

**THIS IS SCHEDULE 1 REFERRED TO IN THE FOREGOING AGREEMENT BETWEEN
TIE AND THE MUDFA CONTRACTOR**

SCHEDULE 1

SCOPE OF WORKS AND SERVICES

1. GENERAL

1.1 Unless otherwise expressly agreed with **tie** in accordance with this Agreement, the MUDFA Contractor shall:

1.1.1 perform and complete all Pre-Construction Services during the Pre-Construction Phase;

1.1.2 perform and complete all Construction Services during the Construction Phase;

1.1.3 carry out and complete all Construction Works during the Construction Phase;

1.1.4 perform all Risk Services throughout the Pre-Construction Phase and the Construction Phase, as appropriate;

1.1.5 perform all Stakeholder Services throughout the Pre-Construction Phase and the Construction Phase, as appropriate; and

1.1.6 provide all accommodation and vehicles in accordance with Part 7 of this Schedule 1 (*Scope of Works and Services*).

2. PRE-CONSTRUCTION SERVICES

General

2.1 In the absence of a specified date for completion of any Pre-Construction Deliverable, any such Pre-Construction Deliverable shall be submitted to **tie** for approval by **tie** in accordance with the Review Procedure. The MUDFA Contractor shall ensure that the Pre-Construction Deliverables are finalised, in accordance with the Review Procedure, no later than two weeks before the end of the Pre-Construction Phase.

Work Breakdown Structure

2.2 The MUDFA Contractor shall develop the Work Breakdown Structure (WBS) into a comprehensive and detailed document suitable for executing and managing the dates required for the release of design information, mobilisation, construction works, testing and commissioning and completion in respect of the MUDFA Works. The WBS shall be completed by the MUDFA Contractor and finalised in accordance with the Review Procedure within four weeks of the Effective Date. The WBS shall be segregated into management activities, mobilisation activities, Work Sectors, Work Sections, Work Sites within Work Sections, type of construction, type of installation and Utilities Works. The objective of the WBS is to assist in the monitoring of progress of the MUDFA Works, to enable the release of design information, and to ensure that the Pre-Construction Services, Pre-Construction Deliverables, Construction Services and Construction Works are fully integrated with the construction and commissioning activities.

Pre-Construction Programme

2.3 The MUDFA Contractor shall develop the Pre-Construction Programme into a detailed and comprehensive programme, for approval by **tie** in accordance with the Review Procedure. The MUDFA Contractor shall ensure that the Pre-Construction Programme is finalised within three weeks of the Effective Date. The Pre-Construction Programme shall be developed by the MUDFA Contractor to ensure that:

2.3.1 the Pre-Construction Deliverables are defined and identified;

2.3.2 the Review Procedure is identified for each Deliverable;

2.3.3 the Pre-Construction Programme shall show, and shall assist in controlling progress in completing the Pre-Construction Deliverables;

2.3.4 any relevant constraints, procedures, documentation and approvals specified in Schedule 2 (*Technical Requirements*) required during the Pre-Construction Phase are defined and identified;

2.3.5 any design approvals and notices required from the Utilities during the Pre-Construction Phase are defined and identified;

- 2.3.6 any works to be undertaken by any Sub-Contractor during the Pre-Construction Phase are defined and identified;
 - 2.3.7 any long lead time works which require to be initiated during the Pre-Construction Phase are identified and defined;
 - 2.3.8 the requirements and approval dates for traffic management and TTROs, including any third party's requirements for notices and road closures, are clearly identified and defined;
 - 2.3.9 links and relationships between all activities and events are clearly demonstrated and justification of the logic that underpins them is detailed;
 - 2.3.10 the SDS Provider's scheme design, detailed designs and construction production information are identified and defined in terms of content and timing; and
 - 2.3.11 inputs and approvals required from **tie**, the Utilities, and any Approval Bodies are clearly identified.
- 2.4 The MUDFA Contractor shall develop the Pre-Construction Programme to meet the following minimum requirements:
- 2.4.1 the Pre-Construction Programme shall be in Primavera P3e for detailed implementation;
 - 2.4.2 the Pre-Construction Programme shall follow the WBS;
 - 2.4.3 the Pre-Construction Programme shall be cost and resource (named) loaded down to activities;
 - 2.4.4 all resource reporting and time sheet and cost allocation shall be coded to suit the activities contained within the WBS;
 - 2.4.5 records of time spent against activities shall be completed weekly against planned works as generated by Primavera P3e. Any deviations shall be reported in a weekly progress report and include notification of remedial actions to be authorised by **tie**;

- 2.4.6 weekly records shall be collated by 09:00hrs on the Tuesday following the week to which the records relate;
 - 2.4.7 the Pre-Construction Programme shall be continuously updated and submitted at 2 weekly intervals; and
 - 2.4.8 the Pre-Construction Programme shall also take into account programming input and attendance at meetings, both as required by **tie**.
- 2.5 The MUDFA Contractor shall take into account the availability of alternative materials or components when developing the Pre-Construction Programme. The MUDFA Contractor shall identify, in consultation with the Utilities, those materials and components which require advance ordering and processing. Any advanced orders which are approved shall be identified and defined in the Pre-Construction Programme.
- 2.6 The MUDFA Contractor shall update the Pre-Construction Programme every two weeks to show its progress in completing the Pre-Construction Deliverables. The updated Pre-Construction Programme and a progress report shall be submitted by the MUDFA Contractor to **tie** no later than 3 Business Days before each two weekly progress meeting. Each progress report shall include:
- 2.6.1 4 week forecast of activities;
 - 2.6.2 8 week critical impact notice (any internal or external factor which may affect programme delivery);
 - 2.6.3 the activities begun and completed since the previous report and upon what dates;
 - 2.6.4 the expected remaining duration of all activities begun but not completed;
 - 2.6.5 any changes or additional activities with expected durations, methods, and resource requirements and sequence assumptions;
 - 2.6.6 programme comparison between actual vs planned;
 - 2.6.7 outstanding information schedule;
 - 2.6.8 updates to the Change Control Register;

2.6.9 schedule of instructions; and

2.6.10 cost report.

Construction Programme

2.7 The MUDFA Contractor shall develop the Construction Programme into a detailed and comprehensive programme, for approval by **tie** in accordance with the Review Procedure. The MUDFA Contractor shall ensure that the Construction Programme is finalised four weeks before the end of the Pre-Construction Phase. The Construction Programme shall be developed by the MUDFA Contractor to ensure that:

2.7.1 the commencement and completion constraints for each Work Site, Work Section and Work Sector are accounted for;

2.7.2 the constraints, procedures, documentation and approvals specified in Schedule 2 (*Technical Requirements*) are defined and identified;

2.7.3 the construction execution strategy for the MUDFA Works has been carefully developed and embedded within the Construction Programme;

2.7.4 seasonal constraints which affect working procedures are accounted for;

2.7.5 the design approvals and notices required from the Utilities are identified;

2.7.6 all works to be undertaken by any Sub-Contractor are defined and identified;

2.7.7 all Utilities Works, including attendance, witnessing, inspections, testing and commissioning, are defined and identified;

2.7.8 sufficient detail is provided to demonstrate integration of the Pre-Construction Phase activities with the proposed dates of possession and completion of construction for each Work Sector;

2.7.9 other projects in the affected areas are fully integrated into the MUDFA Works. For example, any street works to be carried out by CEC, and works by any third parties (including landowners and developers);

2.7.10 long lead time works are identified and defined;

- 2.7.11 the extent of any Advance Works which may be required is identified and defined;
 - 2.7.12 the extent of any Enabling Works which may be required is identified and defined;
 - 2.7.13 the requirements and approval dates for traffic management and TTROs, including any third party's requirements for notices and road closures, are clearly identified and defined;
 - 2.7.14 the commencement, completion dates and relationships of proposed stages/Work Sites within each Work Section are clearly identified and defined;
 - 2.7.15 links and relationships between all activities and events are clearly demonstrated and justification of the logic that underpins them is detailed;
 - 2.7.16 the SDS Provider's scheme design, detailed designs and construction production information are identified and defined in terms of content and timing;
 - 2.7.17 inputs and approvals required from tie, the Utilities, and any Approval Bodies are clearly identified; and
 - 2.7.18 the interface and relationship with the commencement of Infracore Work Sections are clearly defined and identified.
- 2.8 The MUDFA Contractor shall develop the Construction Programme to meet the following minimum requirements:
- 2.8.1 the Construction Programme shall be in Primavera P3e for detailed implementation;
 - 2.8.2 the Construction Programme shall follow the WBS;
 - 2.8.3 the Construction Programme shall be cost and resource (named) loaded down to activities;
 - 2.8.4 all resource reporting and time sheet and cost allocation shall be coded to suit the activities contained within the WBS;

- 2.8.5 records of time spent against activities shall be completed weekly against planned works as generated by Primavera P3e. Any deviations shall be reported in a weekly progress report and include notification of remedial actions to be authorised by **tie**;
 - 2.8.6 weekly records shall be collated by 09:00hrs on the Tuesday following the week to which the records relate;
 - 2.8.7 the Construction Programme shall also take into account programming input and attendance at meetings, both as required by **tie**; and
 - 2.8.8 the Construction Programme shall also contain cost/spend tables and cumulative curves to match the achievement of major deliverables and activities within the WBS;
- 2.9 The MUDFA Contractor shall take into account the availability of alternative materials or components when developing the Construction Programme. The MUDFA Contractor shall identify, in consultation with the Utilities, those materials and components which require advance ordering and processing. Any advanced orders which are approved shall be identified and defined in the Pre-Construction and Construction Programme (as appropriate).

Interaction with the SDS Provider

- 2.10 The SDS Provider and the MUDFA Contractor shall work together, pro-actively, to achieve economically efficient design and buildability with regard to the MUDFA Works.
- 2.11 The MUDFA Contractor shall review the design work carried out by the SDS Provider, and the MUDFA Contractor shall produce an Initial Buildability Report which shall be finalised by the MUDFA Contractor in accordance with the Review Procedure within four weeks of the Effective Date. The Initial Buildability Report shall include proposals from the MUDFA Contractor in relation to buildability, Temporary Works, access to premises or properties and phasing of all Work Sectors and Work Sections and the staging of Work Sites within the Work Sections. The MUDFA Contractor shall propose cost and time-saving initiatives and explore mitigation measures which are reasonably predicted to be required to protect the interests any of third parties affected by the MUDFA Works.

- 2.12 The MUDFA Contractor shall liaise with **tie**, the SDS Provider, the Utilities and other affected third parties throughout the Pre-Construction Phase, to optimise progress and ensure that all issues relevant to the MUDFA Works are addressed timeously. This liaison shall include working together to achieve the objectives expressed in Clause 40 (*Value Engineering Incentive*).
- 2.13 The MUDFA Contractor shall support the SDS Provider in relation to the resolution of the policies and agreements for traffic management and the submission of the TTROs which will be required in respect of the MUDFA Works. The SDS Provider shall consult with and submit the TTRO requirements and schedules, to CEC in its capacity as roads authority. The MUDFA Contractor shall support this process by preparing phasing plans, Work Site plans, Temporary Works method statements, access routes for emergency vehicles, assumptions registers, issues logs and any other means to ensure prompt resolution of issues which could affect the progress and economic execution of the MUDFA Works. This responsibility shall also include attendance by the MUDFA Contractor (as required by **tie**) at meetings in relation to the TTRO requirements and the MUDFA Contractor being involved (as required by **tie**) in any representations to the Council-led RAUC Committee, which convenes quarterly.
- 2.14 The MUDFA Contractor shall produce a method statement entitled "Procedures for dealing with Unidentified Apparatus or Unrecorded Artificial Obstructions", which shall be finalised by the MUDFA Contractor in accordance with the Review Procedure within 4 weeks of the Effective Date. This method statement shall contain procedures which shall confirm the processes for dealing with unforeseeable events or circumstances, the discovery of unidentified apparatus or unrecorded artificial obstructions. The MUDFA Contractor shall consult with the SDS Provider prior to issue of the method statement. The final version of the method statement and procedures shall be agreed with the relevant key third parties, Approval Bodies, the Utilities and the emergency services. The method statement shall be updated and a final version produced which shall be finalised by the MUDFA Contractor in accordance with the Review Procedure no later than four weeks before the end of the Pre-Construction Phase.
- 2.15 The MUDFA Contractor shall keep the Pre-Construction Programme and Construction Programme under continuous review as the SDS Provider's designs evolve, so as to ensure that the SDS Provider's design release dates meet the MUDFA

Contractor's requirements for mobilisation and construction. The MUDFA Contractor shall propose mitigation measures if the SDS Provider's design release dates are not met. Mitigation measures shall include alternative execution strategies and proposals to re-deploy staff or operatives to minimise or avoid any cost implications.

- 2.16 The MUDFA Contractor shall similarly keep the scope of the MUDFA Works, in particular the Construction Works, and the estimated costs under review (in conjunction with the SDS Provider and **tie**), with regard to potential savings that may be identified before the design being carried out by the SDS Provider is completed.
- 2.17 The MUDFA Contractor shall manage any specialist contractor design elements carried out by any Utilities Specialist Contractor or by another third party which are required to progress the MUDFA Works (e.g. proprietary sewer rehabilitation design), and shall co-ordinate the same within the overall design process. The SDS Provider shall review the specialist contractor design elements and ensure that there are no conflicts with the SDS Provider's designs.
- 2.18 The MUDFA Contractor shall support and provide input into the "Waste Management Plan", which shall be prepared by the SDS Provider.
- 2.19 The MUDFA Contractor shall support and provide input into the "Construction Site Drainage Plan", which shall be prepared by the SDS Provider.
- 2.20 The MUDFA Contractor shall support and provide input into the "Landscape and Habitat Management Plan", which shall be prepared by the SDS Provider.
- 2.21 The MUDFA Contractor shall support and provide input into the "Archaeological and Heritage Mitigation Plan", which shall be prepared by the SDS Provider.
- 2.22 The MUDFA Contractor shall support and provide input into the "Mitigation Measures for Working around Protected Species", which shall be developed by the SDS Provider.
- 2.23 The MUDFA Contractor shall support and provide input to the strategy for controlling "Invasive and Alien Species", which shall be prepared by the SDS Provider and the MUDFA Contractor shall demonstrate how the requirements set out in Schedule 2 (*Technical Requirements*) shall be complied with.

- 2.24 The MUDFA Contractor shall support and provide input to the “Condition and Defects Survey”, which shall be prepared by the SDS Provider.

Management Systems

- 2.25 No later than four weeks before the end of the Pre-Construction Phase, the MUDFA Contractor shall confirm that the following management systems have been implemented by the MUDFA Contractor in accordance with Schedule 2 (*Technical Requirements*):

- 2.25.1 Quality Management System;
- 2.25.2 Safety Management System; and
- 2.25.3 Environmental Management System.

Traffic Management and TTROs

- 2.26 The MUDFA Contractor shall provide all necessary support to **tie** and SDS Provider to ensure that TTROs are obtained. The services and support which shall be provided by the MUDFA Contractor shall include the following:

- 2.26.1 the MUDFA Contractor shall work with the SDS Provider and **tie** to further refine the definition and staging of the MUDFA Works and the MUDFA Contractor shall produce a "Traffic Management and Work Site Staging Plan" which shall be submitted by the MUDFA Contractor in accordance with the Review Procedure within four weeks of the Effective Date. This plan shall be updated by the MUDFA Contractor every two weeks for review at design meetings and every four weeks at stakeholder and third party meetings. A final version of the Traffic Management and Work Site Staging Plan shall be finalised by the MUDFA Contractor in accordance with the Review Procedure no later than two weeks before the end of the Pre-Construction Phase. The Traffic Management and Work Site Staging Plan shall include a detailed definition of the Work Sectors, Work Sections and Work Sites within the Work Sections. The Traffic Management and Work Site Staging Plan shall also include all necessary drawings, diagrams and supporting information to show the mobilisation, erection and dismantling of Temporary Works, traffic and pedestrian management during any pre-

diversion works and the MUDFA Works, access to properties, details of fencing and security measures.

2.26.2 The MUDFA Contractor shall develop a set of requirements in relation to TTROs and traffic management which shall be based on information supplied to the MUDFA Contractor by the SDS Provider ("TTRO Obligations and Traffic Management Plan"). The MUDFA Contractor shall prepare and develop project-specific procedures for complying with the TTRO Obligations and Traffic Management Plan, and these procedures shall be submitted four weeks before the end of the Pre-Construction Phase in accordance with the Review Procedure. By appropriate induction, the MUDFA Contractor shall ensure all site-based personnel, management staff, operatives and visitors are fully aware of and understand the procedures contained within this document. The designated project or site manager appointed by the MUDFA Contractor in relation to each Work Section shall be accountable for implementation and compliance with these requirements and procedures. The MUDFA Contractor shall ensure that the overriding considerations expressed in these procedures and requirements shall be the safety of road users, minimising disruption caused by the MUDFA Works, and ensuring that traffic and pedestrian disruption is kept to a minimum. This shall include taking such measures as CEC, in its capacity as roads authority, may reasonably require.

2.26.3 The MUDFA Contractor shall ensure that reasonable access to premises is maintained at all times. The proposals and procedures in relation to maintaining such access shall be contained within the TTRO Obligations and Traffic Management Procedures Plan.

Construction Advice

2.27 Following the preparation of the Initial Buildability Report, the MUDFA Contractor shall continue to provide advice to the SDS Provider and such advice shall include the practical implications relative to the buildability of the design. The MUDFA Contractor shall also carry out a detailed review of the proposed drawings and specifications. In particular, the MUDFA Contractor shall confirm how the extent of necessary works can be minimised, diversions avoided, works re-planned, unidentified apparatus dealt with and abandoned apparatus treated.

- 2.28 The MUDFA Contractor may propose suitable alternative materials and components for use in relation to the MUDFA Works, subject to the approval of the SDS Provider and the relevant Utilities and **tie** in accordance with paragraphs 2.5 and 2.9.
- 2.29 The MUDFA Contractor shall propose and agree with **tie** the construction methods which shall be utilised in respect of the MUDFA Works. The MUDFA Contractor shall also advise **tie** on the time and cost implications of alternative solutions, and shall initiate the requirements for Temporary Works, and the programme for approvals for such Temporary Works and their execution. The proposals shall be presented and defined by the MUDFA Contractor in the Final Buildability Report.
- 2.30 The MUDFA Contractor shall advise **tie** on the provision and layout of the main site office and local Work Sector /Work Section facilities and services to be provided or secured by the MUDFA Contractor. **tie's** requirements for office accommodation at the main site office are expressed in Part 7 of this Schedule 1 (*Scope of Works and Services*). The proposals for facilities and services shall be presented and defined by the MUDFA Contractor in the Final Buildability Report.
- 2.31 The MUDFA Contractor shall advise **tie** on the potential impact of the MUDFA Works upon neighbouring occupiers and users of nearby highways, and the MUDFA Contractor shall plan the execution of the MUDFA Works in such a way as to minimise disruption and prevent nuisance.
- 2.32 No later than six weeks before the end of the Pre-Construction Phase, the MUDFA Contractor shall prepare a plan which shall show the MUDFA Contractor's proposals for temporary works, security and fencing arrangements ("Temporary Works, Security and Fencing Arrangements Plan"). The MUDFA Contractor shall produce suitable registers, schedules and drawings no later than four weeks before the end of the Pre-Construction Phase to show how the Temporary Works, Security, and Fencing Arrangements Plan will work in practice.
- 2.33 No later than four weeks before the end of the Pre-Construction Phase, the MUDFA Contractor shall provide a Final Buildability Report for approval in accordance with the Review Procedure, which shall address all of the requirements identified in paragraphs 2.27 to 2.32.

Pricing and Cost Control

- 2.34 During the Pre-Construction Phase, the MUDFA Contractor shall review the developed designs prepared by the SDS Provider, and following such review, the MUDFA Contractor shall update the Tender Total and produce a draft Anticipated Final Account no later than 4 weeks after the Effective Date. This draft Anticipated Final Account shall be updated every two weeks by the MUDFA Contractor and issued by the MUDFA Contractor to **tie** no later than two Business Days before each cost review meeting. The final version of the Anticipated Final Account shall be issued by the MUDFA Contractor to **tie**, no later than ten Business Days before the end of the Pre-Construction Phase.
- 2.35 The Anticipated Final Account shall comply with the approved WBS and the structure of the Construction Programme.
- 2.36 The MUDFA Contractor shall ensure that that the Anticipated Final Account is compiled using appropriate rates and prices from the Bills of Quantities. Where the MUDFA Contractor considers that an item of work varies materially from the work described in the Bills of Quantities, the MUDFA Contractor shall provide details, including estimates of labour, plant and materials from the Bills of Quantities for the proposed item of work, for approval by **tie**.
- 2.37 As required by **tie**, the MUDFA Contractor shall carry out a pro-active role in cost benchmarking, risk management and value engineering processes. This shall involve the production by the MUDFA Contractor of "Benchmarking, Risk Management and Value Engineering Estimates and Reports". These Reports and advice shall be provided by the MUDFA Contractor from time to time as required.
- 2.38 The MUDFA Contractor shall update and provide all necessary details for the "Construction Stage Cost Reporting System" recommended at tender stages for **tie**'s approval. The requirements are defined in paragraph 3.2.

Access Permits and Permits to Work

- 2.39 The MUDFA Contractor shall develop procedures, "Access Control Permit Procedures", which shall demonstrate how the MUDFA Contractor shall comply with the requirements for obtaining Access Permits in accordance with Schedule 2 (*Technical Requirements*).

- 2.40 The MUDFA Contractor shall develop procedures, "Permits to Work Procedures", which shall demonstrate how the MUDFA Contractor shall comply with the requirements for obtaining Permits to Work in accordance with Schedule 2 (*Technical Requirements*).

Interaction with the Utilities

- 2.41 In so far as reasonably practicable, the MUDFA Contractor shall manage arrangements with the Utilities in respect of the Utilities' involvement in the MUDFA Works (in whatever capacity) and in respect of any Utilities Works. This shall include:
- 2.41.1 the management of any sub-contract arrangements and materials supplies, if required in the context of the MUDFA Contractor appointing Utility Specialist Contractors;
 - 2.41.2 management of the Utilities in carrying out the Utilities Works;
 - 2.41.3 establishing specific requirements and procedures for each Utility including: incident reporting and escalation, Access Permits, identification of unidentified Apparatus, handover (both ways), working on the same Work Site at the same time, health & safety issues, compliance with the CDM Regulations (which shall include the MUDFA Contractor retaining its role as the Principal Contractor in respect of the MUDFA Works and the Utilities Works unless expressly instructed to the contrary by **tie**), notifications to customers, inspections and access to the works by the Utilities;
 - 2.41.4 agreement of the programme(s) where the Utility is undertaking any Utilities Works and integrating these programmes into the Construction Programme;
 - 2.41.5 providing support to **tie** and the SDS Provider to obtain design approvals and agreements with the Utilities;
 - 2.41.6 attendance at any "Utility Group meetings"; and
 - 2.41.7 integration of communications with the Utilities, including reporting, resolution of queries and provision of any outstanding information etc.

Health and Safety

- 2.42 During the Pre-Construction Phase, the MUDFA Contractor shall develop and update the Pre-Construction Health and Safety Plan as the design of the utilities diversions is finalised, to provide the information relating to the significant hazards which the MUDFA Contractor shall be required to address in the Construction Health & Safety Plan which is to be prepared by the MUDFA Contractor.
- 2.43 The Health and Safety File shall be issued by the Planning Supervisor as a discrete deliverable at the end of the MUDFA contract. Information for inclusion within the Health and Safety File will however be provided by the SDS Provider and the MUDFA Contractor as the contract progresses. The information shall be provided to the timescales identified below:
- 2.43.1 On issue of the Handback Certificate – hand annotated information;
- 2.43.2 Within six weeks of the issue of the Handback Certificate – final issue of the information in it's fully drafted and collated form.
- 2.43.3 The information shall be prepared in a format such that a discrete package of information can be issued:
- 2.43.3.1 To each utility, identifying the scope of works that relates to their plant and equipment;
- 2.43.3.2 To each third party and tie, identifying the full scope of works that relates to the plant and equipment from all the utilities.
- 2.43.4 The information shall be issued to tie in the following formats:
- 2.43.4.1 1 paper copy;
- 2.43.4.2 1 electronic copy in read only format i.e. PDF; and
- 2.43.4.3 1 electronic copy in original format to enable updating e.g. word, excel and AutoCAD.

Method Statements

- 2.44 The MUDFA Contractor shall develop procedures, "Method Statement Procedures", which shall demonstrate how the MUDFA Contractor shall comply with the requirements for the development of method statements in accordance with Schedule 2 (*Technical Requirements*). The development of the "Method Statement Procedures" shall be completed by the MUDFA Contractor and finalised in accordance with the Review Procedure.

Communications, Meetings and Progress Reporting

- 2.45 The MUDFA Contractor shall produce and implement a "Communications Plan" which shall be in accordance with the requirements of paragraph 2.49 and which shall be finalised by the MUDFA Contractor in accordance with the Review Procedure within four weeks of the Effective Date. The Communications Plan shall ensure that all processes, activities and issues are being managed and satisfactorily resolved. The MUDFA Contractor shall liaise with the relevant parties to ensure that the MUDFA Contractor is copied into all relevant communications in order to ensure that any relevant construction-related issues, such as Temporary Works and practical constraints, are identified and addressed.
- 2.46 During the Pre-Construction Phase, the MUDFA Contractor shall work with **tie** to develop the meetings schedules and requirements for progress reporting during the Construction Phase. The following schedule provides an outline of the minimum requirements:

| Meeting | Frequency | Chaired by / Minutes taken |
|------------------------------------|-------------|----------------------------|
| Progress | 4 weekly | tie |
| Design and Planning | Fortnightly | SDS Provider |
| Utilities Group Meetings | 4 weekly | tie |
| Stakeholder & third party meetings | As required | tie |

| | | |
|---------------|-------------|------------------|
| Site Meetings | Weekly | MUDFA Contractor |
| Cost Review | Fortnightly | tie |

- 2.47 The MUDFA Contractor shall propose a comprehensive meetings schedule indicating those meetings which the MUDFA Contractor shall chair and those meetings which the MUDFA Contractor will attend. All meetings shall be clearly shown in the Construction Programme.
- 2.48 During the Pre-Construction Phase, progress meetings shall be held every two weeks. The purpose of these meetings will be to review progress made by all parties, and identify and agree actions required. The MUDFA Contractor shall provide reports three Business Days before each meeting. The reports will include all of the requirements detailed at paragraph 2.6.
- 2.49 The Communications Plan shall detail how the MUDFA Contractor will communicate with Sub-Contractors, **tie**, the SDS Provider, the Utilities, key stakeholders and third parties. The Communications Plan shall also include the intended processes for dealing with enquiries, particularly complaints, from all sources. The MUDFA Contractor shall refer to the requirements on the MUDFA Contractor set out in Schedule 2 (*Technical Requirements for Contractors*) and the Stakeholder Services, in order to ensure that the Communications Plan includes all necessary requirements.

Advance Construction Works

- 2.50 During the Pre-Construction Phase, the MUDFA Contractor may be requested by **tie** to carry out or procure the carrying out of enabling works and demolition works (which could include survey and protection of buildings and other structures, archaeological and site investigations, removal/re-location of street furniture, frontager accommodation works and advance signing) on Site prior to the commencement of the Construction Phase, including the management of any archaeological works and site investigations.

Enabling Works

2.51 During the Pre-Construction Phase, the MUDFA Contractor may be requested by **tie** to carry out or procure cabling or pre-diversion works on Site prior to the commencement of the Construction Phase.

Pre-Construction Deliverables

2.52 The MUDFA Contractor shall submit the following deliverables for approval by **tie** in accordance with the requirements identified in this Schedule 1 (*Scope of Works and Services*).

| Ref | Programme |
|------------|--|
| 2.2 | Work Breakdown Structure |
| 2.3 | Pre-Construction Programme |
| 2.7 | Construction Programme |
| | Interaction with SDS Programme |
| 2.11 | Initial Buildability Report |
| 2.14 | Procedures for dealing with Unidentified Apparatus or Unrecorded Artificial Obstructions |
| 2.18 | Inputs to the Waste Management Plan |
| 2.19 | Inputs to the Construction Site Drainage Plan |
| 2.20 | Inputs to the Landscape and Habitat Management Plan |
| 2.21 | Inputs to the Archaeological & Heritage Mitigation Plan |
| 2.22 | Inputs to the Method of Working around Protected Species |
| 2.23 | Inputs to the strategy for controlling Invasive and Alien Species |
| 2.24 | Inputs to Condition and Defects Survey |
| | Management Systems |
| 2.25 | Management Systems – (Quality, Safety, Environmental) |
| | Traffic Management and TTROs |
| 2.26.1 | Traffic Management and Work Site Staging Plan |
| 2.26.2 | TTRO Obligations and Traffic Management Procedures |

| | |
|------|---|
| | Construction Advice |
| 2.32 | Temporary Works, Security and Fencing Arrangements Plan |
| 2.33 | Final Buildability Report |
| | Pricing & Cost Control |
| 2.34 | Anticipated Final Account |
| 2.37 | Benchmarking, Risk Management and Value Engineering Estimates and Reports |
| 2.38 | Update and provide details for Construction Stage Cost Reporting System |
| | Access Control Permits and Permits to Work |
| 2.39 | Access Control Permit Procedures |
| 2.40 | Permits to Work Procedures |
| | Health & Safety |
| 2.42 | Construction Health & Safety Plan |
| | Method Statements |
| 2.44 | Method Statement Procedures |
| | Communications, Meetings and Progress Reporting |
| 2.45 | Communications Plan |
| | Risk |
| 5 | The relevant Deliverables identified in Part 5 of this Schedule 1 (<i>Scope of Works and Services</i>). |

3. Construction Services

Construction Programme

3.1 The MUDFA Contractor shall update the Construction Programme every four weeks to show its progress in completing the MUDFA Works. The updated Construction Programme and a progress report shall be submitted by the MUDFA Contractor to tie no later than 3 Business Days before each monthly progress meeting. Each monthly progress report shall include:

3.1.1 planned versus actual cost and a resource summary;

- 3.1.2 progress against milestones anticipated/required completion dates;
- 3.1.3 earned value report;
- 3.1.4 4 week forecast of activities;
- 3.1.5 8 week critical impact notice (any internal or external factor which may affect programme delivery);
- 3.1.6 labour histograms detailing planned, actual and forecast across all disciplines;
- 3.1.7 the activities begun and completed since the previous report and upon what dates;
- 3.1.8 the expected remaining duration of all activities begun but not completed;
- 3.1.9 additional activities with expected durations, methods, and resource requirements and sequence assumptions;
- 3.1.10 method statements for the next four weeks;
- 3.1.11 any changes to expected durations, method, resource requirements and sequence assumptions;
- 3.1.12 forecast completion dates for all MUDFA Works in each Work Section and Work Sector including any slippage or advance upon the Date for Completion;
- 3.1.13 programme comparison between actual vs planned;
- 3.1.14 summary health and safety records;
- 3.1.15 outstanding information schedule;
- 3.1.16 resource levels (man hour labour returns);
- 3.1.17 updates to the Change Control Register;
- 3.1.18 colour copies of a selection of two to five progress photographs for each Work Site within each Work Section during the month;
- 3.1.19 schedule of instructions; and

3.1.20 cost report.

Pricing and Cost Control

- 3.2 The MUDFA Contractor shall update the Anticipated Final Account every four weeks and shall provide **tie** with all necessary details and supporting documentation. The minimum requirements are defined below:
- 3.2.1 all costs to be recorded and presented in accordance with the approved WBS including OHP, Main Contractor Prelims, Work Sector Prelims, Prime Cost Sums and Provisional Sums;
 - 3.2.2 the Tender Total shall be defined for each Work Sector and Work Section;
 - 3.2.3 the Anticipated Final Account;
 - 3.2.4 the Anticipated Final Account referred to in the Works Order Confirmation Notice;
 - 3.2.5 approved **tie** Changes and MUDFA Contractor Changes;
 - 3.2.6 pending **tie** Changes and MUDFA Contractor Changes;
 - 3.2.7 Anticipated Final Account this month;
 - 3.2.8 Anticipated Final Account last month;
 - 3.2.9 variance between this month and last month;
 - 3.2.10 Application for Payment this month;
 - 3.2.11 Application for Payment last month;
 - 3.2.12 variance in Applications for Payment; and
 - 3.2.13 variance in Anticipated Final Account this month and the Anticipated Final Account agreed at the end of the Pre-Construction Phase.
- 3.3 The MUDFA Contractor shall ensure that that the Anticipated Final Account is compiled using appropriate rates and prices from the Bills of Quantities. Where the MUDFA Contractor considers that an item of work varies materially from the work described in the Bills of Quantities, the MUDFA Contractor shall provide details,

including estimates of labour, plant and materials from the original Bills of Quantities for the proposed item of work, for approval by **tie**.

- 3.4 As required by **tie**, the MUDFA Contractor shall carry out a pro-active role in cost benchmarking, risk management and value engineering processes. This shall involve the production of "Benchmarking, Risk Management and Value Engineering Estimates and Reports". These Reports shall be provided by the MUDFA Contractor from time to time as required.

Communications, Meetings and Progress Reporting

- 3.5 The MUDFA Contractor shall continue to work in accordance with the Communications Plan.

- 3.6 As a minimum, the MUDFA Contractor shall attend the following meetings during the Construction Phase:

| Meeting | Frequency | Chaired by / Minutes taken |
|-----------------------------|------------------|-----------------------------------|
| Progress | 4 weekly | tie |
| Design and Planning | Fortnightly | SDS Provider |
| Utilities Group | 4 weekly | tie |
| Stakeholder and third party | 4 weekly | tie |
| Site Meetings | 4 weekly | MUDFA Contractor |
| Cost Review | Fortnightly | tie |

- 3.7 The MUDFA Contractor shall liaise with the relevant parties to ensure that the MUDFA Contractor is copied into all relevant communications in order to ensure that any relevant construction-related issues, such as Temporary Works and practical constraints, are identified and addressed.

Interaction with the SDS Provider

- 3.8 The MUDFA Contractor shall liaise with **tie**, the SDS Provider, the Utilities and other affected third parties throughout the Construction Phase, to optimise progress and ensure that all issues relevant to the MUDFA Works are addressed timeously.

- 3.9 The MUDFA Contractor shall continue to support the SDS Provider in relation to the resolution of the policies and agreements for traffic management and the submission of the TTROs which will be required in respect of the MUDFA Works. The SDS Provider shall consult with and submit the TTRO requirements and schedules, to CEC in its capacity as roads authority. The MUDFA Contractor shall support this process by preparing phasing plans, Work Site plans, Temporary Works method statements, assumptions registers, issues logs and any other means to ensure prompt resolution of issues which could affect the progress and economic execution of the MUDFA Works. This responsibility shall also include attendance by the MUDFA Contractor (as required by **tie**) at meetings in relation to the TTRO requirements and the MUDFA Contractor being involved (as required by **tie**) in any representations to the Council-led RAUC Committee, which convenes quarterly.
- 3.10 The MUDFA Contractor shall comply with the method statement entitled "Procedures for dealing with Unidentified Apparatus or Unrecorded Artificial Obstructions".
- 3.11 The MUDFA Contractor shall keep the Construction Programme under continuous review as the SDS Provider's designs evolve, so as to ensure that the SDS Provider's design release dates meet the MUDFA Contractor's requirements for mobilisation and construction. The MUDFA Contractor shall propose mitigation measures if the SDS Provider's design release dates are not met. Mitigation measures shall include alternative execution strategies and proposals to re-deploy staff or operatives to minimise or avoid any cost implications.
- 3.12 The MUDFA Contractor shall similarly keep the scope of the MUDFA Works in particular the Construction Works and the estimated costs under review (in conjunction with the SDS Provider and **tie**), with regard to potential savings that may be identified.
- 3.13 The MUDFA Contractor shall manage any specialist contractor design elements carried out by any Utilities Specialist Contractor or by another third party which are required to progress the MUDFA Works (e.g. proprietary sewer rehabilitation design), and shall co-ordinate the same within the overall design process. The SDS Provider shall review the specialist contractor design elements and ensure that there are no conflicts with the SDS Provider's designs.

Traffic Management and TTROs

3.14 The MUDFA Contractor shall provide all necessary support to tie and SDS Provider to ensure that TTROs are obtained. The services and support which shall be provided by the MUDFA Contractor shall include the following:

3.14.1 the MUDFA Contractor shall work with the SDS Provider and tie to further refine the definition and staging of the MUDFA Works and the MUDFA Contractor shall comply with the Traffic Management and Work Site Staging Plan. This Plan shall be updated by the MUDFA Contractor every four weeks for review at design meetings and every four weeks at stakeholder and third party meetings.

3.14.2 The MUDFA Contractor shall comply with the project-specific procedures set out in the TTRO Obligations and Traffic Management Plan. By appropriate induction, the MUDFA Contractor shall ensure all site-based personnel, management staff, operatives and visitors are fully aware of and understand the procedures contained within this document. The designated project or site manager appointed by the MUDFA Contractor in relation to each Work Section shall be accountable for implementation and compliance with these requirements/procedures. The MUDFA Contractor shall ensure that the overriding considerations expressed in these procedures/requirements shall be the safety of road users, minimising disruption caused by the MUDFA Works, and ensuring that traffic and pedestrian disruption is kept to a minimum. This shall include taking such measures as tie on behalf of CEC, in its capacity as roads authority, may reasonably require.

3.14.3 The MUDFA Contractor shall ensure that reasonable access to premises is maintained at all times in accordance with the TTRO Obligations and Traffic Management Procedures.

Construction Advice

3.15 Throughout the Construction Phase, the MUDFA Contractor shall continue to provide advice to the SDS Provider and such advice shall include the practical implications relative to the buildability of the design. The MUDFA Contractor shall also carry out a detailed review of the proposed drawings and specifications. In particular, the MUDFA Contractor shall confirm how the extent of necessary works can be

minimised, diversions avoided, works re-planned, unidentified apparatus dealt with and abandoned apparatus treated.

- 3.16 The MUDFA Contractor may propose suitable alternative materials and components for use in relation to the MUDFA Works, subject to the approval of the SDS Provider and the relevant Utilities in accordance with paragraphs 2.5 and 2.9.
- 3.17 The MUDFA Contractor shall propose and agree with **tie** the construction methods which shall be utilised in respect of the MUDFA Works. The MUDFA Contractor shall also advise **tie** on the time and cost implications of alternative solutions, and shall initiate the requirements for Temporary Works, and the programme for approvals for such Temporary Works and the execution of them.
- 3.18 The MUDFA Contractor shall advise **tie** on the potential impact of the MUDFA Works upon neighbouring occupiers and users of nearby highways, and the MUDFA Contractor shall plan the execution of the MUDFA Works in such a way as to minimise disruption and prevent nuisance. The MUDFA Contractor shall continue to produce suitable registers, schedules and drawings.
- 3.19 The MUDFA Contractor shall continue to comply with the Temporary Works, Security and Fencing Arrangements Plan and the other requirements set out in the Final Buildability Report.

Interaction with the Utilities

- 3.20 In so far as reasonably practicable, the MUDFA Contractor shall manage arrangements with the Utilities in respect of the Utilities' involvement in the MUDFA Works in whatever capacity and in respect of any Utilities Works. This shall include:
 - 3.20.1 the management of any sub-contract arrangements and materials supplies, if required in the context of the MUDFA Contractor appointing Utilities Specialist Contractors;
 - 3.20.2 management of the Utilities in carrying out the Utilities Works;
 - 3.20.3 establishing specific requirements and procedures for each Utility including: incident reporting and escalation, Access Permits, identification of unidentified Apparatus, handover (both ways), working on the same Work Site at the same time, health & safety issues, compliance with the CDM

Regulations (which shall include the MUDFA Contractor retaining its role as the Principal Contractor in respect of the MUDFA Works and the Utilities Works unless expressly instructed to the contrary by **tie**), notifications to customers, inspections and access to the works by the Utilities;

3.20.4 agreement of the programme(s) where the Utility is undertaking any Utilities Works and integrating these programmes into the Construction Programme;

3.20.5 providing support to **tie** and the SDS Provider to obtain design approvals and agreements with the Utilities;

3.20.6 attendance at any Utility Group meetings; and

3.20.7 integration of communications with the Utilities, including reporting, resolution of queries and provision of any outstanding information etc.

Health and Safety

3.21 The Health and Safety File shall continue to be updated in accordance with Schedule 2 (*Technical Requirements for Contractors*).

4. Construction Works

General

4.1 The MUDFA Contactor shall supply all materials to complete the Construction Works unless otherwise stated.

Scotland Gas Network Apparatus

4.2 In respect of any works in relation to Scotland Gas Networks Apparatus which form part of the MUDFA Works, the MUDFA Contractor shall:

4.2.1 carry out and complete all civil engineering works required to complete the Scotland Gas Network Works, including, but not limited to excavation, chamber construction, pipelaying, installation of connections (including customer connections), installation of valves, pipe protection, pipe bedding, and reinstatement, in accordance with Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;

- 4.2.2 carry out all required testing, commissioning and associated certification in accordance with Schedule 3 (*Specification*), and the other relevant provisions of the Agreement;
- 4.2.3 carry out any de-commissioning works required to be carried out to Scotland Gas Networks Apparatus to be abandoned, including its removal as required, in accordance with Schedule 3 (*Specification*) and the other relevant provisions of the Agreement, including the removal of existing apparatus as required;
- 4.2.4 allow access for planned inspections by Scotland Gas Networks, after notice by Scotland Gas Networks of one Business Day and provide assistance as required; and
- 4.2.5 allow access to Scotland Gas Networks to carry out emergency repairs on Scotland Gas Networks Apparatus and provide assistance as required.

Scottish Water Apparatus

- 4.3 In respect of any works in relation to Scottish Water Apparatus which form part of the MUDFA Works, the MUDFA Contractor shall:
 - 4.3.1 carry out and complete all civil engineering works required to complete the Scottish Water Works, including, but not limited to excavation, chamber construction, pipelaying, installation of connections (including customer connections), installation of valves, pipe protection, pipe bedding, sewer rehabilitation, and reinstatement, in accordance with Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.3.2 carry out all required testing, commissioning and associated certification in accordance with Schedule 3 (*Specification*), and the other relevant provisions of the Agreement;
 - 4.3.3 carry out any de-commissioning works required to be carried out to Scottish Water Apparatus to be abandoned, including its removal as required, in accordance with Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;

- 4.3.4 allow access for planned inspections by Scottish Water, after notice by Scottish Water of one Business Day and provide assistance as required; and
- 4.3.5 allow access to Scottish Water to carry out emergency repairs on Scottish Water Apparatus and provide assistance as required.

BT Apparatus

- 4.4 In respect of any works in relation to BT Apparatus which form part of the MUDFA Works, the MUDFA Contractor shall:
 - 4.4.1 agree a programme and method statement with BT for all works to be carried out by BT;
 - 4.4.2 carry out and complete all required civil engineering works including but not limited to excavation, chamber construction, duct laying, duct bedding, duct protection, laying of warning tape, and reinstatement all in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.4.3 allow BT access to provide, lay and joint all cables necessary to complete the works being undertaken by BT, and to allow BT to carry out all necessary commissioning and testing. For the avoidance of doubt, BT shall be supplying all materials for cabling and jointing;
 - 4.4.4 allow BT access to decommission any BT Apparatus made redundant by the MUDFA Works, including the removal of existing apparatus as required;
 - 4.4.5 allow access for planned inspections by BT, after notice by BT of one Business Day; and
 - 4.4.6 allow access to BT to carry out emergency repairs on BT Apparatus.
- 4.5 The obligations on the MUDFA Contractor to allow BT access in paragraphs 4.4.3, 4.4.4, 4.4.5 and 4.4.6 shall only apply when the MUDFA Contractor is in control of the Work Sections where BT is carrying out the activities described in these paragraphs. In such circumstances, the MUDFA Contractor shall provide BT with assistance as required to carry out the work described. When the MUDFA Contractor is not in control of the Work Section, BT shall make its own arrangements.

Easynet Apparatus

- 4.6 In respect of any works in relation to Easynet Apparatus which form part of the MUDFA Works, the MUDFA Contractor shall:
- 4.6.1 carry out and complete all required civil engineering works including but not limited to excavation, chamber construction, duct laying, duct bedding, duct protection, laying of marker tape and reinstatement all in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.6.2 procure that Easynet (or a sub-contractor approved by Easynet) carries out all required cable laying in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement, for the avoidance of doubt this shall include supply of all materials required by Easynet, (or a sub-contractor approved by Easynet);
 - 4.6.3 procure that Easynet (or a sub-contractor approved by Easynet) carries out all required connections to existing Easynet Apparatus and all required connections to customers in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement for the avoidance of doubt this shall include supply of all materials required;
 - 4.6.4 procure that Easynet (or a sub-contractor approved by Easynet) carries out all required testing and commissioning in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement for the avoidance of doubt this shall include supply of all materials required;
 - 4.6.5 procure that any redundant Easynet Apparatus is decommissioned by Easynet (or a sub-contractor approved by Easynet) in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement, including the removal of existing apparatus as required. For the avoidance of doubt this shall include supply of all materials required;
 - 4.6.6 allow access for planned inspections by Easynet, after notice by Easynet of one Business Day and provide assistance as required; and
 - 4.6.7 allow access to Easynet to carry out emergency repairs on Easynet apparatus and provide assistance as required.

Thus Apparatus

- 4.7 In respect of any works in relation to Thus Apparatus which form part of the MUDFA Works, the MUDFA Contractor shall:
- 4.7.1 carry out and complete all required civil engineering works including but not limited to excavation, chamber construction, duct laying, duct bedding, duct protection, laying of marker tape and reinstatement all in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.7.2 carry out all required cable laying in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.7.3 carry out all required connections to existing Thus Apparatus and all required connections to customers in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.7.4 carry out all required testing and commissioning in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
 - 4.7.5 decommission any redundant Thus Apparatus in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement, including the removal of existing apparatus as required;
 - 4.7.6 allow access for planned inspections by Thus, after notice by Thus of one Business Day and provide assistance as required; and
 - 4.7.7 allow access to Thus to carry out emergency repairs on Thus Apparatus and provide assistance as required.

NTL Apparatus

- 4.8 In respect of any works in relation to NTL Apparatus which form part of the MUDFA Works, the MUDFA Contractor shall:
- 4.8.1 carry out and complete all required civil engineering works including but not limited to excavation, chamber construction, duct laying, duct bedding, duct protection, laying of marker tape and reinstatement all in accordance with the

Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;

- 4.8.2 carry out all required cable laying in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
- 4.8.3 carry out all required connections to existing NTL Apparatus and all required connections to customers in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
- 4.8.4 carry out all required testing and commissioning in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement;
- 4.8.5 decommission any redundant NTL Apparatus in accordance with the Schedule 3 (*Specification*) and the other relevant provisions of the Agreement, including the removal of existing apparatus as required;
- 4.8.6 allow access for planned inspections by NTL, after notice by NTL of one Business Day and provide assistance as required; and
- 4.8.7 allow access to NTL to carry out emergency repairs on NTL apparatus and provide assistance as required.

4.9 **Telewest Apparatus**

[Drafting to be inserted]

4.10 **BAA Apparatus**

[Drafting to be inserted]

4.11 **Scottish Power Apparatus**

[Drafting to be inserted]

4.12 **Geo Networks Apparatus**

[Drafting to be inserted]

4.13 **Forth Ports Apparatus**

[Drafting to be inserted]

5. Risk

5.1 The MUDFA Contractor shall:

| Required Action from the MUDFA Contractor | Timing/Frequency applicable to the MUDFA Contractor |
|--|---|
| <p>1. Provide input to the project risk management plan developed by or on behalf of tie, in respect of matters which are applicable to the MUDFA Contractor.</p> <p>This input should be provided by the MUDFA Contractor in the form of a plan which shall confirm the roles and responsibilities of the MUDFA Contractor, the risk management process which shall be adopted by the MUDFA Contractor and how the plan prepared by the MUDFA Contractor shall contribute to the existing project risk management plan in terms of how the MUDFA Contractor intends to manage risk throughout the duration of this Agreement.</p> <p>The MUDFA Contractor shall ensure that this plan shall indicate the critical success factors for the MUDFA Contractor, key areas of focus and individuals involved and the MUDFA Contractor's proposals for risk management controls for specific areas such as construction risks that tie or any tie Party may not be aware of.</p> | <p>Input to project risk management plan within 1-month of the Effective Date and monthly updates thereafter throughout the duration of this Agreement.</p> |
| <p>2. Support tie with contributions to the project assumptions register developed by or on behalf of tie. This register will record all capex, opex, lifecycle, revenue, programme, quality, functionality</p> | <p>Input from the MUDFA Contractor to commence within 1 month of the Effective Date and continue</p> |

| Required Action from the MUDFA Contractor | Timing/Frequency applicable to the MUDFA Contractor |
|---|--|
| <p>and approvability assumptions and consequential risks to the Edinburgh Tram Network throughout the scheme development, design procurement, construction and pre-operational phases of the project. The assumptions register will also be used to contribute to the project risk register referred to below.</p> <p>The MUDFA Contractor shall identify any consequential risks specific to this Agreement and notify tie and the SDS Provider of any such risks.</p> | <p>monthly throughout the duration of this Agreement</p> |
| <p>3. Liaise with the SDS Provider, Infraco, tie, the tie project team and tie's technical, legal, financial and other advisors, regarding risk matters.</p> <p>Liaison to include attendance at risk management meetings and assistance with the risk identification procedure relevant to this Agreement which will be carried out by tie, and attendance at any risk management workshops which will be facilitated to allow a sharing of previous experience.</p> | <p>Monthly risk management meetings, risk management workshops as notified to the MUDFA Contractor from time to time and other ongoing liaison with tie, tie's project team, key stakeholders, the Infraco, and tie's technical, legal and other advisers throughout the duration of this Agreement</p> |
| <p>4. Contribute to the project risk register. This register will detail all capex, opex, lifecycle, revenue, programme, quality, functionality and approvability risks to the Edinburgh Tram Network and the</p> | <p>Input from the MUDFA Contractor to commence within 1-month of the Effective Date and continue throughout the duration of</p> |

| Required Action from the MUDFA Contractor | Timing/Frequency applicable to the MUDFA Contractor |
|---|--|
| <p>proposed mitigation of these risks.</p> <p>The project risk register will include analysis of each risk in terms of ‘likelihood’ and ‘impact’ prior to and following mitigation, responsible owners of each risk and graphical summaries of risk profile. Risks to be addressed will include strategic, commercial, construction, economic, legal and regulatory, organisational, environmental, technical, operational and infrastructure risks.</p> <p>The MUDFA Contractor shall inform tie and the SDS Provider of all risks which the MUDFA Contractor has identified will affect the MUDFA Contractor throughout the duration of this Agreement. This shall also include informing tie and the SDS Provider of initial mitigation procedures for the risks which the MUDFA Contractor has identified and presenting at risk workshops to confirm mitigation strategies and timeframes.</p> <p>In respect of this Agreement, the MUDFA Contractor shall provide input to tie and the SDS Provider in the quantification of risk pricing to ensure that adequate project contingencies are generated for risk pricing and programme risk contingencies (e.g. lead-in times, mobilisation, order periods et al).</p> | <p>this Agreement.</p> |
| <p>5. Prepare and submit a risk progress report to tie on the status of risk management and mitigation, giving a summary of new risks and assumptions identified,</p> | <p>Agree format of the MUDFA Contractor's required monthly risk report</p> |

| Required Action from the MUDFA Contractor | Timing/Frequency applicable to the MUDFA Contractor |
|---|---|
| <p>key matters to be resolved and any risks that have been closed out during certain time limits.</p> <p>The report to be provided by the MUDFA Contractor should indicate “Red-Amber-Green” (RAG) status areas including assumptions and key uncertainties, implementation of quality controls, implementation of risk management plan and the progression and development of project risks.</p> | <p>with tie's designated risk manager (as notified to the MUDFA Contractor from time to time) within 1-month of the Effective Date and submit monthly report to tie throughout the duration of this Agreement</p> |
| <p>6. Create and submit a construction hazard report which comprises a Hazard Identification stage (HAZID)/Hazard Operability study (HAZOP) and include contribution from the key parties including the Utilities, the SDS Provider, tie and the Planning Supervisor. The construction hazard report shall confirm in detail business continuity plans, mitigation plans and controls for all site risks including property damage, safety, utility damage etc.</p> <p>In addition, the MUDFA Contractor through an appropriate number of workshops to generate a clear and complete picture of the hazards and identify the proposed mitigation strategies for all works to be undertaken by MUDFA Contractor. The risks and assumptions shall also be relayed to SDS Provider and tie for inclusion in the appropriate registers.</p> | <p>The MUDFA Contractor must submit the construction hazard report to tie at least 4 weeks before any form of construction takes place.</p> |

6. Stakeholder Management

Liaison and public information

- 6.1 The MUDFA Contractor shall appoint a liaison officer to manage all public relations, information and press related matters, who shall liaise with **tie**, and if so requested by **tie**, CEC, other statutory bodies, members of the public, press and the media as may be necessary on all matters relating to the MUDFA Works. Except where expressly stated in this Agreement, the MUDFA Contractor shall not make any publicity or media statements or make any other formal disclosure of information regarding the MUDFA Works without the prior approval of **tie**.
- 6.2 The liaison obligation referred to in paragraph 6.1 shall include, but shall not be limited to the following matters:
- 6.2.1 participating as required in business and community liaison groups, public meetings and consultation meetings;
 - 6.2.2 providing proactive input, information and comment into information initiatives organised by or on behalf of **tie** and attending as requested by **tie** at any relevant consultation meetings;
 - 6.2.3 assisting with the development and maintenance of, and adherence to, a communications protocol for dealing with all stakeholders and members of the public affected by the MUDFA Works;
 - 6.2.4 assisting with the development and maintenance of procedures developed by **tie** in relation to stakeholder management by way of the provision of information relating to the MUDFA Works;
 - 6.2.5 provision of weekly updates to **tie** on the progress of the MUDFA Works and all planned works in a form reasonably requested by **tie**;
 - 6.2.6 informing **tie** at least two weeks in advance of all plans for any formal communication with stakeholders and members of the public. The form and content of such formal communication shall be subject to **tie**'s prior approval;
 - 6.2.7 provision to **tie** of all information reasonably requested by **tie** in respect of the MUDFA Works planned in a form prescribed by **tie**;

- 6.2.8 recruiting and providing "Tram Helpers" to man each of the Work Sections at the time when the MUDFA Contractor is carrying out the MUDFA Works to provide trouble-shooting on site, a customer interface and to ensure that traffic flows. The identity of Tram Helpers employed by the MUDFA Contractor will be subject to the prior approval of **tie**. If required by **tie**, Tram Helpers shall be required to undergo an induction process and the MUDFA Contractor shall comply with all reasonable requirements of **tie** in respect of the duties and role of the Tram Helpers;
- 6.2.9 provision and use of approved branding materials, PPE kit and boarding at all operational Work Sections. No such materials, kit or boarding shall be erected at any Work Section without the prior approval of **tie**; and
- 6.2.10 providing traffic re-routing maps for all areas affected by the MUDFA Works in advance of the MUDFA Works starting in any particular Work Section as may be requested by **tie**. In the event that **tie** requires that such material is for public issue, public issue shall not occur before the form and content has been approved by **tie**.

Information Centre and Website

- 6.3 The MUDFA Contractor shall provide all information and documentation regarding the MUDFA Works as may be reasonably required by **tie** in respect of the mobile and fixed information centres being operated by **tie** in relation to the Edinburgh Tram Network.

The MUDFA Contractor shall also provide all information regarding the MUDFA Works reasonably requested by **tie** in order to populate the website which shall be maintained and operated by **tie** in respect of the works being carried out in relation to the Edinburgh Tram Network.

Work Sector by Work Sector weekly newsletter

- 6.4 The MUDFA Contractor shall publish a Work Sector by Work Sector weekly newsletter every Wednesday, detailing works to be undertaken in the forthcoming week and outlining, with appropriate maps and diagrams, any alterations to road traffic circulation patterns required by the coming week's works. This newsletter will be issued, if requested by **tie**, by fax and email to: local and national newspapers and

other news media, The City of Edinburgh Council, Lothian and Borders Police, the emergency services, to any party or parties requested by **tie** and to any other persons or organisations that have requested receipt of the newsletter.

The newsletter shall also be distributed door to door by the MUDFA Contractor in affected Work Sectors.

Sufficient free distribution, take-away hard copies of the newsletter shall be placed in the information centre by the MUDFA Contractor before 0800 every Thursday morning. No charge will be made for this service.

The form and content of the newsletter shall be subject to the prior approval of **tie**. The MUDFA Contractor is required to submit the draft newsletter to **tie** no later than midday on the Monday immediately preceding the proposed issue of the newsletter on the Wednesday.

The MUDFA Contractor shall provide all information and assistance reasonably requested by **tie** in relation to the publication by **tie** of a monthly newsletter in relation to the progress of and future plans for the Edinburgh Tram Network.

Call Centre

- 6.5 The telephone number, fax number and e-mail address of the call centre to be operated by **tie** in relation to the Edinburgh Tram Network (the "hotline") shall be publicised through the press and the Work Sector by Work Sector weekly newsletter and clearly displayed on PPE kit, hoardings around every worksite and at other suitable locations within and in the vicinity of every operational Work Section. The responses required from the MUDFA Contractor in respect of call made to the hotline are set out in the section below on "Contacts Log".

Contacts Log

- 6.6 All complaints, comments and queries howsoever received by the MUDFA Contractor shall be registered in a suitable log (the "contacts log"), set out in Work Sectors and listed alphabetically. The MUDFA Contractor is required to take such steps as are required to address any such complaint, comment or query in accordance with Table 1 below. To the extent that a stricter response requirement is otherwise required under this Agreement, the stricter response requirement shall apply. To the extent that Table 1 provides for the recovery of any amount by **tie** from the MUDFA

Contractor, such amount may be deducted from any monies due to or to become due to the MUDFA Contractor or, alternatively, may be recovered from the MUDFA Contractor as a debt. A record of remedial action shall be logged. In the event of a complaint a follow up letter or electronic communication shall be passed to the complainant within 24 hours of the initial complaint, outlining the complaint and the remedial action being undertaken by the MUDFA Contractor. All comments, questions and complaints shall be logged in writing together with any response and a record of any actions taken, including a record of the time when that action is completed. An up to date copy of the contacts log shall be compiled daily, together with a report on the progress of any actions. The contacts log shall be inspected and signed daily by a nominated senior representative of the MUDFA Contractor and shall be counter signed by the MUDFA Contractor's Representative at least once per week. The MUDFA Contractor's Representative shall write a report to **tie** and/or the Nominated City Officer of CEC (as notified by **tie** from time to time) at least once per month containing a list of any breaches of the requirements of this Schedule 1 and Schedule 2 (*Technical Requirements*) occurring within the previous month, setting out;

- the nature of the breach;
- the duration of the breach;
- the action taken by the MUDFA Contractor to mitigate the breach; and
- the steps taken to minimise the likelihood of a subsequent occurrence of the breach.

Subject to the MUDFA Contractor obtaining **tie's** prior approval, a copy of each week's contacts log shall be placed every Friday in the information centres, where it will remain until completion of the MUDFA Works. Any person, including representatives of **tie** and CEC's Nominated City Officer, may freely inspect all deposited copies of the contacts log during the normal opening hours of the information centres. The version of contacts log on public display should not breach any data protection legislation or other applicable Law.

Additional copies of the contacts log shall be forwarded to **tie's** Representative and/or and CEC's Nominated City Officer once per week. The master register shall be available for **tie's** Representative and CEC's Nominated City Officer to inspect at any other time during normal working hours.

Table 1

| Level of Urgency | Category of Notification | Required Response Time |
|-------------------------|--|---|
| 1 | High urgency. Involves an immediate threat to persons or property or the circumstances otherwise require immediate rectification. | Immediate action required. If response not completed by the MUDFA Contractor within 4 hours, tie may procure that the relevant work is carried out and the costs of so doing shall be recovered from the MUDFA Contractor. |
| 2 | Medium urgency. No immediate threat to persons or property, but circumstances require rectification within 24 hours. | Remedial action requires to be completed within 24 hours. If the MUDFA Contractor does not complete the required response within 24 hours, tie may procure that the relevant work is carried out and the costs of so doing shall be recovered from the MUDFA Contractor. |
| 3 | Issue requires rectification, but no immediate threat to persons or property and the circumstances do not otherwise require immediate rectification. | Timescales for rectification to be agreed between the MUDFA Contractor and tie . In the event that the MUDFA Contractor does not comply with the agreed timescales, tie may procure that the relevant work is carried out and the costs of so doing shall be recovered from the MUDFA Contractor. |

7. Temporary Accommodation and Vehicle Specification

ACCOMMODATION - GENERAL REQUIREMENTS

7.1 The MUDFA Contractor shall prepare and submit for approval by **tie's** Representative an office layout based on the accommodation description set out below. The MUDFA Contractor shall then provide and maintain to the satisfaction of **tie's** Representative, accommodation in accordance with the requirements of this Part 7 as follows:

7.1.1 office accommodation to accommodate 10 desks and 1 table and 1 drawing board, each with a minimum working space of 5.5 m²;

7.1.2 2 meeting rooms suitable for sitting up to 20 and 8 people respectively around a table in each room;

7.1.3 male and female toilets. Minimum area 3m² each;

7.1.4 kitchen. Minimum area 6m²;

7.1.5 drying room. Minimum area 6 m²;

7.1.6 shower room. Minimum area 3m²; and

7.1.7 parking for up to 10 cars.

7.2 The MUDFA Contractor shall integrate this accommodation with the MUDFA Contractor's own accommodation and, subject to proposals which are acceptable to **tie's** Representative, the meeting rooms and welfare facilities may be shared by the MUDFA Contractor.

FITTINGS AND FURNISHINGS

Office

7.3 The MUDFA Contractor shall provide an office for use by **tie's** Representative, **tie** staff and visiting Utilities' staff with the following as minimum requirements:

7.3.1 10 office desks with at least one drawer provided with lock and key;

- 7.3.2 10 fully adjustable swivel cloth upholstered chairs on castors to accompany desks;
- 7.3.3 3 x 4 drawer lockable metal filing cabinets;
- 7.3.4 2 wall mounted notice board 1m high 1.5m wide;
- 7.3.5 5 waste paper baskets;
- 7.3.6 6 telephones connected to 2 lines;
- 7.3.7 1 Fax machine connected to a separate line;
- 7.3.8 1 photocopier capable of producing A4 and A3 black and white copies;
- 7.3.9 10 connections to internet via broadband, all able to connect at same time;
- 7.3.10 1 plan layout table 1 x 2 m;
- 7.3.11 1 A0 Drawing Board;
- 7.3.12 6 desk lamps;
- 7.3.13 12 letter tray/ filing baskets;
- 7.3.14 2 m of book shelves at 6 of the desks; and
- 7.3.15 2 large white boards.

7.4 Meeting rooms

- 7.4.1 28 stacking chairs.
- 7.4.2 tables for meeting rooms, large enough to seat the number specified in paragraph 7.4.1 above;
- 7.4.3 3 flip charts and flip chart paper as required; and
- 7.4.4 1 large wall mounted white board.

7.5 Kitchen

- 7.5.1 1 x 4 ring cooker;

- 7.5.2 1 microwave cooker;
- 7.5.3 1 electric kettle;
- 7.5.4 20 mugs;
- 7.5.5 10 sets of cutlery and plates;
- 7.5.6 supply of potable water from main supply;
- 7.5.7 kitchen sink with running hot and cold water; and
- 7.5.8 power points for cookers and kettle.

7.6 Toilets

- 7.6.1 Each to be fitted with WC and wash hand basin with running hot and cold water.

7.7 Drying room

- 7.7.1 2 chairs;
- 7.7.2 20 coat pegs mounted on wall; and
- 7.7.3 1 boot pull.

7.8 General

- 7.8.1 sufficient fire extinguishers to meet fire regulations;
- 7.8.2 sufficient electricity power points to service all rooms and desks;
- 7.8.3 sufficient lighting and heating to meet the minimum requirements under the Workplace (Health, Safety and Welfare) Regulations 1992;
- 7.8.4 windows complying, both in area and ability to open, with the Building Standards (Scotland) Regulations 1981. The windows shall be provided with blinds and fitted with security grilles/ shutters;
- 7.8.5 a security alarm system shall be provided;

- 7.8.6 access doors, fitted with five lever mortice locks. The MUDFA Contractor shall also provide 6 sets of keys;
- 7.8.7 hose connected to main water supply for cleaning boots, at entrance door to the office;
- 7.8.8 Boot cleaning brushes at entrance door to the office; and
- 7.8.9 door mats.

SERVICES

- 7.9 The MUDFA Contractor shall install and maintain a potable water supply to the welfare facilities and pay for any charges.
- 7.10 The MUDFA Contractor shall ensure that a constant and steady current electricity supply at 240V AC is provided and maintained to the office, meeting rooms and the other parts of the accommodation provided by the MUDFA Contractor at all times, and the MUDFA Contractor shall pay for any charges.
- 7.11 The MUDFA Contractor shall install and maintain the two telephone lines, linked to 6 telephone points, serving the office accommodation for **tie's** Representative, **tie** staff and the Utilities throughout the duration of the MUDFA Works. Both lines shall be linked to Broadband. The cost of line rental, calls, Broadband connection and Broadband rental shall be paid by the MUDFA Contractor.
- 7.12 The MUDFA Contractor shall install and maintain a minimum of one fixed line laser fax machine serving the office accommodation for **tie's** Representative, **tie** staff and the Utilities throughout the duration of MUDFA Works. The cost of line rental and calls shall be paid by the MUDFA Contractor. Subject to acceptable proposals, the fax machine may be shared by the MUDFA Contractor, **tie's** Representative and **tie** staff.
- 7.13 The MUDFA Contractor shall install and maintain a modern photocopier capable of producing A4 and A3 size black and white photocopies. The MUDFA Contractor shall ensure that sufficient stocks of consumables (including paper and toner) are available at all times. Subject to acceptable proposals, the photocopier may be shared by the MUDFA Contractor, **tie's** Representative and **tie** staff.

- 7.14 The MUDFA Contractor shall install and maintain a minimum of two broadband internet lines within the office accommodation for **tie's** Representative and **tie** staff for the exclusive use of **tie's** Representative and **tie** staff throughout the duration of the MUDFA Works. The cost of line rental and usage charges shall be paid by the MUDFA Contractor.
- 7.15 The MUDFA Contractor shall provide tea, coffee, sugar fresh milk and a suitable drinking water supply for use by **tie's** Representative and **tie** staff for the duration of the MUDFA Works.
- 7.16 The MUDFA Contractor shall arrange for cleaning of the office, meeting rooms and welfare facilities daily and shall ensure that welfare and messing facilities are kept in a clean and hygienic condition at all times. Toilet paper, paper towels, soap, and detergents shall be provided as required.

EQUIPMENT

- 7.17 The MUDFA Contractor shall provide the following equipment for the exclusive use of **tie's** Representative and **tie** staff throughout the duration of the MUDFA Works:
- 7.17.1 6 x 5m long steel tape measures;
- 7.17.2 4 x 50m long tape measures;
- 7.17.3 4 hand-held torches; and
- 7.17.4 2 approved utility tracers cable of tracing cables and pipes.
- 7.18 The MUDFA Contractor shall provide surveying/setting out services to **tie's** Representative as required in connection with the MUDFA Works.

SITE VEHICLES

- 7.19 The MUDFA Contractor shall provide four plain-coloured [**white and liveried - check with Dave Ramsay**] four wheel drive pick up vehicles (e.g. Nissan Nivara 2.5TD Double Cab Aventura of equivalent.) and one plain-coloured, four wheel drive vehicle people carrier (e.g. Renault Espace, or equivalent) transport for the exclusive use of **tie's** Representative and **tie** staff and visitors for a period of 6 months following the issue of the Defects Correction Certificate from the commencement of the MUDFA Works. The vehicles shall be delivered and maintained by the MUDFA

Contractor in good, roadworthy condition. They shall be licensed and insured by the MUDFA Contractor for use on the public highway and shall have comprehensive insurance cover for any qualified driver authorised by **tie's** Representative, together with any authorised passengers and the carriage of goods or samples. The MUDFA Contractor shall provide fuel, oil and maintenance in conformity with the vehicle manufacturers' recommendations and shall clean the vehicles inside and outside as required. A suitable replacement vehicle shall be provided by the MUDFA Contractor for any vehicle out of service for more than 24 hours.

- 7.20 The MUDFA Contractor shall ensure that each vehicle shall be fitted with approved warning beacons and any other safety equipment as required for work on highways or within Edinburgh International Airport.