136 ULE90130-01-UTL-00137 ULE90130-01-UTL-00138 ULE90130-01-UTL-00139 ULE90130-01-UTL-00140 ULE90130-01-UTL-00141 ULE90130-01-UTL-00142



ULE90130-01-UTL-00143 ULE90130-01-UTL-00144 ULE90130-01-UTL-00159 ULE90130-01-UTL-00160 ULE90130-01-UTL-00163 ULE90130-01-UTL-00048 Scottish Power ULE90130-01-UTL-00232 ULE90130-01-UTL-00233 ULE90130-01-UTL-00234 ULE90130-01-UTL-00235 ULE90130-01-UTL-00236 ULE90130-01-UTL-00237 ULE90130-01-UTL-00238 ULE90130-01-UTL-00239 ULE90130-01-UTL-00240 ULE90130-01-UTL-00241 ULE90130-01-UTL-00242 ULE90130-01-UTL-00243 ULE90130-01-UTL-00244 Scottish Water - CLEAN ULE90130-01-UTL-00332 ULE90130-01-UTL-00333 ULE90130-01-UTL-00334 ULE90130-01-UTL-00335 ULE90130-01-UTL-00336 ULE90130-01-UTL-00337 ULE90130-01-UTL-00338 ULE90130-01-UTL-00339 ULE90130-01-UTL-00340 ULE90130-01-UTL-00341 ULE90130-01-UTL-00342 ULE90130-01-UTL-00343 ULE90130-01-UTL-00344 Scottish Water - SEWER ULE90130-01-UTL-00432 ULE90130-01-UTL-00433 ULE90130-01-UTL-00434 ULE90130-01-UTL-00435



ULE90130-01-UTL-00436 ULE90130-01-UTL-00437 ULE90130-01-UTL-00438 ULE90130-01-UTL-00439 ULE90130-01-UTL-00440 ULE90130-01-UTL-00441 ULE90130-01-UTL-00442 ULE90130-01-UTL-00443 ULE90130-01-UTL-00444 ULE90130-01-UTL-00445 ULE90130-01-UTL-00446 ULE90130-01-UTL-00447 ULE90130-01-UTL-00448 ULE90130-01-UTL-02125 ULE90130-01-UTL-02126 ULE90130-01-UTL-02128 ULE90130-01-UTL-02129 ULE90130-01-UTL-02131 ULE90130-01-UTL-02132 Thus ULE90130-01-UTL-00932 ULE90130-01-UTL-00933 ULE90130-01-UTL-00934 ULE90130-01-UTL-00935 ULE90130-01-UTL-00936 ULE90130-01-UTL-00937 ULE90130-01-UTL-00938 ULE90130-01-UTL-00939 ULE90130-01-UTL-00940 ULE90130-01-UTL-00941 ULE90130-01-UTL-00942 ULE90130-01-UTL-00943 ULE90130-01-UTL-00944 ULE90130-01-UTL-00959 Virgin Media ULE90130-01-UTL-00732 ULE90130-01-UTL-00733 ULE90130-01-UTL-00734 ULE90130-01-UTL-00735



ULE90130-01-UTL-00736 ULE90130-01-UTL-00737

ULE90130-01-UTL-00738

ULE90130-01-UTL-00739

ULE90130-01-UTL-00740

ULE90130-01-UTL-00741

ULE90130-01-UTL-00742

ULE90130-01-UTL-00743

ULE90130-01-UTL-00744

### TROs

ULE130-01-TMG-00013 +5 v6

ULE130-01-TMG-00014 +5 v8

ULE130-01-TMG-00015 <del>v5</del> v7

ULE130-01-TMG-00016 <del>v5</del> v7

#### Landscaping

ULE90130-01-LDS-00014 v2

#### Supervisory, Control and Communications

ULE90130-SW-SCC-00034 v3 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00035 v3 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00248 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00267 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00268 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00268 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00269 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00269 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00271 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design. ULE90130-SW-SCC-00271 v2 Now superseded by Siemens Drawings. See Siemens Systemwide Design.

#### Comments

Documents and versions to be confirmed with final version of document.

Drawing versions will be updated with IFC as appropriate.

#### e) Applicable Systemwide Drawings and Documents:

- OLE Generic Foundation Drawings
  - ULE90130-SW-OLE-00015 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00016 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00017 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00018 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00019 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00020 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00021 v2 Now superseded by foundation designs to suit Siemens OLE Design
  - ULE90130-SW-OLE-00022 v2 Now superseded by foundation designs to suit Siemens OLE Design



<ul> <li>OLE Generic Foundations Design Summary ULE90130-SW-REP-00594 v2 Now superseded by foundation designs to suit Siemens OLE Design</li> </ul>
<ul> <li>Department of Transport Manual of Contract Documents for Highways Works:</li> </ul>
(Note: Specifications will be revised following any design changes moving forward, however the revisions noted below are current at the point of time of phase 1A closure)
<ul> <li>Appendix 1/5: Testing to be Carried Out by the Contractor – ULE90130-SW-SPN-00188 v5</li> </ul>
<ul> <li>Appendix 2: Site Clearance - ULE90130-SW-SPN-00090 v41</li> </ul>
<ul> <li>Appendix 4/1: Road Restraint Systems (Vehicular and Pedestrian) - ULE90130-SW-SPN-00086 v58</li> </ul>
<ul> <li>Appendix 4/2: Information Required to Demonstrate Compliance of Road Restraint Systems to BS EN 1317-1, BS EN 1317-2, BS EN 1317-3 and DD ENV 1317-4:2002 - ULE90130-SW-SPN- 00183 v3</li> </ul>
<ul> <li>Series 500 Drainage Specification - ULE90130-SW-SPN-00113 v50</li> </ul>
<ul> <li>Series 600 Earthworks Specification – ULE90130-SW-SPN-00161 v11</li> </ul>
<ul> <li>Appendix 7/1: Permitted Pavement Options - ULE90130-SW-SPN-00190 v8</li> </ul>
<ul> <li>Appendix 7/2: Excavation, Trimming and Reinstatement of Existing Surfaces - ULE90130-SW- SPN-00139 v9</li> </ul>
<ul> <li>Appendix 7/4: Bond Coats, Tack Coats and other Bituminous Sprays - ULE90130-SW-SPN-00140 v9</li> </ul>
<ul> <li>Appendix 7/7: Slurry Surfacing Incorporating Microsurfacing - ULE90130-SW-SPN-00141 v9</li> </ul>
<ul> <li>Appendix 7/9: Cold Milling (Planing) of Bituminous Bound Flexible Pavement - ULE90130-SW- SPN-00142 v9</li> </ul>
<ul> <li>Appendix 11/1: Kerbs, Footways, Cycleways, Laybys, Busbays and Paved Areas – ULE90130- SW-SPN-00087 v35</li> </ul>
<ul> <li>Appendix 12/1: Traffic Signs: General - ULE90130-SW-SPN-00088 v61</li> </ul>
<ul> <li>Appendix 12/3: Traffic Signs: Road Markings and Studs - ULE90130-SW-SPN-00100 v56</li> </ul>
<ul> <li>Appendix 12/5: Traffic Signal Works - ULE90130-SW-SPN-00171 v16</li> </ul>
<ul> <li>Appendix 13: Road Lighting Columns and Brackets, CCTV Masts, and Cantilever Masts - ULE90130-SW-SPN-00172 v12</li> </ul>
<ul> <li>Appendix 14: Electrical Work for Road Lighting and Traffic Signs - ULE90130-SW-SPN-00173 v22</li> </ul>
<ul> <li>Appendix 16/1-16/8: Piling and Embedded Retaining Walls – ULE90130-SW-SPN-00177 v10</li> </ul>
<ul> <li>Appendix 17/1-17/6: Structural Concrete – ULE90130-SW-SPN-00111 v16</li> </ul>
<ul> <li>Appendix 18/1: Structural Steelwork – ULE90130-SW-SPN-00179 v3</li> </ul>
<ul> <li>Appendix 19/1 – 19/5: Protection of Steelwork Against Corrosion – ULE90130-SW-SPN-000175 v12</li> </ul>
<ul> <li>Appendix 20/1: Structures Specification 2000 – Waterproofing of Concrete Structures – ULE90130-SW-SPN-00110 v13</li> </ul>
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<ul> <li>Appendix 23/1-23/2: Bridge Expansion Joints and Sealing of Gaps – ULE90130-SW-SPN-00176 v15</li> </ul>
<ul> <li>Appendix 24: Brickwork, Blockwork and Stonework – ULE90130-SW-SPN-00168 v12</li> </ul>
<ul> <li>Appendix 25/2: Requirements for Reinforced Soil and Anchored Earth Structures – ULE90130- SW-SPN-00178 v5</li> </ul>



- Appendix 26: Miscellaneous ULE90130-SW-SPN-00169 v11
- Landscaping Specification ULE90130-SW-SPN-00198 v1
- Construction Drawings:
  - ULE90130-SW-CND-00002 v20
  - ULE90130-SW-CND-00010 v4
  - ULE90130-SW-CND-00013 v5
  - ULE90130-SW-CND-00014 v4
  - ULE90130-SW-CND-00015 v4
- Ground Improvement Layer Drawings
  - ULE90130-SW-DRG-00682 v4
  - ULE90130-SW-DRG-00683 v4
  - ULE90130-SW-DRG-00684 v3
  - ULE90130-SW-DRG-00685 v3
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  - ULE90130-SW-DRG-00688 v3
  - ULE90130-SW-DRG-00689 v2
  - ULE90130-SW-DRG-00690 v3
  - ULE90130-SW-DRG-00691 v3
  - ULE90130-SW-DRG-00691 (schedule) v3
  - ULE90130-SW-DRG-00692 v2
  - ULE90130-SW-DRG-00692 (schedule) v3
  - ULE90130-SW-DRG-00783 v3
- OLE Generic Foundation Design Drawings and Certificates
  - ULE90130-SW-OLE-00023 v4
  - ULE90130-SW-OLE-00024 v4
  - ULE90130-SW-OLE-00030 v5
  - ULE90130-SW-OLE-00031 v5
  - ULE90130-SW-OLE-00032 v5
  - ULE90130-SW-OLE-00033 v5
- Systemwide Fencing Drawings
  - ULE90130-SW-DRG-00642 v1
  - ULE90130-SW-DRG-00643 v1
  - ULE90130-SW-DRG-00644 v2
  - Trackform Reference Design Rail Plinth on Structure
    - ULE90130-SW-DRG-00713 v1



- ULE90130-SW-SCH-00156 v1
- ULE90130-SW-FOR-00220 v1
- ULE90130-SW-FOR-00246 v1
- Standard Turnout Geometry: ULE90130-SW-DRG-00077 v2
- Substation Exemplar:
  - ULE90130-SW-SUB-00008 v3
  - ULE90130-SW-SUB-00016 v1
  - ULE90130-SW-SUB-00017 v1
  - ULE90130-SW-SUB-00018 v1
  - ULE90130-SW-SUB-00201 v3
  - ULE90130-SW-SUB-00202 v3
  - Drainage Assessment Report ULE90130-SW-REP-00369 v2
  - Environmental Management Plan ULE90130-SW-SW-PPN-00011 v6
  - Archaeological Specification For A Programme of Archaeological Works Standing Structures ULE90130-SW-REP-00506 v1
  - Contaminated Land Interpretative Report ULE90130-SW-REP-00383 v2
  - Bat Roost Report ULE90130-SW-REP-00367 v1
  - Invasive Weeds Report ULE90130-SW-REP-00251 v3
  - Tram Stop Exemplar Drawings:
    - ULE90130-SW-STP-00008 v3
    - ULE90130-SW-STP-00009 v15
    - ULE90130-SW-STP-00011 v14
    - ULE90130-SW-STP-00012 v7
    - ULE90130-SW-STP-00013 v11
    - ULE90130-SW-STP-00014 v8
    - ULE90130-SW-STP-00015 v13
    - ULE90130-SW-STP-00016 v9
    - ULE90130-SW-STP-00017 v10
    - ULE90130-SW-STP-00019 v9
    - ULE90130-SW-STP-00020 v7
    - ULE90130-SW-STP-00035 v2
    - ULE90130-SW-STP-00037 v4
    - ULE90130-SW-STP-00040 v1
- Earthworks Drawings
  - ULE90130-SW-GEO-00150 v2
  - ULE90130-SW-GEO-00151 v2
  - ULE90130-SW-GEO-00152 v2
  - ULE90130-SW-GEO-00153 v2



- Register for Cuttings and Embankments
  - ULE90130-SW-REP-00207 v5
- Geotechnical Desk Study Summary Plans:
  - ULE90130-SW-GEO-00001 v4
  - ULE90130-SW-GEO-00002 v4
  - ULE90130-SW-GEO-00003 v4
  - ULE90130-SW-GEO-00004 v4
  - ULE90130-SW-GEO-00005 v4
  - ULE90130-SW-GEO-00006 v4
  - ULE90130-SW-GEO-00007 v4
  - ULE90130-SW-GEO-00008 v4
  - ULE90130-SW-GEO-00009 v4
  - ULE90130-SW-GEO-00010 v4
  - ULE90130-SW-GEO-00011 v4
  - ULE90130-SW-GEO-00012 v4
  - ULE90130-SW-GEO-00013 v4
  - ULE90130-SW-GEO-00014 v4
  - ULE90130-SW-GEO-00015 v4
  - ULE90130-SW-GEO-00016 v4
  - ULE90130-SW-GEO-00017 v4
  - ULE90130-SW-GEO-00018 v4
  - ULE90130-SW-GEO-00019 v4
  - ULE90130-SW-GEO-00020 v4
  - ULE90130-SW-GEO-00021 v4
  - ULE90130-SW-GEO-00022 v4
  - ULE90130-SW-GEO-00023 v4
  - ULE90130-SW-GEO-00024 v4
  - ULE90130-SW-GEO-00025 v5
  - ULE90130-SW-GEO-00026 v5
  - ULE90130-SW-GEO-00027 v5
  - ULE90130-SW-GEO-00028 v5
  - ULE90130-SW-GEO-00029 v5
  - ULE90130-SW-GEO-00030 v5
  - ULE90130-SW-GEO-00031 v5
  - ULE90130-SW-GEO-00032 v5
  - ULE90130-SW-GEO-00033 v5
  - ULE90130-SW-GEO-00034 v5



- ULE90130-SW-GEO-00035 v5
- ULE90130-SW-GEO-00036 v5
- ULE90130-SW-GEO-00037 v5
- ULE90130-SW-GEO-00038 v5
- ULE90130-SW-GEO-00039 v5
- ULE90130-SW-GEO-00040 v5
- ULE90130-SW-GEO-00041 v5

#### TRO Schedules

- ULE90130-SW-SCH-00142 v4
- ULE90130-SW-SCH-00143 v4
- ULE90130-SW-SCH-00144 v4
- ULE90130-SW-SCH-00145 v4
- ULE90130-SW-SCH-00146 v4
- ULE90130-SW-SCH-00147 v2
- ULE90130-SW-SCH-00148 v2
- ULE90130-SW-SCH-00149 v2
- ULE90130-SW-SCH-00151 v3
- ULE90130-SW-SCH-00152 v3
- ULE90130-SW-SCH-00153 v3
- ULE90130-SW-SCH-00154 v3
- ULE90130-SW-SCH-00155 v2
- ULE90130-SW-SCH-00169 v1
- ULE90130-SW-SCH-00170 v2

#### Comments

TRO schedules subject to change until CEC makes order and promotes orders outside of City Centre. CEC/tie have changed the protocol and decided to promote City Centre order separately from rest of project.

#### f) Principal Standards:

#### Detail Applicable Standards;

#### **Employers Requirements v4.1**

Planning

National Guidance

- Scottish Planning Policy 1: The Planning System (2004)
- Planning Advice Note 68: Design Statements (2003)
- Planning Advice Note 78: Inclusive Design (2006) (for Tram Stops)
- Designing Places: A Policy Statement for Scotland (2001)
- National Planning Policy Guidance 18: Planning and the Historic Environment (1999)
- Inclusive Mobility, Department for Transport (2005)



- Memorandum of Guidance for Listed Buildings and Conservation Areas (1998).
- Local Authority Development Plan
- Edinburgh and Lothian Structure Plan 2015
- Finalised Edinburgh City Local Plan (2007)

Supplementary Planning Guidance

- Tram Design Manual (2006)
- Edinburgh Standards for Streets (2006)
- Edinburgh Standards for Urban Design (2003)
- CEC Development Quality Guidelines

#### Other

- Disability Discrimination Act 1995
- CEC Local Transport Strategy 2007-2012
- Edinburgh Tram (Line Two) Act 2006
- Parliamentary Undertakings
- Environmental Statement for Edinburgh Tram (Line Two) Act
- Noise and Vibration Policy
- Office of Rail Regulation Railway Safety Publication 2: Guidance on Tramways

#### Track

- 'Railway Safety Publication 2, Guidance on tramways', HM Railway Inspectorate, Office of Rail Regulation;
- 'Railway Safety Principles and Guidance Part 2, Section A, Guidance on Infrastructure', HM Railway Inspectorate, HSE.
- Track Alignment Criteria ULE90130-SW-SPN-00001 v3

#### Roads

- Design Manual for Roads and Bridges (DMRB)
- Traffic Signs Manual 2006
- New Roads and Streetwork Act (1991)
- Edinburgh Standards for Streets
- Outline Project Specification Roads and Utilities (Halcrow) (ULE90130-SW-SPN-00035 v2) for applicable standards.

#### **Street Lighting**

- BS 5489-1
- BS EN 13201-2: 2003
- Street Lighting Strategy for Edinburgh Tram
- CIBSE Lighting Guide 6

#### **Tram Stops**

- Outline Project Specification Tram Stops (ULE90130-SW-SPN-00028 v2) for applicable standards.
- Tram Stops and Points Heating Electrical Design Performance Specification (ULE90130-SW-SPN-00162 v1

#### Landscaping

Outline Project Specification – Landscape Architecture (ULE90130-SW-SPN-00052 v2) for applicable



	standards.							
Geote	Geotechnical							
٠	Outline Project Specification – Geotechnical (ULE90130-SW-SPN-00036 v2) for applicable standards.							
Struct	Structures							
•	Outline Project Specification –Structures (Halcrow) (ULE90130-SW-SPN-00034 v1) for applicable standards.							
1.5								
g) Tra	am Design Manual and Design Briefs:							
•	Environmental Statement for Edinburgh Tram (Line Two) Act							
•	Edinburgh Tram Noise and Vibration Policy							
•	Tram Design Manual							
•	Urban Design Brief							
•	Letter from tie re Surface Finishes and Tram Stops dated 4 January 2008 (Ref SMH/FN/PLGPRJ/FM)							
h) Rel	levant Agreements and Undertakings:							
Detail	Applicable References:							
Agreen	ment - ADM Milling							
Agreen	nent – Royal Yacht Britannia							
Agreen	nent – Ocean Terminal							
Agreen	nent – Forth Ports							
Letter of	of Comfort - Irish Life Assurance							
Letter of	of Comfort – Baxters							
Letter of	of Comfort - BHS							
Letter of	of Comfort - Debenhams							
Letter of	of Comfort – New Look							
Letter	of Comfort - Starbucks							
Letter	of Comfort – David Levy (Yes Indeed)							
Letter of	of Comfort – Sharon Riley (Card Piont)							
Letter	of Comfort – Abercastle Holdings							
Letter	of Comfort – Christine Sprott							
Letter	of Closure / Position Statement – Judith Pearson							
Letter	of Comfort – Mr and Mrs Duncan							
Letter	of Comfort – Mrs Smith							
Letter of	of Comfort – Gary Gilbert							
Letter	of Comfort – Mr Degg							
Agreen	nent – Stanley Casinos							



Letter of Closure / Position Statement – CALA Management
Letter of Comfort – Professor Margaret Lang
Letter of Comfort – Mr and Mrs Campbell
Letter of Comfort – Georgia Low
Letter of Comfort – Kristan Jayne Drew
Letter of Comfort – Laura Fleming
Letter of Closure / Position Statement – Mr Scott
Letter of Comfort – Nicki Santer
Letter of Comfort – Mr and Mrs Laird
Letter of Comfort – Miss Connel-Guarino
Letter of Comfort – Fiona Douglas
Letter of Comfort – Shelia Gaynor
Letter of Comfort – Barbara Williams
Letter of Comfort - Anne Marie Gillon
Letter of Comfort – Murray Hetherington
Letter of Comfort – Doreen Peiffer
Letter of Comfort – Miss Haggerty and Miss Hill
Letter of Comfort – Christopher Foster
Letter of Comfort – Mrs F Rennie
Letter of Comfort – Graham Duff
Letter of Comfort – Caryn Connor
Letter of Comfort – Samantha Scotland
Letter of Comfort – Mr Eric Innes
Letter of Comfort – Natalie Sheenan
Letter of Comfort – Rachel Keen
Letter of Comfort – John Campbell
Letter of Comfort – Lynne Marsh
Letter of Comfort – Ian Shirley
Letter of Comfort – John and Alison Craske
Letter of Comfort– Alexander Latto
Letter of Closure / Position Statement – Norman Downie and Kerr
Letter of Comfort – Lee Ann McNaught
Letter of Assurance – Deardrie Harte
Letter of Comfort – Caversham Trading
1B Detail Applicable References;
Letter of Comfort – Janet Dunbar (Traditional Barbers)
Letter of Comfort – Thomson (CEC)

Letter of Comfort – Thomson (CEC)

Letter of Comfort - NHS Lothian Healthcare



Letter of Closure / Position Statement – Robert Dewar
Letter of Comfort – Mrs Kane
Letter of Comfort - Derek O'Carroll
Letter of Closure / Position Statement – Edinburgh Masonic Club
1C Detail Applicable References;
Letter of Comfort – Mr Francesco Germi
Letter of Comfort – Kate Mackenzie (Mad Jacks Back)
Letter of Comfort – Nick Stansfield
Letter of Comfort – Gillian Nicoll (Garlands)
Letter of Comfort - Pritchard
Letter of Comfort – Euro Hostels
Letter of Assurance – Mrs Joy dated
Letter of Assurance – Police Box Coffee Bars
i) CEC Review Comment Documentation Pertinent to the Design above:
Sub section 1A1 and 1A2 - CEC Letter Ref. SS/1 40/RG dated 25 <sup>th</sup> January 2010

2 - GEC Letter Ref SS/1.40/RG dated 25 January 2010
- Schedule comments from CEC dated 24 <sup>th</sup> September 2009
- CEC Letter Ref SS/1.40/RG dated 19th August 2010
- CEC Letter Ref SS/1.40/HAB dated 24 <sup>th</sup> March 2009



# **System Design Closure Report**

# For

# **Secondary Phase 1a**

			BBS Consortium			
			-		Date	Agreed
			BBS Proje	ect Director		
			BBS Depu	ity Project Director		
This d manua		produce	ed electroni	cally and requires no	o signature. I	t may not be amended
		Name		Department	Date	Signature
Released by		Michae	el Wilken	SPM		
Checke	Checked by Klaus D		Dieker	TRW		
		Gary Bro		REL		
		Thomas Berndt		SIG		
2		Tony V	/right	COMM/SCADA		į.
		Wolfgang Braun		E&B		
Droport	ad by	Chabu	Dedhar	SPM		-
Prepar	nent History	Snabu	Dedhar	SPM		
Rev.	Issue Date	Descr	iption of Cl	nange		Author
А	15/06/2012	Forma	lissue			S Dedhar
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	Summary of Changes		
Revision	Reference	Description	
А	All chapters	First issue	

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**BBS** Infraco for ETN, Edinburgh Tram Network ETN(SPM)CEC#051702 System Design Closure Report Rev A.doc Revision A, Date 15 June 2012 BILFINGER BERGER SIEMENS

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A number of acronyms are used in this document. Please refer to the Glossary at the end for their meanings.

#### 1

Civil

## BACKGROUND AND CONTEXT

Following the Mediation in March 2011, the Settlement Agreement of 15 September 2011 provided for truncation of the route construction at York Place (Initial Phase 1a) and completion of design to Newhaven so that this section (Secondary Phase 1a) could be built at some future time.

On 1 March 2012, tie Change Order 558 was issued, instructing Infraco to cease any further design work on Secondary Phase 1a (York Place to Newhaven) and package up the design in its current form along with a status report indicating what elements of design had not been completed.

Under the above Change Order, Infraco was instructed to issue to CEC a "Closure of Seconday Phase 1a Design Report" which would replace and remove the obligation to produce an Integrated Design Assurance Statement for the Secondary Phase 1a design. The report would consist of a Civils Design Closure Report and a System Design Closure Report.

This document represents the System Design Closure Report.

The Closure of Secondary Phase 1a Design Report would also include a liability disclosure statement for agreement with CEC in recognition of the fact the design would not be assured for Secondary Phase 1a.

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### 2 LIMITATIONS

#### 2.1 SCOPE OF THIS REPORT

This report deals with the following Systems:

- Overhead Line Equipment;
- Signalling;
- Communications;
- SCADA;
- Earthing and Bonding / Stray Current protection;
- Trackwork;
- LV/HV Power supplies/Wayleaves.

#### 2.2 CLARIFICATION OF DESIGN SCOPE

The original design for the complete route from Airport to Newhaven (Phase 1a) did not include a tramstop or termination at York Place. The scope of system design that would have been required to complete the route to Newhaven is necessarily different from the scope to extend the truncated line from York Place to Newhaven.

The Settlement Agreement provided for competing the design all the way to Newhaven, rather than extending the design at a future date. This report only deals with the future extension by way of a brief introduction to the additional scope that would be required. As the termination design for York Place had not been fully defined, designed or approved at the date of tCO 558, it is not possible to define the scope of design works to design out the termination so that the route could be extended to Newhaven.

This report therefore focuses on design of the full route to Newhaven assuming no termination at York Place. The full scope of any additional design required to extend a truncated, operational route from York Place to Newhaven will have to be defined by the consultants appointed at that future date, or as a further exercise for the project team once the termination at York Place has been fully designed and approved.

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### **3 DESIGN SUBMISSIONS LISTS**

#### 3.1 ONLY RELEVANT NORTH OF YORK PLACE

The following listed Submissions are only relevant north of York Place.

	Re		
SubmissionID	v	Submission Title	Submission date
SPM-TRW-S1C.0301	В	Track Layout km120.00 - km122.000 McDonald Road - Picardy Place Picardy Place - Andews Square	21/01/2011
SPM-TRW-S1A.0301	С	Track Layout km110.000 - km120 000 Foot of Walk - Balfour Street Constitution Street -McDonald Road	26/03/2012
SPM-TRW-S1B.0301	В	Track Layout km100.000 - km110.000 New Haven - Ocean Terminal Ocean Terminal - Ocean Drive Ocean Drive - Constitution Street Constitution Street - Foot of Walk	26/03/2012

#### 3.2 RELEVANT NORTH AND SOUTH OF YORK PLACE

The following listed submissions are relevant both beyond York Place and to the sections being constructed to the south of York Place. These may have been updated due to design development or change, but this would only apply to sections south of York Place. For this reason, submissions may now be out of date beyond York Place.

SubmissionID	Rev	Submission Title	Submission date
SPM0170	В	Code of Practice for Stray Current Corrosion Control	12/11/2009
SPM0001	E	Stray Current Corrosion Strategy	12/11/2009
SPM-REL-TPS.0210	A	DC Traction Study	24/11/2008
SPM0210	Н	Stray Current Corrosion Study - Ver 2	12/11/2009
SPM0220	В	Psophometric Study	25/01/2010
SPM0230	В	Flicker Study	15/12/2009
SPM0240	В	DC Magnetic Field Calculation	05/02/2010
SPM0250	В	EMC Field Survey	14/08/2009
SPM0260	С	Soil Resistivity Measurements	06/08/2009
SPM0280	В	Harmonic Study Principle Overall System	25/06/2009
SPM-REL-TPS.0230	A	Description incl. single lines and layouts	21/11/2008

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SubmissionID	Rev	Submission Title	Submission date
SPM-REL-TPS.0250	А	Control and Protection Concept incl. Emergency Trip System	21/11/2008
SPM-REL-TPS.0260	А	EMC / Network Rail: Strategy, Management Plan	07/11/2008
SPM0310	А	11 kV AC switchgear single line and arrangement drawing	11/06/2009
SPM-REL-TPS.0310	А	Traction Transformer outline drawing	06/02/2009
SPM-REL-TPS.0320	А	Rectifier arrangement drawing	06/02/2009
SPM-REL-TPS.0330	А	DC switchgear single line and arrangement drawing	06/02/2009
SPM-REL-TPS.0340	А	Emergency trip arrangement	26/01/2009
SPM-REL-TPS.0350	А	SCD single line and arrangement drawing	06/02/2009
SPM-REL-TPS.0360	Α	Typical Wayside Equipment (bypass switch and disconnectors) single line and arrangement drawing	27/01/2009
SPM-REL-TPS.0370	А	Power Cables (MV and LV)	26/01/2009
SPM-REL-TPS.0380	А	Relay Co-ordination Study (Relay settings)	10/07/2009
SPM-REL-TPS.0390	В	Principle Overall System Description	19/11/2009
SPM-REL-OCL.0250	С	OCL - Typical Structure Types	31/03/2009
SPM-RA-COM.0301	В	Optical Fiber Network & Fibre Optic cable	08/05/2009
SPM-RA-COM.0306	В	Detailed Design Tramstop Cabinet UPS	08/05/2009
SPM-RA-COM.0308	В	Detailed Design Sub-Station UPS	08/05/2009
SPM-RA-COM.0309	В	Detailed Design Radio Base Station UPS	08/05/2009
SPM-TRW-GEN.0101	F	Basis of Design: Sub System Trackwork	22/05/2009
SPM-TRW-RHC.0101	D	Rheda City C	20/05/2009
SPM-TRW-RHC.0102	С	Rheda City C Track Typical Sections	23/03/2010
SPM-TRW-RHC.0103	В	Rheda City C Track at Tramstops Details & Location of Drainage Boxes	30/06/2009
SPM-TRW-RHD.0101	В	Rheda City D Track Report	19/05/2009
SPM-TRW-DFF.0101	D	<b>Direct Fixation Track Report</b>	12/05/2010
SPM-TRW-DFF.0102	В	Direct Fixation Track Typical Section	10/02/2010
SPM-TRW-S&C.0101	В	Track Switches and Crossings Report	05/05/2009
SPM-TRW-S&C.0301	2	Track Switches & Crossings Plans (VAE Turnouts)	04/02/2010
SPM-TRW-S&C.0302	t	Track Switches & Crossings - Turnout Geometries (VAE Turnouts)	04/02/2010

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SubmissionID	Rev	Submission Title	Submission date
SPM-TRW-S&C.0304	A	132111-000 Layout for T/O "RH" 49E1 -41m- 1:3,73 CVD (Left hand Turnout Curved T/O item 31 and To item 32) 133928-000 Layout for T/O "RH" 49E1 41m- 1:3,73 CVD Items 29 and T/O "LH" 49E1 -41m- 1:3,73 SVR Items 30	25/03/2010
SPM-TRW-S&C.0305	0	Detailed Design: Switches & Crossings - Turnout Depot Layout Drawings	23/06/2010
SPM-TRW-GEN.0103	D	Transitions on Embankment Report	22/06/2012
SPM-TRW-GEN.0113	D	Transitions to Ballastless Track on Structures	22/06/2012
SPM-TRW-GEN.0114	В	Longitudinal Calculations; Expansion Joints and Rail Stressing	23/11/2009
SPM-TRW-GEN.0115	1	Wheel-Rail Interface Study Report	03/04/2009
SPM-TRW-GEN.0116	С	Wheel-Rail Interface Proposed CAF wheel profile - x.06.00323	01/07/2009
SPM-TRW-GEN.0104	В	Trackwork Specification Rails, Rail welds, and Rail joints	17/03/2010
SPM-TRW-GEN.0105 SPM-TRW-GEN.0107 SPM-TRW-GEN.0108 SPM-TRW-GEN.0109	C C C A	Trackwork Specification Concrete Basic Design Transition Rails Alignment Definition Drawing Drainage Box Details	21/09/2009 23/03/2010 23/03/2010 25/06/2009
SPM-TRW-GEN.0110	С	Transition Welds Alumino	22/07/2009
SPM-TRW-GEN.0111	A	Thermic Welds Tolerances Rheda Track - Horizontal/Vertical Set Transition rail straight 49E1	21/09/2009
SPM-TRW-GEN.0305	А	/60R2 twist 49E1 1:40 in the transition area	04/02/2010
SPM-TRW-GEN.0306	В	Overview Typical Trackforms	11/02/2010
SPM-TRW-RHS.0101	А	Rheda City Stations and Level Crossings	13/10/2009
SPM-TRW-RHS.0102	А	Rheda City SLC Typical Sections	02/06/2010
SPM-REL-OCL.0310	E	Modular OCL Construction Set	04/08/2010
SPM-REL-OCL.0320	F	OCL Layout Drawings	27/07/2010
SPM0330	В	<b>BSC Infraco EMC Matrices</b>	11/11/2010
SPM-REL-OCL.0330	В	OCL Statical Calculation	13/12/2010
SPM-REL-OCL.0340	В	OCL Cross Profiles and Longitudinal Sections	13/12/2010
SPM-TRW-S&C.0102	4	MMU- Review of ETN S&C Flangeway Study- Final Report (issue 2)	27/09/2010
SPM-TRW-GEN.0119	А	Insulation Joints Typical Section	27/09/2010

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SubmissionID	Rev	Submission Title	Submission date
SPM-REL-OCL.0260	В	Technical Specification of OCL Main Components	13/12/2010
SPM-REL-OCL.0270	В	Statical Requirements of OCL fixation	13/12/2010
SPM-TRW-GEN.0302	В	At Grade Road Crossings Strail Crossings	21/01/2011
SPM-RA-SIG.0308	В	Point Heater Controller	03/06/2010
SPM-RA-SIG.0312	В	Material & Requirement Specification - LED Signal Head Layout	02/02/2011
SPM-TRW-GEN.0304	В	System Wide - Generic Track Type Transitions Ballast to Rheda City/Direct Fixation Track	02/02/2011
SPM-RA-COM.0201	A	Optical Fibre Network Requirements Preliminary Design	27/11/2008
SPM-RA-COM.0202	А	Tramstop Cabinet UPS	27/11/2008
SPM-RA-SIG.0202	А	TPDS - Transmission System IMU 100	27/11/2008
SPM-RA-SIG.0203	А	TPDS - Interlocking SICAS S7	27/11/2008
SPM-REL-OCL.0350	Е	OCL Sectioning Diagram	21/02/2011
SPM-REL-TPS.0395	В	REL - Access Concept for REL Rooms and Equipment	09/03/2011
SPM-RA-COM.0302	С	Tramstop Cabinet Design (including Tramstop UPS)	07/03/2011
SPM-RA-SIG.0302	Е	TPDS - Transmission System IMU 100	07/03/2011
SPM-RA-SIG.0303	D	TPDS - Interlocking SICAS S7	07/03/2011
SPM-RA-SIG.0306	С	Material & Requirement Specification - Point Controller Cabinet - Layout and Foundation	19/07/2011
SPM-TRW-GEN.0121	В	Basic Design: Special Trackforms on Floating Slab	24/02/2012
SPM-TRW-GEN.0307	D	Basic Design: Rheda City Floating Slab Track (drawing)	22/02/2012
SPM-TRW-GEN.0120	С	Basic Design: Reinforced Rheda City C&D Track	26/01/2012
SPM-TRW-GEN.0117	Е	Basic Design Floating Slab	23/01/2012
SPM-TRW-GEN.0118	1	Trackform Overview	19/01/2012
SPM0270	В	Immunisation Calculations Submission to ISRP	01/07/2010
SPM-TRW-S1C.0303	Е	Track layout km 121.300 - km 130.000 St Andrews Square - Princes St	27/03/2012
SPM0320	D	Informative 72 Comment 11244	14/03/2012
SPM-TRW-RHD.0102	D	Rheda City D Track Typical Sections	20/04/2012

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## 4 DESIGN TO BE COMPLETED

#### 4.1 LEITH WALK SHALLOW STRUCTURES

Whilst the standard Rheda trackform is fully designed for Leith Walk, it is understood that there may be shallow structures beneath the designed track alignment, which would require special designs for either the track improvement layer or the trackform. The exact location of these obstructions, including their levels has not been established. Generic designs were provided for shallow obstructions, but these have not been developed for the specific applications at these locations.

#### 4.2 TOWER PLACE AND VICTORIA DOCK BRIDGES

Both dock bridges (Tower Place and Victoria Dock) were subject to special shallow onstreet trackform solutions, with transitional trackforms between the Rheda City trackform adjacent. These have not been fully developed.

#### 4.3 PICARDY PLACE

Whilst the standard Rheda trackform, OLE and comms/SCADA designs were fully completed for Picardy Place, the redesign of Picardy Place was carried out, under instruction from CEC, only as far as submission of a package for Prior Approval. It is understood that CEC does not intend to respond to Infraco and Infraco is not to develop the design further or to submit for technical approval, including Roads Authority Approval.

#### 4.4 FOOT OF THE WALK BUILDING FIXINGS

CEC Planning has previously requested an alteration to the OLE design at Foot of the Walk, namely a change from poles to building fixings. The request was never the subject of a formal change under the Infraco Contract. Accordingly, a design for this proposed change has not been developed.

#### 4.5 VICOS SYSTEM AT DEPOT

Vicos OC 101 - the detailed views to control & monitor the interlockings Newhaven and Ocean terminal will be not implemented in the Vicos system. **Justification:** implementation of field elements which are not installed will create failure and alarm messages which will lead to unacceptable performance restrictions.

Vicos OC 100 (TPDS system (ATT)) - the track section behind York place will be not shown on the Vicos screens. The designed field elements (IMU antennas/loops, points, signals, etc.) will be not implemented in the SW. **Justification**: implementation field elements which are not installed will create failure and alarm messages which will lead to unacceptable performance restrictions.

#### 4.6 IRON FREE ZONES AT OCEAN TERMINAL AND NEWHAVEN

Detailed positioning of iron free zones for the track circuits at Ocean terminal and Newhaven, based on drawings ULE90130-SIG-1A-00001 to 00004 and contractor methodology (eg fibre concrete or carbon fibre reinforcement bars etc).

#### 4.7 EARTHING & BONDING OF STREET FURNITURE

Report Ref ETN(SPM\$TEE&ADB#051815 entitled Earthing and Bonding of Street Furniture excluded any existing street furniture in Secondary Phase 1a.

#### 4.8 JANE STREET RADIO STATION

Detailed design of Jane Street radio base station on the roof of the BT building once CEC has secured the lease, which will involve a detailed site survey.

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### 5 DESIGN REQUIRED TO EXTEND THE TRUNCATED ROUTE

#### 5.1 CHANGE

During the period before the Mediation of March 2011 and since the Mediation, a number of changes were either formalised or going through the process of formalisation. At various stages, a change may have been given one of the following identification references:

#### Notices

11011005	
INTC	Infraco Notice of tie Change (Pre-Mediation)
tNC	tie Notice of Change (Pre-Mediation)
PMC	Post Mediation Change (Post-Mediation)

#### Instruction

tCO tie Change Order (Pre and Post-Mediation)

Design associated with the following changes ceased to be progressed following the issue of tCO558:

Notice	Instruction	Subject
	tCO 506	York Place
	tCO 548	Dock Bridges
INtC 0485		Turnback Strategy
PMC 0098		OLE post finials
		PID integration outside LoD
INtC 157		Jane Street radio base station
PMC0097		Floating slab
INtC0503		Trackside signage
Scope shift		Combined OLE and street lighting
		OLE pole to building fixing at Foot of the Walk
INTC 588		Trackform for shallow depth structures

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#### CONSENTS AND INFORMATIVE COMMENTS 6

#### 6.1 CONENTS AND INFORMATIVES

At the time of issue of tCO 588, the following Informative Comments had not been satisfied. In anticipation of tCO 588, CEC had agreed that Infraco should simply explain by letter how the Comment would be dealt with, but not carry out the intended design necessary to satisfy the Comment.

Informative 9 Comment 11299 Informative 26 Comment 11300

Controlled Crossing at Newhaven Ocean Terminal Junctions at each end

On the above basis, CEC confirmed these were closed under their letter dated 4 April 2012 Ref SS1.40/RG.

Notwithstanding the above referenced letter, design remains to be completed in respect of these Informatives.

#### 6.2 ICP REQUESTS FOR INFORMATION / REQUESTS FOR ICP OPINION

**RFI No** Details When response required 3 Confirmation requested that Safety Verification will Before appointed include positive verification of the acceptability of the Tramco and standards used, or proposed for use, on the project. Infraco start validation of outline design 22 Follows on from RFO 021. Asks for confirmation that Response required the DKE of the tram has been formally checked after construction, against the "as built" position at clearance issue but before tram locations. Asks for safety assurance where clearances operation during are no better than forecast. commissioning

The following ICP requests for Information were open at the date of tCO 558:

There were no open RFOs at the date of tCO 558.

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## 7 GLOSSARY OF TERMS

The following table contains the definitions of those terms, abbreviations and acronyms that are used in this document. These are supplied only for the ease of reading this document.

Abbreviations / Acronym	Definition
CEC	City of Edinburgh Council
CFE	Chamber Filling Element
ESU	Elastic rail-flange sheathing (Translation Elastische SchienenfussUmmantellung) or rubber boot
HRA	Hot Rolled Asphalt
INtC	Infraco Notice of tie Change
MUDFA	Multi Utilities Diversion Framework Agreement
NEW	Newhaven tramstop
OLE	Overhead Line Equipment
PMC	Post Mediation Change
SCADA	Supervisory, Control and Data Acquisition (System)
SDS	System Design Services (Provider)
SMA	Split (or Stone) Mastic Asphalt
tCO	Tie Change Order (Client instruction)
TIL	Track Improvement Layer
tNC	Tie Notice of Change
YPL	York Place temporary tramstop

Table 1.1, Abbreviations and Acronyms List



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Attachment II. IDC Certificate Status

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BILFINGER BERGER SIEMENS & CAF BBS IDC CERTIFICATE REGISTER		1st IDC	2nd IDC	3rd IDC	4th IDC	5th IDC	victing	rainage	epoi	eotechnica	unscations andscapting	treet Lighti	ramstops	oads/Highways Bridges	Retaini Wal	ow Völtage (LV) Power	raffic Light Control	wheek	Electrificatio	ignal -	and work (Clan	igh Voltage (HV) Power	Workshop Equipment	APPENDIX MULTIPLE	faintenance Rolling Stock nd Tram Related Equipment	14(be)	Manage	ivil Engineeri Manage	DR/ DC Process Manager
1B OLE	ID C 01-CER-145	08/12/2010					-		5 W	0	n =	(n)	2 =	æ.			E	2	6	5 <i>0</i> 1		E I		1	2 7		2.01		
1B Ducting	ID C 01-CER-146		24/01/2012																				10.000						
1B Drainage	IDC 01-CER-147		24/01/2012																				1						
1B Landscaping	IDC 01-CER-148	20/07/2010	100																				100000						
1B StreetLighting	IDC-01-CER-149	1		14/07/2011																			1						
1B Track	IDC-01-CER-150	03/03/2011																					1						
1B Roads	IDC-01-CER-151	1	05/05/2011																				1		-			_	
1B Leith Walk Railway Bridge - Trackform	IDC 01-CER-152	12/11/2010																					10000000						
1B Leith Walk Railway Bridge - E&B Design	IDC-01-CER-153															1							1000						
1A OLE	IDC 01-CER-161	08/12/2010																											
1A Ducting	IDC-01-CER-162		14/01/2012																						_				
1A Drainage	IDC-01-CER-163			24/01/2012																			dimension of the						
1A Roads	IDC-01-CER-164		14/07/2011																				1						
1A Environmental / Landscape	IDC-01-CER-165	27/07/2010																											
1A Street Lighting	IDC-01-CER-166	1		14/07/2011		-																							
1A Geotechnical	IDC-01-CER-167	27/07/2010		-																									
1A Track	IDC-01-CER-168																						10000						
1A Lindsay Road RTW	ID C 01-CER-169	1	03/03/2011																										
1A Tower Place Bridge	IDC 01-CER-170			23/08/2011														-										-	
1A Tower Place Bridge - Trackform	IDC 01-CER-171																			2									
1A Tower Place Bridge - OLE Interface	IDC-01-CER-172		17/03/2011																							_			
1A Tower Place Bridge - E&B Design	IDC-01-CER-173	1	17/03/2011																				1000		No.				
1A Victoria Dock Entrance Bridge	IDC-01-CER-174	1	17/03/2011																										
1A Victoria Dock Entrance Bridge - Trackform	IDC-01-CER-175																												
1A Victoria Dock Entrance Bridge - E&B Design	IDC 01-CER-176		17/03/2011															_											
1A Substations - Leith Sands	IDC-01-CER-177	14/12/2010										_						_		-	_								
1A Newhaven Tramstop	IDC-01-CER-178	1	25/08/2011																					_					_
1A Ocean Terminal Tramstop	IDC-01-CER-179	1	25/08/2011																									-	
1A Port of Leith Drive Tramstop	IDC-01-CER-180	E	25/08/2011																										
1A Bernard Street Tramstop	IDC-01-CER-181	Î.	25/08/2011																							_			
1B Substations - Leith Walk	IDC-01-CER-182	14/12/2010		<b>—</b> ——								-			_									_					_
1B Foot of the Walk Tram Stop	IDC-01-CER-183		25/08/2011												-									_			-	-	
1B Balfour Street Tram Stop	IDC-01-CER-184		25/08/2011												-												-	-	