

**Yeadon Way Phase 2 Project**

**Works Information and Specification**

Number 1

Bickerstaff Square

Talbot Road

Blackpool

FY1 3AH

**WORKS INFORMATION**

**1.0 GENERAL REQUIREMENTS**

**1.1** The Works information consists of section 1 general requirements, the Highway Specification encompassing Volume 1 of the Manual of Contract Documents for Highway Works, as modified and extended by the Works Information and all appendices

**1.2 Introduction**

Blackpool presents a unique seaside environment and economy within which to deliver significant infrastructure schemes. Physical infrastructure improvements are intended to lead to economic and social regeneration.

Yeadon Way is a single lane two-way elevated carriageway in Blackpool which was built in 1986 utilising a former railway embankment and passes over five road and two pedestrian bridges. The total length of Yeadon Way is approximately 3.25km. The road starts west of the M55 at the junction of the A5230, Progress Way and Ashworth Road and runs due west before turning north at Watson Road (St Anne’s Road Bridge) to enter South Blackpool, where it merges with Seasider’s Way.

The road has experienced distress in the form of settlement of the pavement and movement of the concrete safety barriers since around the time of its construction. Blackpool Council’s long-term plans are to remediate the full length of the road, including the embankment and the road itself.

Phase 1 of remedial works was undertaken in 2015 between project chainage Ch0755 (immediately west of St Anne’s road bridge) and Ch1400 (immediately east of Hawes Lane Bridge). Remedial works were undertaken to the embankment based on control modulus columns (CMC) and geogrids in addition to complete replacement of the pavement and street furniture.

Phase 2 of the road remediation, which form the proposed works, are required to stabilise existing embankments and replace the road pavement, road drainage and street furniture between project chainages Ch0195m to Ch0730m and Ch1440m to Ch3200m.

Design, construction, testing and commissioning works for the Phase 2 Remediation of Yeadon Way, Blackpool are to be provided by the Contractor as instructed by the Employer.

The objectives of the works are to complete:

1. Replacement of road pavement, road drainage and street furniture.
2. Embankment remediation works to satisfy a betterment performance criteria: to enable the replacement road pavement to achieve a minimum 15 year period without repair/maintenance following completion of the works.

The existing embankments supporting the road are considered to be marginally stable and the carriageway has undergone a varying degree of distress in the form of differential settlement of the road pavement and concrete safety barrier. Predominant defects observed during 2018 investigations are summarised below.

| **Chainage** | **Predominant defect** |
| --- | --- |
| Ch0195 – Ch0730 | Minor surface cracking |
| Ch1450 – Ch1800 | Longitudinal cracking and rotation displacement of Vehicle Crash Barriers (VCB) |
| Ch1800 - Ch1950 | Minor Cracking |
| Ch1950 - Ch2220 | Extensive longitudinal cracking |
| Ch2220 – Ch2380 | Differential settlement of VCB and cracking |
| Ch2380 – Ch2500 | Minor surface cracking |
| Ch2500 - Ch2630 | Differential settlement of VCB and cracking |
| Ch2630 – Ch2720 | Extensive longitudinal cracking |
| Ch2720 – Ch2920 | Minor surface cracking |
| Ch2920 – Ch3200 | Extensive longitudinal cracking |

* 1. **DESCRIPTION OF THE WORKS.**

The site location is shown in Insert 1 below.

A remedial scheme has been developed by Blackpool Council which comprises the interventions summarised in the table and described further below. **It is however possible that the Contractor may present alternative solutions.**

The interventions, their proposed extents and a Geotechnical Risk Register are shown on Drawings 001-1 and 001-2.

| **Intervention Description** | **Extent of Proposed Interventions** |
| --- | --- |
| **Intervention Option 1**  Road Embankment – Reinforced Earth Slope (RE) with geosynthetic reinforced pavement solution. | Ch 1450-2500  (1050m total) |
| **Intervention Option 2**  Bridge Approach Embankments - Reinforced Earth (RE) Slope with CMC/Load Transfer Platform (LTP) solution. | Ch 2500-2630  (0130m total) |
| **Intervention Option 3**  Resurfaced Pavements and Replaced Vehicle Crash Barriers (VCB) with VRS (Vehicle Restraint System). | Ch 0195-0730  (0535m total) |
| **Intervention Option 4**  Resurfaced Pavements and Replaced Vehicle Crash Barriers (VCB) with VRS (Vehicle Restraint System) and relocate carrier drain | Ch 2630-3200  (0570m total) |

**Intervention 1: Road Embankment – Reinforced Earth Slope (RE) with geosynthetic reinforced pavement solution**

This improves the stability of the upper slope by reducing the weight of material on the shoulder of the embankment and reduce the effects of differential settlement in the carriageway by using geosynthetic reinforced pavement. This intervention includes:

1. Excavate to 1.4m below the carriageway and replaced with the treated excavated site material to improve density and condition of the sub-base;
2. Replace the top of the slope with reinforced earth at 45º (steeper than existing) reduce weight and therefore relieve stress from the top of the embankments;
3. Re-design the drainage system and relocate the carrier pipe to the space created on the shoulder of the reduced embankment level;
4. Remove concrete crash barriers and replace with lighter alternative;
5. Replace and recompact the excavated embankment material (see point a) above);
6. Reinforced pavement using two layers geotextiles (TriAx TX160 or similar) to improve performance and reduce differential settlement.

**Intervention 2: Bridge Approach Embankments - Reinforced Earth (RE) Slope with Control Modulus Columns (CMC) / Load Transfer Platform (LTP) solution**

This reduces the potential for future differential settlements between the approach embankments and the bridge structure. The CMC/LTP will distribute the traffic load to competent underlying Glacial Till, thereby reducing the impact of future movement within the loose embankment fill on the carriageway as well as to stiffen/densify the embankment fill during installation.

The use of the RE slope will improve the global stability of the slope, especially in the upper part of slope where the embankment was previously widened. This will also create space on the shoulder of the embankment to re-locate the carrier drainage pipe. This solution will only be provided to Whalley Lane Bridge approach embankments since significant differential settlements were observed only at this section. This intervention includes:

1. Install 340mm CMC (15m to 18m deep) at 2.0m c/c and 500mm thick Load Transfer Platform (LTP) in the approach embankment to Vicarage and Whalley Bridges;
2. Excavate the 1.4m below the carriageway and replace with the treated site excavated material;
3. Install reinforced earth slopes at 70° gradient, within the upper sections of the slope to relieve stress from the top of the embankments. Use Green slope reinforced earth wall;
4. Re-design the drainage system and relocated the carrier pipe to the space created on the shoulder of the reduced embankment level;
5. Replace and recompact the excavated embankment material (see point b) above).

**Intervention 3: Bridge Embankments - Resurfaced Pavements and Replaced Vehicle Crash Barriers (VCB) with VRS (Vehicle Restraint System)**

This intervention is proposed in sections where no significant damages such as longitudinal, transverse cracking and differential settlements were observed. The heavy weight VCB is suggested to be replaced by light weight VRS and resurfacing of the current pavement is suggested to repair any current damages.

This option includes:

1. Remove the VCB and replace with VRS;
2. Resurface the existing pavement;
3. Remove and replace existing automatic traffic counter

**Intervention 4: Bridge Embankments - Resurfaced Pavements and Replaced Vehicle Crash Barriers (VCB) with VRS (Vehicle Restraint System) and relocate carrier drainage pipe.**

This intervention is the same as intervention 3 with an additional element of work which is to re-design the drainage system and relocate the carrier pipe to the shoulder of the embankment. This would require temporary works to allow excavation to install the drainage, and reinstatement of the embankment to the existing profile following installation.



The works will also cover the construction of the highway improvements and will encompass the following

* Provision and installation of kerbs
* Relocation, resetting and replacement of Street furniture
* Replacement of Road Restraint System
* Relocation and replacement of Traffic Signage and markings
* Replacement of Street Lighting
* Testing and commissioning of the street lighting
* Replacement of highway drainage system
* Liaison with stakeholders and the public
* Traffic management
* Disposal of any materials removed as part of the works
* Landscaping
* Post works Topographical Survey Drawings
* Removal of Car Parks directional sign and posts
* Replacement of Automatic Traffic Counter cabinet
* Provision of Traffic counter loops
  1. **LIST OF DRAWINGS**

The list of drawings are given in Appendix 0/4 and are contained in Appendix A

* 1. **CONTRACTORS DESIGN**

The Contractor is responsible for the design of the works to Design Manual for Roads and Bridges (DMRB) and in line with the Employers work specifications and drawings. The Contractor has full responsibility for the design.

During the design process, the Contractor maintains a procedure within their Quality Plan which records the development of the design of the works. The record includes:

* details of changes to the design;
* the impact of works added to the Works Information by the Project Manager;
* elements of the design where the Contractor and the Project Manager have agreed to deviate from agreements previously made;
* details of permissions, authorisation, agreements and similar made in connection with the project.

The record provides a full audit trail of the development of the design of the works and includes any impact on the programme, the Risk Register and the forecast total of the Prices. The Contractor reports these developments at the monthly progress meetings.

The Contractor shall satisfy themselves of the suitability of survey data provided within the Site Information prior to relying upon it. Any additional survey information required shall be the responsibility of the Contractor.

* 1. **EMPLOYERS DESIGN CRITERIA**

**General Design Requirements**

The Contractor ensures that the requirements for this project are developed in accordance with the Works Information and in full consideration regarding the future maintenance of all infrastructure together with the associated whole life costs at every step in the design process.

The Contractor develops the project, adopting the DMRB and associated standards current at Contract Date. Should standards change following the Contract Date the Contractor must seek confirmation from the Project Manager as to whether they shall be applied.

The Contractor considers maintenance and operation at every step of the design process.

**Constraints**

Weight of vehicle on the road is limited to 7.5t. This should be considered in planning of the construction works and design of the permanent works.

**Drainage**

*General Requirements*

Road drainage to be relocated from the centre of the carriageway to the verge, as shown on the Tender Drawings. Existing outfalls are to be incorporated into the new drainage system.

Unless otherwise stated within these Employer’s Requirements, the design of surface and subsurface drainage complies with the Design Manual for Roads and Bridges (DMRB) and MCHW, using the appropriate Standards.

All proposals for drainage are developed in accordance with the Works Information.

The drainage design including the design of surface water run-off collection systems, pollution control measures and any other associated facilities shall be confined within the areas of the project red line boundary.

The drainage design, including the design of surface water run-off collection systems, pollution control measures, outfalls and any other associated facilities, include measures which safeguard the environment and satisfy the requirements of landscape, ecology and the environment.

The drainage design makes provision for the safety of the Contractors building the works, the general public and maintenance and decommissioning personnel at all drainage facilities, in particular, surface water run-off collection and conveyance systems, pollution control measures and outfalls (including headwalls).

The surface water drainage shall be designed for a critical design storm for the 1 in 5 year plus climate change (with surcharge (within limitations as defined by IAN 161/13 and HD33/06), but no flooding).

The rainfall intensities used to calculate the critical design storms for must include an allowance for the effects of climate change. This must be achieved by increasing rainfall intensities of the design storm by a minimum of 20%.

Large diameter pipes (>900mm) and chambers should be reviewed against the requirements of BD2/12 and, if appropriate, the technical approval and certification requirements for structures.

*Existing Drainage Systems*

Existing drainage will be renewed where it is not compatible with the Works.

*Sub-surface water drainage*

The drainage design takes account of any sub-surface groundwater flows and drainage paths that are intercepted.

Sub-surface water drainage for the pavement construction shall be provided using Type 5,6,7,8 or 9 drains as shown in the Manual of Contract Documents for Highway Works Volume 3 - Highway Construction Details.

*Pollution control measures*

Pollution control and mitigation measures are provided in accordance with results of risk assessments undertaken using Highways England’s Water Risk Assessment Tool (HAWRAT), as prescribed in the Design Manual for Roads and Bridges (DMRB) guidance; DMRB HD 45/09 (Highways England et al., 2009) and to satisfy the requirements of the Environment Agency.

Suitable shut-off penstock valve facilities for purposes of spillage containment are provided on all proposed drainage systems downstream of the pollution control mitigation facilities and upstream of the outfall. Shut off penstock valve facilities must be clearly marked as such to allow the emergency services to identify these quickly in an emergency.

Pollution Control Notices are to be provided at all pollution control devices and shut-off penstock valve facilities for spillage containment. Consideration is to be given to the positioning of any barrier / signposts relative to any lined drainage features such as lined combined filter drains.

*Outfalls*

Water shall not be discharged from the Site on either a temporary or permanent basis (other than maintaining existing permanent outfall connections) until approval has been granted by the Environment Agency, as necessary, on all aspects related to the discharge, e.g. volume, velocity, storage, pollution control, treatment, outfall type.

Drainage aspects of the Works do not change the catchment of the existing drainage and existing discharge point outfalls are to be incorporated into the Works drainage design. Existing outfalls are shown on drawings provided in the Works Information. The contractor is to:

* Satisfy themselves that existing outfalls are functioning by inspection and/or CCTV surveys.
* Provide condition report on outfalls and identify actions required to restore full functionality.
* Undertake any required clearance of discharge point outfalls and ensure they are functional by completion of works.

**Geotechnical Works**

*General Geotechnical*

Geotechnical Works are designed and constructed in accordance with the requirements of the DMRB, NA BS EN1997-1 and NA BS EN 1997-2 except where these conflict with the (Employers requirements) we draw particular attention to the Geotechnical Design Life criterion specified below. Design Embankment global stability requirement.

HD22/08 is a key geotechnical document. The Contractor issues all design and deliverables in accordance with this document.

*Geotechnical Design Life/Overall Scheme Objectives.*

Given the age and historical use of the embankment, the objective of the scheme is not for the contractor to deliver a scheme compliant to modern design standards but to deliver a scheme that,

* Provide an improvement to the performance of the carriageway by reducing potential washout of subgrade/ embankment material.
* Improve the performance of the carriageway pavement by increasing its stiffness to avoid development of longitudinal and transverse cracks along the carriageway.
* Prevent further differential settlement at the bridge approach embankments.
* Reduce long term maintenance requirements to achieve at least 15years maintenance free period post remediation.

*Concrete in Aggressive Ground*

Design Sulphate Class and ACEC Class of DS-1 and AC-1 may be adopted, assuming ground disturbance will occur during construction, e.g. during excavation for construction of pavement as well as for new services/utilities.

*Re-use of materials*

Where material is to be excavated from the existing top 1.4m of the existing embankment, excavated material may be re-used as engineered fill. The materials to be excavated is expected to have low to medium plasticity and can be classified as Class 1A, 1B, 2A and 2C fill. Some sorting and processing may be required prior to reuse of these material.

The concrete crash barriers can be can be crushed and reused for Type 1: Granular Subbase layer in the proposed pavement construction.

*Geotechnical Investigations*

A number of Geotechnical Investigations have been undertaken by the Employer. This data is provided with the ITT documents.

The Contractor reviews the geotechnical information and advises the Project Manager as to the completeness and adequacy of the information, including if required, any recommendation for additional investigations.

A Ground Investigation Report (GIR) has been undertaken for the project. The report is provided with the ITT documents. The Contractor reviews the report to satisfy themselves as to the completeness and adequacy prior to any recommendation to the Project Manager for additional investigations, if required.

It is not expected that additional ground investigations will be required. However, if the Contractor carries out additional ground investigations, the Contractor produces a new GIR.

*Reporting*

The Contractor prepares a Geotechnical Design Report (GDR) for the design in accordance to HD22/08.

**Road Pavements**

The pavement is to be designed to the Design Manual for Roads and Bridges (DMRB).

Volume 7; Manual of Contract Documents for Highway Works (MCHW) Volumes 1 to 3 and applicable Interim Advice Notes (IAN) including, but not limited to;

* IAN 73/06 Revision 1 Design Guidance for Road Pavement Foundations
* IAN 154/12Revision of SHW Clause 903, Clause 921 and Clause 942;
* IAN 156/12 Revision of Aggregate Specification for Pavement Surfacing.

The pavement is to be designed by the Contractor to achieve a performance criterion. The criterion is to achieve a minimum 15 year period without repair/maintenance following completion of the works.

* 1. **TIMING AND SEQUENCING OF THE WORKS**

The Works are envisaged to commence on 11th November 2019 with Completion of the whole of the *works* by 22nd May 2020.

The *works* are located at the end of the M55. It is located on a former railway embankment, some 5.3m to 9.3m high, relative to the surrounding ground. The average slope angle is between 26’ and 34’. The highway is a standard 7.3m wide single carriageway with 0.45m verge on both sides, adjoined by 0.95m high concrete vehicle crash barriers. There is no pedestrian access along the route.

The route is bounded by residential and commercial properties over some of its length, and there are 2 permanent traveller camps at the east end of the site and 1 touring caravan site at the North end of the site, (no properties or businesses have direct access off the site).

Without prejudice to the Contractor’s obligation to comply with the Consultation and Stakeholder Management Plan (see paragraph 1.16*),* the *Contractor* must give consideration to the need for the closure of any section (in part or whole) of the highway. In sequencing the *works* the *Contractor* must ensure that alternative traffic routes, are available to vehicular traffic, and such routes can be utilised in order to minimise congestion and disruption to highway users, local businesses and properties, all with a view to avoiding (or at the very least minimising) claims from such parties.

* 1. **PROGRAMME TO BE SUBMITTED**

The Contractor is to provide a programme taking account of the following requirements.

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Start Date** | **End Date** |
| Instruction | 09/08/2019 |  |
| Design Phase |  |  |
| Pre-Construction Design | 09/08/2019 | 27/09/2019 |
| Employer Review Period | 30/09/2019 | 25/10/2019 |
| Issue of AFC Issue Documents | 28/10/2019 | 08/11/2019 |
| Construction Phase |  |  |
| Issue RAMS | 28/10/2019 | 08/11/2019 |
| Employer Review RAMS | 11/11/2019 | 22/11/2019 |
| Construction Starts | 11/11/2019 | - |
| Highway Opens | 22/05/2020\* | - |

**\*Indicative completion date. Contractors should propose an appropriate completion date for the project. This will be considered in the appraisal of the tender submission.**

The programmes produced must show all activities and deliverables including approval periods and approvals by others.

The programmes and associated documents produced also:

* Show the critical path;
* Show the number of personnel to be employed on each activity, including a summary of the total number of personnel expected to be on site each week including those employed by sub-contractors;
* Identify work to be completed by sub-contractors;
* Allow the time periods in relation to a submission for technical approval by the Employer as defined in the Works Information.

Each submission of the programme includes information which allows the Project Manager to readily identify changes made since the previous submission.

The programme is submitted in a format agreed with the Project Manager.

1. **WORKING HOURS AND RESTRICTIONS ON ACCESS**

The standard working hours on Site (including to avoid doubt, any Site compound) will be limited to Monday to Saturday (excluding bank and/or statutory holidays) and between the hours of 08.00 am and 6.00 pm. This will include all construction activities and deliveries to Site. There will be no work undertaken outside of these hours without the written approval of the *Project Manager*.

The *Contractor* shall notify the *Project Manager* in writing not less than 24 hours before the event of any intention to work other than during the normal working hours stated above. Where work is to be carried out outside normal working hours at weekends, written notification is required by noon on the Thursday prior to the relevant weekend; otherwise weekend working shall not be permitted.

BBC requires the *Contractor* to comply with the UK Working Hours Regulations 1999. The *Contractor* shall ensure that all employees will be protected by the Regulations and that travel time of the workforce is acknowledged.

**1.10 PROGRAMMING CONSTRAINTS**

Access to the site will only be permissible via Parkinson Way. No access will be allowed from the M55 Link Roundabout, (except in an emergency), or written approval of the *Project Manager* is obtained.

**1.11 HEALTH AND SAFETY**

Prior to commencement of any works the *Contractor* must submit to the *Project Manager* or his delegate all relevant Risk Assessments and Method Statements (RAMS) for review. No work is to commence until the response to these has been received from the *Project Manager* or his delegate*.* The *Contractor* must allow for this period of reply within his rates and programme.

Should a method of work change the *Contractor* must review and amend where necessary all relevant RAMS and resubmit for review by the *Project Manager* or his delegate any such change.

The *Contractor* must comply with all relevant health and safety regulations and law. In accordance with the Construction Design and Management Regulations 2015 (CDM) the C*ontractor* is to maintain and review the construction phase health and safety plan. This is to be available for inspection and review by the *Employer* during normal working hours.

**1.12 MATERIAL APPROVAL.**

The *Contractor* must submit to the *Project Manager* or his delegate details of all materials that are to be used in the construction of the *works*. No materials are to be incorporated into the *works* until acceptance is obtained from the *Project Manager* or his delegate. The *Contractor* must allow for this period of reply within his rates and programme.

**1.13 LABOUR, EQUIPMENT AND MATERIAL RECORDS**

The*Contractor* is to provide, on a weekly basis, to the *Project Manager* copies of records of all Labour and equipment associated with the undertaking of the *works*.

The *Contractor* is to provide details of any testing required by the specification and copies of all testing certificates as soon as they are available and no later than four weeks after the test.

**1.14 MANAGING THE WORKS**

The *Contractor* shall provide a completed organisational structure, detailing the proposed management structure for the works including details of names, job title, experience. The *Contractor* must nominate, for approval by the *Project Manager,* a senior management representative, who has the necessary experience and authority to act on their behalf, and who must be present on site throughout the works

Progress meetings are to held on a monthly basis (dates to be agreed) and the *Contractor* must submit a progress report, including but not limited to, the latest programme and progress made, financial statement, health and safety report and details of change within the month, no later than three days prior to the meeting

In addition to the above the *Contractor* must arrange a meeting in the site office every week on a Friday morning to discuss the forthcoming week’s works and progress of the works

The *Contractor* must arrange to carry out a joint site measure with the Project Manager or his delegate, where works will become buried, at a suitable regularity to agree measures.

**1.15 CO-ORDINATION AND INTERFACE WITH OTHER CONTRACTORS AND THIRD PARTIES**

1. In relation to the supply and installation of street lighting as part of the *works*, the *Contractor* shall engage the Community Lighting Partnership, or applicable parties to the Community Lighting Partnership, as its Subcontractor for this purpose provided always that the Community Lighting Partnership shall for the purposes of this Contract be treated as the *Contractor’s* domestic Subcontractor and the *Employer* shall have no liability or responsibility to and shall not be obliged to grant relief to the *Contractor* in respect of the performance of the Community Lighting Partnership.

1. The *Employer* may require other inspection works to be carried out in the vicinity of the works, to enable future programming of maintenance works on or adjacent to the site.
2. The *Contractor* shall liaise directly with any contractors carrying out the above works to ensure that there is no prevention, delay or disruption caused by or to the other parties (and vice versa). Without prejudice to the foregoing, the *Contractor*’s obligations include, liaison and co-operation with all the relevant contractors (including but not limited to close co-operation in respect of the working methods, timing, and areas of working) so as not to prevent, delay and/or disrupt each other and to avoid any claims arising;
   1. **CONSULTATION AND STAKEHOLDER MANAGEMENT**

The Contractor shall provide a person **on site**, who will engage and communicate with adjoining property owners on an ongoing basis to inform them of progress of works. This person will also be required to deal with all queries/complaints received from neighbouring property owners with regard to works operations. They will be required to keep a log of all such queries/complaints, with an action undertaken, to be discussed at the following progress meeting.

The Contractor shall develop and produce a Consultation and Stakeholder Management Plan (“Plan”), which will be submitted to the Project Manager for approval prior to the commencement of the works. The purpose of which is to make available the information to allow an understanding and to increase awareness of the highway works, including the scope, nature, effect and timing of the works. The Plan will identify the timing, method and frequency of communication to key stakeholders during the construction phase. It will promote dialogue at all stakeholder levels on issues related to the project to ensure involvement and support for the scheme. The communication will confirm the current status of the project and the future planned activities and timescales.

The Plan will set out the *Contractor's* approach to engaging and communicating with stakeholders and identifying their associated information requirements. The Plan will clearly identify activities, responsibilities and time scales, and the *Contractor*’s personnel responsible for communication and stakeholder management. The *Contractor* shall comply with the Plan. The Plan should include, but not be limited to:

* Close liaison with Blackpool Borough Council Communications Officer for Highways and Traffic
* Identifying the stakeholders associated with the project. This could include named individuals and/or groups who have an interest in, or are involved in, or who are affected by the project;
* Analysing the needs of each stakeholder and nature of communication;
* Identifying the communication channels and appropriate means of communication for each stakeholder or stakeholder group;
* Determining the information to be provided to each stakeholder or stakeholder group;
* Determining the frequency of communication for each stakeholder or stakeholder group.

The *Contractor* shall maintain and update the Plan as necessary.

* 1. **EXISTING CONDITIONS OF THE SITE AND SITE COMPOUNDS**

Prior to taking physical possession of the Site, the *Contractor* shall carry out a detailed photographic survey of the properties adjacent to the Site, and any Site compound area agreed with the *Project Manager* for the *Contractor's* use, and provide a copy, in electronic digital form, of the same to the *Project Manager*. The *Contractor* will be responsible for any repairs or reinstatement works necessary resulting from damage to any property arising out of or in consequence of the carrying out of the *works* and/or the occupation of the Site and any Site Compound. (Any obligations in this Contract on the *Contractor* in relation to the Site shall apply, where relevant, to the Site compound).

The Client is able to provide an area for a site compound on South Car Park as shown on drawing no 493272.T.003. The *Contractor* will be required to erect a 2.4 m high Heras type fence around the whole of the compound area, and to maintain this for the duration of the Contract. A temporary access will also have to be formed off Yeadon Way into the compound area by the contractor. This temporary access will be required to be removed, and the kerbing and fencing reinstated upon completion of the contract. All costs associated with this are to be borne by the *Contractor.*

* 1. **POSSESSION OF THE SITE**

Save as set out in this paragraph 1.7 and Appendix 1/17, the *Contractor* shall not infringe or in any way obstruct any public rights of way.

The *Contractor* shall confine all his operations to within the boundaries of the Site unless otherwise agreed with the *Project Manager.*  The *Contractor* will be responsible for obtaining all necessary consents from affected Third Parties should any encroachment beyond the boundaries of the Sitebe considered necessary for execution of the *works*. Any such areas will be reinstated, if required by the *Project Manager,* to their original condition as a precondition for Completion or earlier if reasonably required by the *Project Manager*.

The *Contractor* shall take all steps necessary to prevent his employees, sub-contractors, suppliers and the like from entering upon any private land outside the Site. The *Contractor* shall ensure that none of his vehicles, items of plant, etc. or any of those belonging to sub-contractors or suppliers shall cross or enter upon private land without the written consent of the owner.

* 1. **SHARING OF WORKING AREAS**

The *Contractor* shall be responsible for the Site.

The *Contractor* shares the Working Areas and the Site with any other contractor, notified to him by the *Project Manager* under paragraph 1.15.

The *Contractor* will be working on the public highway, and will need to create a barrier and manage his own working area for use by himself and his Subcontractors in accordance with the New Roads and Street Works Act 1991 and any other associated legislation or Laws.

To avoid doubt, nothing in this paragraph 1.15 shall constitute a taking over under this Contract

* 1. **EXISTING SERVICES**

The location of Existing Services is included in Appendix B. This information is provided for guidance purposes only, and the *Employer* is not and shall not be responsible for the accuracy, sufficiency or interpretation of this information. This information includes (but is not limited to):

British Telecom

Virgin Media

National Grid Gas

Electricity North West

United Utilities Water

United Utilities Sewers

By way of assistance, the contact details for the various utility providers are shown in Appendix 1/16.

Notwithstanding this and the provision of any information by the *Employer*, the *Contractor* shall fully investigate the presence and capacity of buried utilities/ Services within the Site and/or which may be affected by the *works* (“**Existing Services**”). This shall include liaison with the appropriate authorities, utilities and Service Providers to confirm the presence of services and the need for the diversion/relocation/support/protection/sleeving of live services and the removal of defunct ones, as well as a thorough search, using appropriate detection equipment to precisely locate all buried services, charted or uncharted.

To the extent that it applies, and without prejudice to the *Contractor's* obligation to comply with the requirements of such appropriate authorities, utilities and Service Providers, before mechanical excavation commences, all services in the immediate vicinity of the excavation (including for the avoidance of doubt, any existing services) shall be located and exposed by hand. All such services are to be protected as necessary by the *Contractor* for the duration of the works. Any services, which are exposed within the *works*, should be ducted and protected as appropriate.

The *Contractor* shall allow for all costs and time associated with such investigations and for any temporary or permanent protection of services that is required. The *Contractor* shall not be entitled to any compensation event, extension of time, additional cost, or other compensation or relief as a result of the need for any investigation or diversion (or other) works carried out by such authorities, utilities and/or Service Providers in connection with the *works*.

Should any leakage or damage be discovered, the *Contractor* shall at once notify the *Project Manager* and the statutory authority/Service Provider or owner concerned, and the *Contractor* shall afford every reasonable facility for the repair or replacement of the apparatus affected. The *Contractor* shall not be entitled to a compensation event or extension of time associated with such leakage or damage and its rectification.

Any damage caused to existing services will be made good by the *Contractor* at no cost or risk to the *Employer*. The *Contractor* shall not be entitled to a compensation event or extension of time for such damage and its associated rectification.

The *Contractor* will be responsible for arranging and the disconnection and connection of electrical services to all electrical plant associated with both the permanent and temporary works. The *Contractor* shall allow for this work within the costs and programme.

* 1. **STATUTORY NOTICES CONSENTS AND APPROVALS**

Save in relation to Employer Consents, the *Contracto*r shall obtain, and pay all necessary fees, for any and all Consents, permits, licenses, authorisations and all approvals to provide the *works, including Highways England approval for advance signage on the M55 Motorway as shown on the Traffic Management drawings within the Works Information.*

* 1. **TITLE TO MATERIAL**

Following removal, excavation or demolition, the *Contractor* shall be entitled to the title in any materials generated from such removal, excavation or demolition.

* 1. **CONFLICTS AND DISCREPANCIES**

The *Contractor* acknowledges and agrees that all surveys, reports, details of statutory undertakes plant and equipment and any other information (of any kind) provided by the *Employer* in relation to this Contract (including for the avoidance of doubt, but not limited to any information provided prior to or after entering into of this Contract) is provided for guidance purposes only and the *Contractor* acknowledges and agrees that the *Employer* does not warrant and is not and shall not be responsible for the accuracy, sufficiency or interpretation of such information.

Save as expressly provided for in clause 63.8 of the Contract where there is any ambiguity, conflict, discrepancy or inconsistency within or between the documents forming this Contract or where in the performance of the *Contractor's* obligations any ambiguity, conflict, discrepancy or inconsistency arises in connection with this Contract the *Contractor* shall notify the *Project Manager* as soon as it becomes aware of such any ambiguity, conflict, discrepancy or inconsistency and the *Project Manager* shall give an instruction resolving the ambiguity, conflict, discrepancy or inconsistency (as the case may be), which instruction will take effect in accordance with clause 63.8 of this Contract and shall not, to avoid doubt, constitute a compensation event, save to the extent permissible under clause 63.8.

**HIGHWAY WORKS SPECIFICATION**

**Preamble to the Specification**

**1** The Specification referred to in the Contract shall be the ‘Specification for Highway Works’, published by the Stationery Office (formerly HMSO) as Volume 1 of the Manual of Contract Documents for Highway Works, as modified and extended by Works Information and the following contract specific items:

(i) Appendix 0/1: Contract-specific Additional, Substitute and Cancelled Clauses, Tables and Figures;

(ii) Appendix 0/2: Contract-specific minor alterations to existing Clauses, Tables and Figures;

(iii) The Numbered Appendices listed in Appendix 0/3;

(iv) Appendix 0/4 contains a list of the Drawings.

(v) Appendix 0/5: Special national alterations of the Overseeing Organisation of Scotland, Wales or Northern Ireland.

**2** The relevant publication date of each page of the Specification for Highway Works is given in the Schedule of Pages and Relevant Publication Dates.

**3** An Additional Clause as indicated by a suffix ‘A’ in Appendix 0/5 is an alteration originating from the Overseeing Organisation of Scotland, Wales or Northern Ireland. An Additional Clause as indicated by a suffix ‘AR’ in Appendix 0/1 is a Contract-specific alteration.

**4** A Substitute Clause, as indicated by the suffix ‘S’ in Appendix 0/5 is an alteration originating from the Overseeing Organisation of Scotland, Wales or Northern Ireland. A Substitute Clause as indicated by a suffix ‘SR’ in Appendix 0/1 is a Contract-specific alteration.

**5** A Cancelled Clause as indicated by a suffix ‘C’ in Appendix 0/5 is an alteration originating from the Overseeing Organisation of Scotland, Wales or Northern Ireland. A Cancelled Clause indicated by a suffix ‘CR’ in Appendix 0/1 is a Contract-specific alteration.

**6** Insofar as any of the Numbered Appendices may conflict or be inconsistent with any provision of the Specification for Highway Works the Numbered Appendices shall always prevail. Additionally, Numbered Appendices 0/1 and 0/2 shall take precedence over Numbered Appendix 0/5.

**7** Any reference in the Contract to a Clause number or Appendix shall be deemed to refer to the corresponding Substitute Clause number or Appendix listed in Appendix 0/1, 0/2 or 0/5.

**8** Where a Clause is altered any original Table/Figure referred to in the Clause shall apply unless the Table/ Figure is also altered. Where a Table/Figure is altered any reference in a Clause to the original Table/Figure shall apply to the altered Table/Figure.

**9** Where a Clause in the Specification relates to work goods or materials which are not required for the Works it shall be deemed not to apply**.**

**10** Any Appendix referred to in the Specification which is not used shall be deemed not to apply.

**11** Where a Clause in the Specification is prefixed by an # this indicates that this particular Clause has a substitute National Alteration for one or more of the Overseeing Organisations of Scotland, Wales or Northern Ireland. Substitute or additional National Clauses shall be used within countries to which they specifically apply and they are deemed to replace corresponding Clauses in the main text of the Specification as appropriate. The substitute National Clauses are located at the end of the relevant Series together with the additional National Clauses of the Overseeing Organisations.

**12** Other than where references to the Overseeing Organisation are made in the context of the Overseeing Organisation granting statutory or type approvals, the roles and functions of the Overseeing Organisation shall be undertaken by Blackpool Council (BC).

Where the Specification requires the provision of documentation to the Overseeing Organisation for statutory or type approval such documentation shall be provided to Blackpool Council.

**13**  If the Specification is used in conjunction with a Contract under which the *Contractor* is responsible for the design of any part of the Permanent Works, the delegation of the roles and functions of the Overseeing Organisation as stated in paragraph 12 above shall be further amended as follows**:**

1. If any agreement, consent or approval required to be obtained from the Overseeing Organisation impacts on the health and safety of the general public, the environment or any property or equipment not owned or operated by the *Contractor* or the Design Build Finance and Operate concessionaire, such agreement, consent, approval shall be obtained from Blackpool Council.
2. Where the Specification provides for the Overseeing Organisation to require a test, waive the requirement for a test or alter testing frequency, the party to whom the Overseeing Organisation’s roles and functions have been ascribed by paragraph 12 above shall exercise such decisions in accordance with Blackpool Council’s requirements stated in the Contract.

**PREAMBLE TO THE SPECIFICATION**

**Schedule of Pages and Relevant Publication Dates**

| **Series/Appendix** | **Page Number** | **Publication Date** |
| --- | --- | --- |
| 000 | 1 to 3 | May 2014 |
| 000 | 7 to 7F | February 2016 |
| 000 | 4 to 5 | May 2017 |
| 100 | 1 to 2, 4 to 9, 12 to 29F, WF1, N2 to N11F | May 2014 |
| 100 | 3, 10 to 11, N1 | December 2014 |
| 200 | 1 to 3F | February 2016 |
| 300 | 1 | May 2001 |
| 300 | 4 | November 2002 |
| 300 | 2 to 3, 5 to 6F | May 2008 |
| 400 | 1 to 24F | May 2017 |
| 500 | 23 to 24, 26 | November 2004 |
| 500 | 28F | May 2005 |
| 500 | 3, 22, N1F | May 2006 |
| 500 | 2, 5, 27 | November 2006 |
| 500 | 6, 25 | November 2007 |
| 500 | 1, 4, 7 to 21 | November 2009 |
| 600 | 1 to 68, 70 to 77F, S1 to S4F, W1 to W4F, N1 to N5F | February 2016 |
| 600 | 69 | February 2017 |
| 700 | 1 to 36F, N1 to N6F | February 2016 |
| 800 | 1 to 31F | February 2016 |
| 900 | 2 to 5, 9 to 22, 24 to 26, 28 to 67F | August 2008 |
| 900 | 1, 6 to 8, S1F | November 2008 |
| 900 | 23, 27 | May 2009 |
| 1000 | 1 to 45F | February 2016 |
| 1100 | N1F | November 2006 |
| 1100 | 3 | August 2008 |
| 1100 | 1 to 2, 4 to 6F | February 2017 |
| 1200 | 5 | May 2001 |
| 1200 | 2 to 3, W1F | August 2003 |
| 1200 | 1, 14 to 16F | May 2004 |
| 1200 | 4, 9 to 11, 13 | May 2005 |
| 1200 | 12 | November 2006 |
| 1200 | 6 to 7, N1 to N4F | November 2007 |
| 1200 | 8 | May 2008 |
| 1300 | N2F | November 2003 |
| 1300 | 3 to 4 | November 2004 |
| 1300 | 1, 5 to 10, 12F | November 2005 |
| 1300 | 2, 11 and N1 | May 2006 |
| 1400 | 2, N1F | May 2001 |
| 1400 | 1, 3 to 9F | May 2006 |
| 1500 | 1 to 31F | February 2017 |
| 1600 | 1, 4 to 5, 9, 15, 17 to 18, 24 to 26, 29 to 31, 35, 38, 49F | March 1998 |
| 1600 | 2, 6 to 8, 10 to 14, 16, 19, 27 to 28, 32 to 34, 36 to  37, 39 to 42, 44 to 48 | November 2003 |
|  |
| 1600 | 3, 20 to 23, 43 | November 2005 |
| 1700 | 1 to 27F | December 2014 |
| 1800 | 1 to 35F | August 2014 |
| 1900 | 1 to 35F, S1 to S2F | 1 to 35F, S1 to S2F |
| 2000 | 1, 3 to 4F | May 2001 |
| 2000 | 2 | November 2004 |
| 2100 | 1 to 2F | February 2016 |
| 2300 | 1 | March 1998 |
| 2300 | 2 to 3F | May 2001 |
| 2400 | 1, 4, 7F | May 2005 |
| 2400 | 2 | May 2006 |
| 2400 | 3, 5 to 6 | May 2008 |
| 2500 | 1 | May 2001 |
| 2500 | 2, 8, 11F | November 2003 |
| 2500 | 10 | November 2004 |
| 2500 | 6 to 7, 9 | May 2005 |
| 2500 | 5 | May 2006 |
| 2500 | 3 to 4 | November 2006 |
| 2600 | 1 | March 1998 |
| 2600 | 2 to 4 | November 2003 |
| 2600 | 5 | November 2004 |
| 2600 | 6 | May 2005 |
| 2600 | 7F | November 2006 |
| 3000 | 1, 4 to 7, 10, 12 to 17, 19, 22 to 27F | May 2001 |
| 3000 | 20 | November 2004 |
| 3000 | 2 to 3 | May 2006 |
| 3000 | 8 to 9, 11, 18, 21 | May 2008 |
| 5000 | 1, 4 to 19F, S1F | May 2005 |
| 5000 | 2 to 3 | November 2008 |
| Appendix A | 1 to 4F | May 2014 |
| Appendix B | 1 to 3F | May 2014 |
| Appendix C | 1 to 2F | May 2014 |
| Appendix D | 1F | May 2014 |
| Appendix D (NI) | N1F | May 2005 |
| Appendix E | 1F | May 2014 |
| Appendix F | 1 to 52F | May 2017 |
| Appendix G | Not used |  |
| Appendix H | 1 | May 2004 |
| Appendix H | 2 | November 2005 |
| Appendix H | 3 | November 2006 |
| Appendix H | 4 to 9F | November 2008 |

**APPENDIX 0/1: CONTRACT-SPECIFIC ADDITIONAL, SUBSTITUTE AND CANCELLED CLAUSES, TABLES AND FIGURES INCLUDED IN THE CONTRACT**

**List of Additional Clauses, Tables and Figures**

|  |  |  |
| --- | --- | --- |
| **Clause No.** | **Title** | **Written on Page No. following** |
|  |  |  |
| 170AR | Abatement of Nuisance | 25 |
| 171AR | Siting of Workshops and Depots | 25 |
| 172AR | Care of Public Highways | 26 |
| 173AR | Special requirements in relation to NRASWA | 26 |
| 174AR | As Built Drawings and CDM | 26 |
| 175AR | Services | 26 |
| 570AR  571AR | Works on Existing Drains, Sewers and Manholes  Material for Bedding/adjusting ironwork in the carriageway | 27  27 |
| 1221 AR | Preparation and Finish of Metal and Other Surfaces | 27 |
| 1401 AR | General | 28 |
| 1470AR | Scheme Specific Electrical Installations | 28 |
|  |  |  |

**List of substitute Clauses and Tables**

|  |  |  |
| --- | --- | --- |
| **Clause No.** | **Title** | **Written on Page No. following** |
|  |  |  |
|  | **None** |  |
|  |  |  |

**List of cancelled Clauses and Tables**

|  |  |  |
| --- | --- | --- |
| **Clause No.** | **Title** | **Written on Page No. following** |
|  |  |  |
|  | **None** |  |
|  |  |  |

|  |
| --- |
| **ADDITIONAL Clauses, Tables and Figures** |
| **170AR Abatement of Nuisance**  **Abatement of Nuisance**  Notwithstanding his obligations under the Conditions of Contract, the *Contractor* shall carry out the Works so as to cause the minimum of nuisance and inconvenience to the general public and to the owners and occupiers of property. In particular the *Contractor* shall comply with the following requirements: -  (i) **Roads to be kept clean**  All roads which are being used by the *Contractor*, Sub-Contractors' and Suppliers' vehicles and plant shall be kept clean and free from debris, dirt or mud arising from or due to the construction of the Works. To meet his obligations the *Contractor* shall provide, maintain and use as necessary suitable equipment including wheel wash and mechanical sweepers throughout the course of the Works.  (ii) **Dust Prevention**  Precautions shall be taken to prevent dust nuisance arising from the Works and shall include watering, or any other necessary measures which may be required from time to time.  (iii) **Control of Weeds**  All necessary steps shall be taken to curtail the growth on site of injurious weeds as prescribed under the Weeds Act, 1959, and any other weeds, which may be injurious or constitute a nuisance to land adjacent to the site.  (iv) **Burning of Waste**  No waste materials shall be disposed of by burning at any location within the works, including the site compound |

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| **ADDITIONAL Clauses, Tables and Figures** |
| **171AR Siting of Workshops and Depots**  The *Contractor* shall not site any workshops, mixing plants or depots for the storage of plant or materials: -   * + - 1. without the prior permission of the Overseeing Organisation       2. Where the Contractor sites his compound on private land he shall provide the Overseeing Organisation with a copy of the written consent of the legal land owner.       3. the *Contractor* shall not permit any person under his employment or that of his subcontractors to reside on site except a person who is acting in an official capacity for guarding the security of the site.       4. the *Contractor* shall be solely responsible for the security of the Site, and permanent and temporary Works together with his personnel, construction plant, materials and equipment. |
| **172AR Care of Public Highways**  1. Subject and without prejudice to the Conditions of Contract the *Contractor* shall:   1. take all reasonable measures necessary to avoid damage to the public   highway  (ii) be responsible for all repairs necessary as a consequence of his failure to comply with sub-clause i) of this Clause and shall submit to the Overseeing Organisation for approval his proposed method of repair. |

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| --- |
| **ADDITIONAL Clauses, Tables and Figures** |
| **173AR Special requirements in relation to NRSWA**  The site must have at least one qualified operative on site at all times during works, and the site must have a qualified supervisor appointed to the site who can oversee the works. The supervisor need not be on site at all times, but must be able to adequately carry out the role. The supervisor qualification does not replace or over rule the operative qualification and one person cannot cover both roles at the same time.  The operative must be certified for (Excavation, Backfill and Cold-lay Reinstatement, Units 001, 002, 003, 004, 005, 006, 007, 008, 009). The supervisor must be certified for (Monitoring Excavation, Backfilling and Reinstatement of Bituminous material Units 001, 010, 011, 012, 013, 014). |
| **174AR As Built Drawings and CDM**  The *Contractor* is to develop the Health and Safety Plan for inclusion in the Health and Safety  File in accordance with the Construction (Design and Management) Regulations 2015 and is to  provide the Overseeing Organisation with all the relevant information necessary for inclusion in  the Health and Safety File. |
| **175AR Services**   1. The Street Lighting is maintained under a PFI contract for Blackpool Council.    * 1. The Street Lighting contractor is EON Energy Solutions Ltd, Whitehills Depot, Plot 7, Unit 5, Whitehills Business Park, Blackpool. FY4 5 PZ. 2. The *Contractor* shall make arrangements for DNO supplies / disconnections as required within the works. All costs associted with this work are the responsibility of the *Contractor*. 3. All works to the Street Lighting MUST be carried out by Blackpools PFI contractor. The *Contractor* shall be responsible for programming their work. All costs associated with this work are the responsibility of the *Contractor*. |
| **570AR Works on Existing Drains, Sewers and Manholes**  Where new connections are required to be made to existing highway drains or soakaways, the *Contractor* shall prove by CCTV survey that the downstream run is clear and fit for the purpose and shall undertake such improvement as may be required to the satisfaction of the Overseeing Organisation  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **571AR Material for Bedding / Adjusting ironwork in the Carriageway**.   1. Reconstruction of brickwork within chambers, as required, shall be bonded with a Polyester resin mortar to a maximum depth of 300mm. 2. All highway ironwork shall comply and be installed in accordance with BS EN 124:2015 and HA104/09. 3. The Polyester Resin Mortar system should meet the following requirements within 1 hour of application:    * 1. Tactile Strength 8.25 N/mm2      2. Compressive Strength 61.5 N/mm2      3. Flexural Strength 19 N/mm2 |
| **Clause 1221 AR Preparation and Finish of Metal and Other Surfaces**  1. Permanent traffic signs and, where specified in Appendix 12/1 prescribed temporary traffic signs shall be prepared, protected against corrosion and finished in compliance with BSEN 12899-1:2007 and with sub-clause 2 – 8 of this Clause.  2. Faces of sign plates shall be prepared to receive sign face materials in compliance with BSEN 12899-1:2007 and to the recommendations of the sign face material manufacturer following completion of any preparation and finish in sub-Clauses 3 – 6 of this Clause.  3. Steel sign plates, frames and fittings and purlins shall be prepared and protected in compliance with BSEN 12899-1:2007 and be as described in Appendix 12/1. Preparation to clean steel 2nd Quality and painting of surfaces shall comply with the 1900 Series.  4. Steel posts and post housings shall be prepared and protected in compliance with BSEN 12899-1:2007. Painting shall comply with Appendix 12/1.  5. Aluminium or aluminium alloy posts and post housings shall be left unpainted, except for bituminous coating required by BSEN 12899-1:2007 below ground level. A matt appearance shall be achieved in accordance with sub-Clause 6(ii) of this Clause.  6. Backs of aluminium or aluminium alloy sheet or planks forming plate signs and external parts of luminaire housings or other permanently exposed components shall, to prevent specular reflection, be dulled using a coating with either paint or plastics as follows:  i. Plastics coating, and pre-treatment before its application, shall be in compliance of BSEN 12899-1:2007.  ii. Surfaces to be painted shall be lightly abraded in accordance with sub-Clauses 1903.5 and 1903.6 or degreased and etch primed with primer detailed in Standard BD35, item No.7. except for each primed surface, all surfaces shall be immediately cleaned in accordance with Sub-Clauses 1903.9.  7. Ferrous steel shall be finished inside and out by galvanising, electro-plating or zinc or aluminium spray in accordance with the 1900 Series, or other equivalent preparation and finish.  8. Stainless steel shall be left untreated except where the component is visible against the sign face, when it shall be covered by a suitable material, of a colour to match that part of the face. |
| **Clause 1401 AR General**  Sub-Clause 2 (iv) after ‘Lighting Units’ insert ‘Feeder Pillars, traffic Signal Controllers and the like’ |
| **1470AR Scheme Specific Electrical Installations**  The traffic counter to be installed on Yeadon Way shall be of a type as specified in Appendix12/70 |

**APPENDIX 0/3: LIST OF NUMBERED APPENDICES REFERRED TO IN THE SPECIFICATION AND INCLUDED IN THE CONTRACT**

The following is a complete list of the Numbered Appendices referred to in the Specification for Highway Works with those not adopted marked 'Not Used'.

Guide to types of Numbered Appendices - who compiles/completes

Symbol

(Co) Compiler compiles: Identified in the Notes for Guidance examples by the term 'Sample' included in their title.

(Co/C) Compiler partially compiles and *Contractor* completes and returns to *Project Manager*.

(Co/T) Compiler partially compiles and Tenderer completes and returns with Tender.

(C) *Contractor* completes and returns to *Project Manager*.

(I) For *Contractor*'s information only.

(P) This indicates the Appendix is a national proforma and format used must not be altered.

**LIST OF NUMBERED APPENDICES Referred to in the Specification for Highway Works**

| **Completed by** | **Appendix No** | **Title** |
| --- | --- | --- |
|  |  | **Introduction** |
| Co | 0/ 1 | Contract Specific Additional, Substitute and Cancelled Clauses, Tables and Figures Included in the Contract |
| Co | 0/ 2 | Contract Specific Minor Alterations to Existing Clauses, Tables and Figures included in the Contract |
| Co | 0/ 3 | List of Numbered Appendices |
| Co | 0/ 4 | List of Drawings Included in the Contract |
| Not Used | 0/ 5 | Special National Alterations of the Overseeing Organisation of Scotland/Wales/Northern Ireland |
|  |  | **Preliminaries** |
| Co | 1/ 1 | Temporary Accommodation and Equipment for the Overseeing Organisation |
| Not Used | 1/ 2 | Vehicles for the Overseeing Organisation |
| Not Used | 1/ 3 | Communication System for the Overseeing Organisation |
| Co | 1/ 4 | Working and Fabrication Drawings |
| Co | 1/ 5 | Testing to be Carried out by the *Contractor* |
| Not Used | 1/ 6 | Supply and Delivery of Samples to the Overseeing Organisation |
| Co | 1/ 7 | Site Extent and Limitations on Use |
| Not Used | 1/ 8 | Operatives for the Overseeing Organisation |
| Co | 1/ 9 | Control of Noise and Vibration |
| Not Used | 1/10 | Structures to be designed by The *Contractor* |
| Co/T | 1/11 | Structural Elements and other features to be designed by the *Contractor* |
| Co | 1/12 | Setting Out and Existing Ground Levels |
| Co | 1/13 | Programme of Works |
| Co | 1/14 | Payment Application |
| Not Used | 1/15 | Accommodation Works |
| Co | 1/16 | Privately and Publicly Owned Services and Supplies |
| Co | 1/17 | Traffic Safety and Management |
| Co | 1/18 | Temporary Diversions of Traffic |
| Co | 1/19 | Routeing of Vehicles |
| Not Used | 1/20 | Recovery Vehicles for Breakdowns |
| Co | 1/21 | Information Boards |
| Co | 1/22 | Progress Photographs |
| Co | 1/23 | Risks To Health and Safety from materials and Substances |
| Co | 1/24 | Quality Management System |
| Not Used | 1/25 | Temporary Closed-Circuit Television (CCTV) System for the Monitoring of Traffic |
|  |  |  |
| Not Used | 1/26 | Temporary Automatic Speed Camera System For The Enforcement Of Mandatory Speed Limits At Roadworks (TASCAR) |
| Not Used | 1/27 | Temporary Automatic Speed Camera System for The Enforcement of Mandatory Speed Limits at Roadworks (Tascar) – Particular Requirements |
|  |  | **Site Clearance** |
| Not Used | 2/ 1 | List of Buildings etc. to be Demolished |
| Co | 2/ 2 | Filling of Trenches and Pipes |
| Co | 2/ 3 | Retention of Material Arising from Site Clearance |
| Not Used | 2/ 4 | Explosives and Blasting |
| Co | 2/ 5 | Hazardous Material |
|  |  | **Fencing** |
| Co/T | 3/ 1 | Fences, Gates and Stiles |
|  |  | **Road Restraint Systems (Vehicle and Pedestrian)** |
| Co | 4/ 1 | Road Restraint Systems (Vehicle and Pedestrian) |
| Not Used | 4/ 2 | Information Required to Demonstrate Compliance of Road Restraint systems to BSEN 1317-1, BSEN 1317-2, BDEN 1317-3 and DD ENV 1317-4:2002 |
|  |  | **Drainage and Service Ducts** |
| Co | 5/ 1 | Drainage Requirements |
| Co | 5/ 2 | Service Duct Requirements |
| Not Used | 5/ 3 | Surface Water Channels and Drainage Blocks |
| Not Used | 5/ 4 | Fin Drains and Narrow Filter Drains |
| Co | 5/ 5 | Combined Drainage and Kerb Systems |
| Co | 5/ 6 | Linear Drainage Channel Systems |
| Not Used | 5/ 7 | Thermoplastics Structural Wall Pipes and Fittings |
|  |  | **Earthworks** |
| Co | 6/ 1 | Requirements for Acceptability and Testing etc. of Earthworks Materials |
| Not Used | 6/ 2 | Requirements for Dealing with Class U1B and Class U2 Unacceptable Materials |
| Not Used | 6/ 3 | Requirements for Excavation, Deposition, Compaction (Other than Dynamic Compaction) |
| Not Used | 6/ 4 | Requirements for Class 3 Material |
| Co/T | 6/ 5 | Geotextiles Used to Separate Earthworks Materials |
| Not Used | 6/ 6 | Fill to Structures and Fill Above Structural Foundations |
| Not Used | 6/ 7 | Sub-formation and Capping and Preparation and Surface Treatment of Formation |
| Not Used | 6/ 8 | Topsoiling |
| Not Used | 6/ 9 | Earthwork Environmental Bunds, Landscape Areas, Strengthened Embankments |
| Not Used | 6/10 | Ground Anchorages, Crib Walling and Gabions |
| Not Used | 6/11 | Swallow Holes and Other Naturally Occurring Cavities and Disused Mine Workings |
| Not Used | 6/12 | Instrumentation and Monitoring |
| Co/T | 6/13 | Ground Improvement |
| Not Used | 6/14 | Limiting values |
| Not Used | 6/15 | Limiting Values for Harm to Human Health and the Environment |
|  |  | **Pavements** |
| Co | 7/ 1 | Permitted Pavement Options (Schedules 1,2,3,4 and 5) |
| Co | 7/ 2 | Excavation, Trimming and Reinstatement of Existing Surfaces |
| Not Used | 7/ 3 | Surface Dressing Sheets 1, 2 & 3 |
| Co | 7/ 4 | Bond Coats, Tack Coats and Other Bituminous Sprays |
| Not Used | 7/ 5 | In Situ Recycling: The Remix and Repave Process |
| Not Used | 7/ 6 | Breaking Up or Perforation of Existing Pavements |
| Not Used | 7/ 7 | Slurry Surfacing Incorporating Microsurfacing (Sheets 1, 2 and 3) |
| Not Used | 7/ 8 | Not Used |
| Co | 7/ 9 | Cold-Milling (Planing) Of Bituminous Bound Flexible Pavement |
| Not Used | 7/10 | Not Used |
| Not Used | 7/11 | Overband And Inlaid Crack Sealing Systems |
| Not Used | 7/12 | Arrester Beds |
| Not Used | 7/13 | Saw-Cut and Seal Bituminous Overlays on Existing Jointed Concrete Pavements |
| Not Used | 7/14 | Preparation of Jointed Concrete Pavements Prior To Overlaying and Saw-Cut and Seal of The Bituminous Overlay |
| Not Used | 7/15 | Saw-Cut, Crack and Seat Existing Jointed Reinforced Concrete Pavements |
| Not Used | 7/16 | Cracking and Seating of Existing Jointed Unreinforced Concrete Pavements and CBM bases |
| Not Used | 7/17 | Cracking Plant and Equipment Progress-Record |
| Not Used | 7/18 | Site Specific Details and Requirements for Cold Recycled Bitumen Bound Material |
| Not Used | 7/19 | Site Specific Details and Requirements for Recycled Cement Bound Material |
| Not Used | 7/20 | Not Used |
| Not Used | 7/21 | Surface Dressing - Recipe Specification |
| Not Used | 7/22 | Repairs to Potholes |
|  |  | **Road Pavements -Concrete and Cement Bound Materials** |
| Not Used | 10/ 1 | Plant and Equipment for the Construction of Exposed Aggregate Surface |
|  |  | **Kerbs, Footways and Paved Areas** |
| Co | 11/ 1 | Kerbs, Footways and Paved Areas |
| Not Used | 11/ 2 | Access Steps |
|  |  | **Traffic Signs and Road Markings** |
| Co | 12/ 1 | Traffic Signs: General |
| Not Used | 12/ 2 | Traffic Signs: Marker Posts |
| Co | 12/ 3 | Traffic Signs and Road Markings |
| Not Used | 12/ 4 | Traffic Signs: Cones, Cylinders, FTDs and Other Traffic Delineators |
| Not Used | 12/ 5 | Traffic Signs: Traffic Signals |
| Not Used | 12/ 6 | Traffic Signs: Special Sign Requirements on Gantries |
|  |  | **Road Lighting Columns, Brackets and CCTV Masts** |
| Not Used | 13/ 1 | Information to be provided when specifying lighting columns and brackets |
| Not Used | 13/ 2 | Typical lighting Column and Bracket Data Sheets 1 and 2 |
| Not Used | 13/ 3 | Instruction for Completion of Lighting Column and Bracket Data Sheets |
| Not Used | 13/ 4 | Information to be Provided When Specifying CCTV Masts |
| Not Used | 13/ 5 | (Specification for Highway Works) Typical CCTV Mast Data |
| Not Used | 13/ 6 | Instructions for Completion of CCTV Mast Data Sheets |
| Not Used | 13/ 7 | Information to be Prepared When specifying Cantilever Masts |
| Not Used | 13/ 8 | (Specification for Highway Works) Typical Cantilever Masts Data Sheets 1 and 2 |
| Not Used | 13/ 9 | Instructions for Completion of Cantilever Masts Data Sheets |
|  |  | **Electrical Work for Road Lighting and Traffic Signs** |
| C | 14/ 1 | Site Records |
| C/T | 14/ 2 | Location of Lighting Units and Feeder Pillars |
| Not Used | 14/ 3 | Temporary Lighting |
| Not Used | 14/ 4 | Electrical Equipment for Road Lighting |
| Not Used | 14/ 5 | Electrical Equipment for Traffic Signs |
|  |  | **Motorway Communications** |
| Not Used | 15/ 1 | Motorway Communications |
| Not Used | 15/ 2 | Cable and Duct Requirements |
|  |  | **Piling and Embedded Retaining Walls** |
| Not Used | 16/ 1 | General Requirements for Piling and Embedded Retaining Walls |
| Not Used | 16/ 2 | Precast Reinforced and Pre-stressed Concrete Piles and Precast Reinforced Concrete Segmental Piles |
| Not Used | 16/ 3 | Bored Cast-in-place Piles |
| C/T | 16/ 4 | Bored Piles Constructed Using Continuous Flight Augers and Concrete or Grout Injection through Hollow Auger Stems |
| Not Used | 16/ 5 | Driven Cast-in-Place Piles |
| Not Used | 16/ 6 | Steel Bearing Piles |
| Not Used | 16/ 7 | Reduction of Friction on Piles |
| Not Used | 16/ 8 | Non-Destructive Methods for Testing of Piles |
| Not Used | 16/ 9 | Static Load Testing of Piles |
| Not Used | 16/10 | Diaphragm Walls |
| Not Used | 16/11 | Hard/Hard Secant Pile Walls |
| Not Used | 16/12 | Hard/Soft Secant Pile Walls |
| Not Used | 16/13 | Contiguous Bored Pile Walls |
| Not Used | 16/14 | King Post Walls |
| Not Used | 16/15 | Steel Sheet Piles |
| Not Used | 16/16 | Integrity Testing of Wall Elements |
| Not Used | 16/17 | Instrumentation for Piles and Embedded Walls |
| Not Used | 16/18 | Support Fluid |
|  |  | **Structural Concrete** |
| Not Used | 17/ 1 | Schedule for the Specification of Designed Concrete |
| Not Used | 17/ 2 | Concrete - Impregnation Schedule |
| Co | 17/ 3 | Concrete - Surface Finishes |
| Not Used | 17/ 4 | Concrete – General |
| Not Used | 17/ 5 | Buried Concrete |
| Not Used | 17/ 6 | Grouting and Duct Systems For Post-Tensioned Tendons |
|  |  | **Steelwork for Structures** |
| Not Used | 18/ 1 | Requirements for Structural Steelwork |
|  |  | **Protection of Steelwork Against Corrosion** |
| Not Used | 19/ 1 | Form HA/P1 (New Works) Paint System Sheet |
| Not Used | 19/ 2 | Requirements for Other Works |
| Not Used | 19/ 3 | Form HA/P2 Paint Data Sheet |
| Not Used | 19/ 4 | Form HA/P3 Paint Sample Dispatch List, Sheet 1 and 2 |
| Not Used | 19/ 5 | General Requirements |
|  |  | **Waterproofing for Structures** |
| Not Used | 20/ 1 | Waterproofing for Concrete Structures |
|  |  | **Bridge Bearings** |
| Not Used | 21/ 1 | Bridge Bearing Schedule |
| Not used | 22/1 |  |
|  |  | **Bridge Expansion Joints and Sealing of Gaps** |
| Not Used | 23/ 1 | Bridge Deck Expansion Joint Schedule |
| C | 23/ 2 | Sealing of Gaps Schedule (Other Than in Bridge Deck Expansion Joints) |
|  |  | **Brickwork, Blockwork and Stonework** |
| Not Used | 24/ 1 | Brickwork, Blockwork and Stonework |
|  |  | **Special Structures** |
| Not Used | 25/ 1 | Requirements for Corrugated Steel Buried Structures |
| Not Used | 25/ 2 | Requirements for Reinforced Soil and Anchored Earth Structures |
| Not Used | 25/ 3 | Requirements for Pocket -Type and Grouted Cavity Reinforced Brickwork Retaining Wall Structures |
| Not Used | 25/ 4 | Environmental Barriers |
| Not Used | 25/ 5 | Requirements For Buried Rigid Pipes For Drainage Structures |
|  |  | **Miscellaneous** |
| Co | 26/ 1 | Ancillary Concrete |
| Not Used | 26/ 2 | Bedding Mortar |
| Not Used | 26/ 3 | Cored Thermoplastic Node Markers |
|  |  | **Landscape and Ecology** |
| Not Used | 30/ 1 | General |
| Not Used | 30/ 2 | Weed Control |
| Not Used | 30/ 3 | Control of Rabbits and Deer |
| Not Used | 30/ 4 | Ground Preparation |
| Not Used | 30/ 5 | Grass Seeding, Wildflower Seeding and Turfing |
| Not Used | 30/ 6 | Planting sheets 1 and 2 |
| Not Used | 30/ 7 | Grass, Bulbs and Wildflower Maintenance |
| Not Used | 30/ 8 | Watering |
| Not Used | 30/ 9 | Establishment Maintenance for Planting |
| Not Used | 30/10 | Maintenance of Established Trees and Shrubs |
| Not Used | 30/11 | Management of Waterbodies |
| Not Used | 30/12 | Special Ecology Measures |
|  |  | **Maintenance Painting of Steelwork** |
| Not Used | 50/1 | (Specification for Highway Works) From HA/P1 (Maintenance) Paint System Sheet |
| Not Used | 50/2 | Requirements for Other Work |
| Not Used | 50/3 | (Specification for Highway Works) From HA/P2 Paint Date Sheet |
| Not Used | 50/4 | (Specification for Highway Works) From HA/P3 Paint Sample Despatch List: Sheets 1 and 2 |
| Not Used | 50/5 | General Requirements |

**LIST OF CONTRACT SPECIFIC NUMBERED APPENDICES DEVISED FOR THE CONTRACT**

12/70 Street Furniture **APPENDIX 0/4: LIST OF DRAWINGS INCLUDED IN THE CONTRACT**

1. **Contract-specific Drawings**

**Table 1: Tender Drawings**

| **Drawing no.** | **Title** | **Revision** |
| --- | --- | --- |
| 03079AB/001-1 | Preferred Scheme – Proposed Remedial Works (Sheet 1 of 2) | A |
| 03079AB/001-2 | Preferred Scheme – Proposed Remedial Works (Sheet 2 of 2) | A |
| 03079AB/002 | Proposed Remedial Works Options | A |
| 03079AB/003-1 | Borehole Location Plan (Sheet 1 of 2) | 0 |
| 03079AB/003-2 | Borehole Location Plan (Sheet 2 of 2) | 0 |
| 03079AB/004 | Geological Long Section | 0 |
| 03079AB/005 | Lighting Column – Sleeved Foundation | 0 |
| 493272.T.002 | Diversion Signage Plan | 0 |
| 493272.T.003 | Compound Location Plan | 0 |
| 493272.T.004 | Sign Removal Plan | 0 |
| 493272.T.005 | Traffic Counter Loop Configuration | 0 |

Historical records and reports relating to the extents of Phase 2 are listed below.

**Table 2: Document Register**

| **Date** | **Originator** | **Title** | **Document No.** | **Issue no.** |
| --- | --- | --- | --- | --- |
| 14/02/2019 | Coffey Geotechnics Ltd | Geotechnical Interpretative Report, Yeadon Way Phase 2 | 03079AA\_R\_001A\_MN-GIR | 01 |
| Jan 2019 | WYG | Factual Ground Investigation Report, Yeadon Way Phase 2 | A109957-1 | 2 |
| April 2015 | WYG | Yeadon Way Blackpool, Additional Ground Investigation Factual Report | A090035-1 | 1 |
| Dec 2014 | WYG | Yeadon Way Blackpool, Ground Investigation, Factual Report | A090035 | 1 |
| Sept 2014 | CH2M Hill | Yeadon Way Refurbishment Interpretative Report | 493272/R3 | 1 |
| Feb 2013 | Geotechnics Ltd | Factual Report, Ground Investigation at Yeadon Way, Blackpool | PN122814 | - |
|  |  | **Historical GI** |  |  |
| - | - | 1972 drillers record | BB1 | - |
| - | - | 1972 drillers record | BB2 | - |
| - | - | 1972 drillers record | BB3 | - |
| - | - | 1972 drillers record | BB4 | - |
| - | - | 1972 borehole logs | BB1 to BB4 | - |
| - | - | 1983-1985 borehole & trial pit logs | BH1-8, TP1-17 | - |
| - | - | 1983-1985 borehole log - Vicarage road bridge | BH4362/1R | - |
| - | - | 1983-1985 borehole logs - St Anne’s road bridge | BH4364/1,1R,2,2R,3,4 | - |
| - | - | 1983-1985 borehole log - Chapel road bridge | BH4365/1 | - |
| - | - | BH Plan & Longitudinal Section sheet 1 of 3 | 4/3006/9 | - |
| - | - | BH Plan & Longitudinal Section sheet 2 of 3 | 4/3006/9 | - |
| - | - | BH Plan & Longitudinal Section sheet 3 of 3 | 4/3006/9 | - |
|  |  | **Historic Drawings** |  |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – General arrangement | 4362/1A |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Abutments | 4362/3A |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Beam Mark A | 4362/4A |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Beam Mark B | 4362/5A |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Bridge Deck | 4362/6A |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – General arrangement | 4362/7 |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Waterproofing & Joints | 4362/8 |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Reinforced Conc parapet unit | 4362/8A |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – Misc details | 4362/10C |  |
| 1986 | Lancashire County Council | Vicarage Lane Bridge – 2 Rail Aluminium Parapet | ABH 8623B |  |
| 1986 | Lancashire County Council | Precast Conc Safety Barrier standard unit | 4362/N3 |  |
| 1986 | Lancashire County Council | Precast Conc Safety Barrier closure & transition units | 4362/N4 |  |
| 1986 | Lancashire County Council | Visual Screen | 4362/N6 |  |
| 1986 | Lancashire County Council | Access Gates through Visual Screen | 4362/N7 |  |
| 1986 | Lancashire County Council | Advance Bridgeworks Elostometric bearings | 4362/G/1A |  |
| 1986 | Lancashire County Council | Advance Bridgeworks Plinths joints & Dowels | 4362/G/2A |  |
| 1986 | Lancashire County Council | St Annes Road Bridge - Use of Existing Bridge for Access | 4362G | 5 |
| 1986 | Lancashire County Council | Precast Concrete Safety Barrier Mk2 - Standard Unit | 4362N | E3 |
| 1986 | Lancashire County Council | Hawes Side Lane Bridge General Arrangement | 4363/1 |  |
| 1986 | Lancashire County Council | Hawes Side Lane Bridge Reinf Conc deck slab | 4363/2 |  |
| 1986 | Lancashire County Council | Hawes Side Lane Bridge General Arrangement & Demolition | 4363/3A |  |
| 1986 | Lancashire County Council | Hawes Side Lane Bridge Reinf Conc Parapet Unit | 4363/4A |  |
| 1986 | Lancashire County Council | Hawes Side Lane Bridge Misc Details | 4363/5A |  |
| 1986 | Lancashire County Council | Hawes Side Lane Bridge 2 Rail Aluminium Parapet | 4363/G8 |  |
| 1986 | Lancashire County Council | St Annes Road Bridge 2 Rail Aluminium Parapet | 4363/G9 |  |
| 1986 | Lancashire County Council | St Annes Road Bridge - General Arrangement | 4364/1 | A |
| 1986 | Lancashire County Council | St Annes Road Bridge - Boreholes Sheet 1 | 4364/2-1 | - |
| 1986 | Lancashire County Council | St Annes Road Bridge - Boreholes Sheet 2 | 4364/2-2 | - |
| 1986 | Lancashire County Council | St Annes Road Bridge - Setting Out & Piling | 4364/3 | E |
| 1986 | Lancashire County Council | St Annes Road Bridge - Demolition Excavation & Filling | 4364/4 | - |
| 1986 | Lancashire County Council | St Annes Road Bridge - West Abutment Substructure | 4364/6 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - West Abutment Reinforcement | 4364/7 | B |
| 1986 | Lancashire County Council | St Annes Road Bridge - East Abutment Substructure | 4364/8 | D |
| 1986 | Lancashire County Council | St Annes Road Bridge - East Abutment Reinforcement | 4364/9 | A |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark A | 4364/10 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark A Segments A1 & A3 | 4364/11 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark A Segment A2 | 4364/12 | B |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark B | 4364/13 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark B Segments B1 & B3 | 4364/14 | D |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark B Segment B2 | 4364/15 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark C | 4364/16 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark C Segments C1 & C3 | 4364/17 | D |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark C Segment C2 | 4364/18 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark D | 4364/19 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark D Segments D1 & D3 | 4364/20 | E |
| 1986 | Lancashire County Council | St Annes Road Bridge - Beam Mark D Segment D2 | 4364/21 | D |
| 1986 | Lancashire County Council | St Annes Road Bridge – Deck | 4364/22 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Concrete Parapets | 4364/23 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Bearings | 4364/24 | B |
| 1986 | Lancashire County Council | St Annes Road Bridge - Waterproofing & Joints | 4364/25 | - |
| 1986 | Lancashire County Council | St Annes Road Bridge - Miscellaneous Details | 4364/26 | D |
| 1986 | Lancashire County Council | St Annes Road Bridge - Retaining Wall Layout | 4364/27 | B |
| 1986 | Lancashire County Council | St Annes Road Bridge - Retaining Wall Setting Out Details | 4364/28 | E |
| 1986 | Lancashire County Council | St Annes Road Bridge - Retaining Walls Concrete & Reinforcement Details | 4364/29 | C |
| 1986 | Lancashire County Council | St Annes Road Bridge - Retaining Wall Concrete Parapet Units | 4364/30 | B |
| 1986 | Lancashire County Council | St Annes Road Bridge - Retaining Wall Concrete Parapet Units | 4364/31 | A |
| 1986 | Lancashire County Council | St Annes Road Bridge - Brick Retaining Wall | 4364/32 | - |
| 1986 | Lancashire County Council | St Annes Road Bridge - Brick Retaining Wall | 4364/33 | - |
| 1986 | Lancashire County Council | St Annes Road Bridge - Concrete Wingwall Makeups | 4364/34 | B |
| 1986 | Lancashire County Council | St Annes Road Bridge - Reinforcement Details of Wingwall Makeups | 4364/35 | A |
| 1984 | Lancashire County Council | Chapel Road Bridge General Arrangement | 4365/1A |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Abutments | 4365/3A |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Precast Beam Mark A | 4365/4A |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Precast Beam Mark B | 4365/5B |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Deck | 4365/6A |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Aluminium Parapets | 4365/7B |  |
| 1984 | Lancashire County Council | Chapel Road Bridge General Arrangement | 4365/8 |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Safety Barrier and Parapet | 4365/10 |  |
| 1984 | Lancashire County Council | Chapel Road Bridge Cranked End Rails | ABH 8535C |  |
| 1984 | Lancashire County Council | Whalley Lane Bridge General Arrangement | 4367/1 |  |
| 1984 | Lancashire County Council | Whalley Lane Bridge Precast Conc Deck | 4367/2 |  |
| 1984 | Lancashire County Council | Whalley Lane Bridge General Arrangement & Demolition | 4367/3A |  |
| 1984 | Lancashire County Council | Whalley Lane Bridge Reinforced Conc Parapet | 4367/4A |  |
| 1984 | Lancashire County Council | Whalley Lane Bridge Misc details | 4367/5B |  |
| 1984 | Lancashire County Council | Whalley Lane Bridge Aluminium Parapet | ABH 8622C |  |
| 2011 | Blackpool Council | Rough Heys Lane Bridge Assessment Report | RHL/BAD/2011 |  |
|  |  | **Existing Drainage Drawings** |  |  |
| undated | Blackpool Council | Drainage Connection Location – Bridge House Road | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Bridge House Road (MH013) Sheet 1 | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Bridge House Road (MH013) Sheet 2 | - | - |
| undated | Blackpool Council | Drainage Connection Location – Chapel Road | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Chapel Road (MH019) Sheet 1 | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Chapel Road (MH019) Sheet 2 | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Chapel Road (MH019) Sheet 3 | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Chapel Road (MH019) Sheet 4 | - | - |
| undated | Blackpool Council | Drainage Connection Location – Hawes Side Lane | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Hawes Side Lane (MH008) Sheet 1 | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Hawes Side Lane (MH008) Sheet 2 | - | - |
| undated | Blackpool Council | Drainage Connection Location – Vicarage Lane | - | - |
| undated | Blackpool Council | Drainage Discharge Location – Vicarage Lane (MH015) Sheet 1 | - | - |
|  |  |  |  |  |
| May 2015 | G.J.Brooks Ltd | Topographical Survey Sheets 1 - 4 |  |  |
| Aug 2018 | EON | Street Lighting Assets | SL/YW/001 |  |

**APPENDIX 1/1:TEMPORARY ACCOMMODATION AND EQUIPMENT FOR THE OVERSEEING ORGANISATION**

**Principal Offices for the Overseeing Organisation**

The principal offices for the Overseeing Organisation are to include:

1. Car parking suitable for 3 vehicles shall be provided adjacent to the Overseeing Organisation’s office for the sole use of the Overseeing Organisation’s staff

1. The office shall be divided internally to the satisfaction of the Overseeing Organisation. The floor area shall be not less than 21 sq.m (excluding toilet facilities).
2. The building shall be of adequate waterproof construction and be subject to the approval of the Project Manager. All floors to be covered with heavy duty vinyl or other approved material. Adequate heaters of approved design and capacity, and lighting and power points as required are to be provided. The accommodation is to be available 24 hours per day occupancy, and as such all services are required on a 24 hour basis.
3. Cylinder night locks to be fitted to all internal and external doors of the Overseeing Organisation’s offices. Three keys shall be provided for each lock.
4. All windows to be fitted with anti-vandal grilles/ shutters.
5. The *Contractor* shall arrange for the daily cleaning of all offices, passageways etc., throughout the duration of the works and any specified retention during the maintenance period, and for the provision of an adequate supply of toilet soap, washing up liquid, hand cleaner, towels, toilet rolls, dusters and cleaning materials.

**Fittings and Furnishings of Accommodation** (all to be new).

Provide and fix for the sole use of the employer:

(Items marked (R) to be retained by the Overseeing Organisation)

Office No.1

3No. Kneehole desk 1.8 m x 900 mm with locking drawers (complete with 2 keys)

3No. Chair (armchair type)

6 No. Chairs (meeting room type)

1 No. Table 2.250 m x 750 mm

1 No. Lockable 4 drawer steel filing cabinets (complete with 2 keys)

1 No. Lockable Steel Security Cabinet (For the Storage of Equipment)

2 Lin Metres 300 mm x 25 mm shelving

4 No. Hat and Coat Hooks

2 No. 4 tier beanstalk filing tray with base

1 No. Waste paper basket

1 No. Wall Clock

1 No Plan rail suitable for A0 drawings

Adequate supply of tea, coffee, sugar and fresh milk (daily), tea towel, dish cloths, washing

up liquid, polish, disinfectant, hand towels, soap etc.

The *Employer’s* staff will have full access to the *Contractor’s* facilities (which shall be adjacent) including toilets (Male and female), photocopying, stationary, scanning, internet facilities and refreshments.

List of Office Equipment (all to be new)

(R) 1 No. True meter measuring wheel

(R) 2 No. 150 mm scale rules

(R) 2 No. 300 mm scale rules

(R) 2 No. 32” widescreen monitors

(R) 1 No. WiFi connected A3 printer/copier/scanner

(R) 2 No. 11” IPad Pro 64GB WiFi enabled

(R) 2 No. IPad Pencil for 11” IPad Pro

(R) 2 No. OtterBox Symmetry Series 360 Case for 11” IPad Pro

Quantity of stationary items and printer inks to the sum of £250

List of Surveying and Other Equipment

1 No. Automatic Level with tripod and case

1 No. 4 m Tristal levelling staff and bubble

(R) 2 No. 50 m stilon tapes

(R) 4 No. 8m pocket tapes

(R) 2 No 5m pocket tapes

(R) 2 No. Bricklayers 900 mm spirit level

(R) 1 No. 225 mm spirit level

(R) 6 No. A4 size clip board

(R) 2 No. Inspection Hand Lamps (space beam)

(R) 2 No Water resistant Head torches (LED) minimum 300 lumen

(R) 1 No. Fully Stocked First Aid box

Quantity of pegs, nails, road nails, survey spray paint in four colours, batteries and builder’s string lines as required. The *Contractor* shall provide adequate supplies of batteries and spares for all equipment as required by the Overseeing Organisation.

List of Clothing and Equipment

(R) 3 No. Yellow (Gortex/ Dritex/ Breathable type) waterproof road safety jackets conforming with EN 471 Class3 complete with warm pile lining, gloves and over-trousers (EN 471 Class 1).Unbranded

(R) 4 No. Safety Helmets kitemarked to EN 397 with chin straps

(R) 3 No. Pairs rubber knee boots conforming with EN 345 200 joules with steel midsoles

(R) 3No. Pairs heavy duty seaboot stockings

(R) 3No. Pairs safety boots conforming with EN 345 200 joules with steel midsoles

(R) 4No. Pairs safety goggles to B.S. 2092.1

(R) 4No. Yellow high visibility sleeved executive style safety waistcoats with pockets conforming with EN 471 Class 3

(R) 4 No Pairs of Hearing protection {ear defenders to EN 352-1-2002}

(R) 4No. Pairs of woollen thermal gloves

(R) 4 No. Fleece or similar equivalent thermal jackets Unbranded.

Consumable items

* Gloves (as required)
* Light eye protection (as required)

**Prior to ordering office equipment the *Contractor* should check with the Overseeing Organisation for any amendments, additions or deletions of the listed items.**

**APPENDIX 1/4: WORKING AND FABRICATION DRAWINGS**

The *Contractor* shall provide the Overseeing Organisation with detailed working and fabrication drawings for the following aspects of the works in accordance with Clause 104.

|  |  |  |
| --- | --- | --- |
| **Series** | **Description of Work** | **Minimum period for submission of drawings** |
|  |  |  |
| 1200 | Traffic Signs | 2 weeks prior to fabrication. |
|  |  |  |

**APPENDIX 1/5: TESTING TO BE CARRIED OUT BY THE *CONTRACTOR***

**1** All sampling and testing to indicate compliance with the Specification shall be carried out by the *Contractor*.

**2** Tests comparable to those specified in Table NG 1/1 will be necessary for any equivalent work, goods or materials proposed by the *Contractor*.

**3** A UKAS or equivalent accredited laboratory sampling and test report or certificate is required for those tests identified by (N).

**4** The *Contractor* shall submit copies of all test certificates for works, goods and materials to the Overseeing Organisation.

**5** All test failures or observed anomalies shall be notified to the Overseeing Organisation immediately in order that timely action to resolve the problem can be implemented.

**6** Testing/certification requirements for this Contract are shown highlighted on the Table NG 1/1 included in Part 2 of the Specification.

| **Clause** | **Work, Goods or Material** | | **Test** | **Frequency of Testing** | **Test Certificate** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- |
| **Series 500** | | | | | | |
| 501 | Pipes for drainage and service ducts | |  |  |  | Product certification scheme applies  Note: Certificates are provided for in the relevant BS but are not required except for pipes which are not quality marked by a UKAS or equivalent accredited body |
| Vitrified clay | | Not Required |
| Concrete- PC/SRC | Not exceeding 900mm diameter | Not Required | See note |
| Concrete- Pre-stressed |  |
| Iron-cast | |  |
| Iron-ductile | | See note |
| PVC-U | |  |
| GRP | |
| Plastics. See Table 5/1 | |
| Corrugated steel | | (Manufacturer’s tests) | Required (AASHTO) |
| Corrugated steel bitumen protection, not exceeding 900mm dia | |
| Other materials | |  |  | BBA  certification  (or equivalent)  applies |
| 503 | Pipe Bedding | | Grading and fines | 1 per week | Required | Results of routine control tests from the factory production control system operated by the producer to be provided – see Annex C of BS EN 13242.  Appropriate tests/samples for the resistance to freezing and thawing (magnesium sulfate soundness) should be scheduled where required, NG 803.4 |
| Water-soluble sulphate (WS) content (N) | 5 per source | Minimum to allow for natural variability of sulphur compounds |
|  |  | | Oxidisable sulphides (OS) content and total potential sulphate (TPS) content (N) | 5 per source |
| 503 | Pipe Bedding | | Resistance to fragmentation | 1 per source |  | LA category |
| 506 | Sealing existing drains | |  |  |  | Appropriate tests/ samples should be scheduled where not included under other clause |
| Concrete | |
| Grout | |
| Steel fitments | |
| Covers, grates and frames | | Not Required |  | Product certification scheme applies |
| Cover bolts | | Not Required |  | Quality management scheme applies |
| 508 | Gullies and pipe junction | |  |  |  | Production  certification scheme applies |
| Precast concrete | |  |
| Clay | |  |
| Cast iron and steel | |  |  |
| 509 | Water tightness of joints | | Air test | All pipelines with watertight joints | Required |  |

| **Clause** | **Work, Goods or Material** | **Test** | **Frequency of Testing** | **Test Certificate** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **Series 700** | | | | | |
| 710 | Constituent materials in recycled aggregate | Quality Control | Checks are to be carried out by the *Contractor* in accordance with the procedure set down in ‘Quality Control – Production of Recycled Aggregates’ and with those in this Clause | Required | The quality control procedure should be in accordance with ‘Quality Control – Production of Recycled Aggregates’ published by Construction Research Communications (CRC).  The results of all quality control checks shall be delivered promptly to the Overseeing Organisation on request |
|  | |  |  |  |  |
| 901, 925, 937, 938, 943 | Aggregates for bituminous materials |  |  | Required | National quality management sector schemes apply |
| Resistance to fragmentation (hardness) | Resistance to fragmentation (N) | Monthly |  |
| Resistance to freezing and thawing (durability) | Soundness (N) | 1 per source | Where required – See NG 901.2 |
| Water absorption (N) | Monthly |  |
| Cleanness | Sieve test (mass passing 0.063 mm sieve) (N) | Monthly | Washing and sieving method to be used |
| Shape | Flakniness density (N) | Monthly |  |
| Blast furnace slag | Bulk density (N) | 1 per 500 tonnes |  |
|  | Soundness (N) | Once every 4 months |  |
|  | Dicalcium silicate disintegration (N) | 1 per 500 tonnes |  | These are air-cooled blast furnace slag |
|  | Iron disintegration (N) |  |  |  |
| Steel slag | Bulk density | 1 per 500 tonnes | Required |  |
| Volume stability (N) | 1 per 500 tonnes |  |
| Coarse aggregate for surface course | Resistance to polishing (PSV) (N) | 1 per source |  |
| Resistance to surface abrasion (AAV) | 1 per source |  |
| 901, 925, 937, 938, 943 | Binder for bituminous materials | Penetration (N) | 1 per 750 tonnes | Required | National quality management sector schemes apply. Modified binders should have a BBA HAPAS Roads and Bridges Certificate. In the event that no such Certificate have been issued, then in the interim, only modified binders undergoing BBA assessment should be considered for approval by the Overseeing Organisation.  (More frequent tests/samples should be scheduled for modified binders.) |
| Softening point (N) | 1 per 750 tonnes |
| 903 to 907, 909 to 912, 914,  925,  926,  929,  937,  938,  942,  943,  946 to 948 | Bituminous mixtures | Grading (N) | For Audit Test purpose only |  | National quality management sector schemes apply. |
| Binder Content (N) |
|
|
| 929 | Base and Binder Course Macadam’s | In situ air void content (N) | 1 per 100 Tonnes (min 1 per laying day) | Required |  |
| Refusal air void content (N) (PRD Test) |
| Binder volume (N) |
| Base and Binder Course Macadam’s | Grading (N) | 1 per 100 Tonnes (min 1 per laying day) |  |
| Binder content (N) |  |
| Flow value (N) |  |
| Density (N) |  |
| 921 | Surface macro texture | BS EN 13036-1 Volumetric Patch Technique (N | BS EN 13036-1 | Required |  |
| 920 | Bond coats, tack coats and other bituminous sprays |  |  |  |  |
| Binder | Product identification | 1 per product per source | Required | Tests are expected to be repeated every two years |
| Vialit cohesion | 1 per product per source | Required | Tests are expected to be repeated every two years |
| Accuracy of spread | 1 for each binder and sprayer per month | Required | Not more than 6 weeks prior to start of work and one per month |
| Rate of spread | 1 per week |  |  |
| Penetration at 25°C and 5°C (N) | Every manufactured batch |  | Manufacturer’s QA test results may be submitted |
| System | TAIT or BBA/HAPAS |  | Required |  |
| Rollers | Spray bars working | Before work starts and daily during works |  |  |
| **Series 1100** | | | | | |
| 1101 | Precast concrete kerbs, channels, edgings and quadrants | Bending strength | Minimum of 8 per 1000 units of each product (BS EN 1340) | Required |  |
| **Series 1200** | | | | | |
| 1202 | Permanent traffic signs |  |  | Required | Quality management scheme applies. Certification that the traffic sign is capable of passing the tests in BS EN 12899-1:2001 is required |
| 1212 | Road Markings |  |  |  | National Quality management and sector scheme applies. Procedure are given in BS EN 1824 |
| Test specified in BS EN 1824 | Required |
| 2601 | Bedding mortar materials |  |  | Required for each batch | Certification in accordance with Clause 2601 is required |
| Bedding mortar | Flow cone test | Each batch |  | Laboratory tests |
| Flow between glass plates |  |  |  |
| Compressive strength |  |  |  |
| Expansion test |  |  |  |
| Water absorption |  |  |  |
| Elastic stability | 1 per source |  |  |
| Flow cone test Compressive strength | Each load |  | Site control tests |

**APPENDIX 1/7: SITE EXTENT AND LIMITATIONS ON USE**

**Extent of the Site**

**1** The boundaries of the Siteare shown on drawing numbers 03079AB/001-1 Rev A and 03079AB/001-2 Rev A as l4isted in Appendix 0/4.

All works beyond the Site Boundary, i.e. traffic management and signing to be in accordance with “Safety at Street Works and Roadworks, A Code of Practice”, 2nd impression dated June 2014. Any alteration to the defined limits requires the approval of the Overseeing Organisation.

**Limitations on the Use of the Site**

**2** The *Contractor* shall ensure that the appropriate Local Authority has granted any necessary planning consent for land to be used for tipping.

**3** No equipment or material shall be stored on land within the existing highway boundary. The use of verges, accesses, footways and lay-bys for storage, unless within the limits of the traffic management in use at the time, will not be permitted without the written consent of the Overseeing Organisation. Visibility splays to be kept clear of obstructions at all times.

**4** Any excavations left overnight must be signed, securely guarded and lit in accordance with Safety at Street Works and Roadworks, A Code of Practice”, 2nd impression dated June 2014and Chapter 8 of the Traffic Signs manual. All recommendations contained within Chapter 8 and this Code of Practice are to be complied with.

**5** Where the *Contractor* is required to erect traffic management signing in accordance with Appendix 1/17 of the Specification and the relevant drawings, the signs must be erected within the highway boundary. The use of lighting columns for fixing the signs to, will NOT be permitted without the written consent of the Overseeing Organisation.

**6** The *Contractor* shall, at all times, keep the area of the works in a safe, clean and passable state. The *Contractor* shall clear away all waste or superfluous material on the site as the works proceed.

**7** The *Contractor* shall take all necessary steps to avoid creating a dust nuisance. If the *Contractor* is not dealing adequately with the control of dust, the *Contractor* may be instructed to carry out such additional measures as the Overseeing Organisation considers necessary, at the *Contractor*s own expense.

**8** All reasonable steps shall be taken to stop mud, clay, lime or similar material from being deposited on the highway from a vehicle. This may include sufficient lengths of hardened areas provided within the site to help ensure construction vehicle tyres are kept clean, so stopping mud from being deposited on the highway, also the installation of sufficient wheel washing facilities, pressure washing including manual means. If any mud, clay, lime or similar material has fallen or been deposited on a highway from a vehicle it shall be removed from the highway as completely and as soon as is reasonably practicable. The *Contractor*'s attention is drawn to Sections 148 and 149 of the Highways Act 1980. Dust should also be kept to a minimum by the use of water spray tankers if required.

**9** The person in charge of any vehicle shall not bring the vehicle, or cause it to be brought upon a highway, unless there has been removed from the vehicle thereof as completely as is reasonably practicable all mud, clay, lime or similar material which is likely if not so removed, to cause obstruction, nuisance or danger to persons using the highway, or injury to the surface of the highway.

Where required by the Overseeing Organisation, warning signs must be exhibited whilst works are in progress.

**10** The *Contractor* shall also ensure that all highway drains, gullies and Channels, are kept clear of any spoil, mud, slurry or other material likely to impede the free flow of water therein.

**11** The *Contractor* shall erect and maintain for the duration of the works a board or a sign, within the site boundary, but clearly visible from the adopted highway, indicating the name and contact telephone number of a responsible person for the site. The named person and contact telephone number shall be available 24 hours a day, 7 days a week.

**General**

**12** The *Contractor*’s attention is drawn to Appendix 1/23 relating to the use of Substances Hazardous to Health on the site.

**13** A well-defined and effective barrier system must be provided between the work area and running traffic lane at all times to maintain the statutory safety zone specified in Safety at Street Works and Roadworks, A Code of Practice”, dated 2nd impression dated June 2014**.** At all times when the site is left unattended, the *Contractor* must maintain an effective barrier system to guard the works.

**14** Restrictions regarding traffic management are described in appendix 1/17.

**APPENDIX 1/9: ENVIRONMENTAL MEASURES**

**Noise and Vibration**

1. Any site activities likely to induce excessive vibration shall be subject to approval, in advance, by the *Project Manager*.
2. The Contractor shall:

Consult with the Overseeing Organisation (**Public Protection Division**) with regards to levels of noise, vibration and other nuisances that are acceptable and shall produce and submit to the *Project Manager* for approval, an Environmental Management Plan, which as a minimum will:

* Minimise the nuisance to the general public and premises’ occupiers both adjacent to the *works* and any Site compounds and accommodation and/or along the delivery routes to the Site and any Site compounds and accommodation;
* Identify the proposals and measures for the control of noise and vibration on or adjacent to the *works*;
* Provide the appropriate measures and protection to the public and/or the adjacent properties and infrastructure from the action of carrying out the *works*, including but not limited to fencing/hoarding, guardrails, signage, etc;
* Ensure that dust nuisance is kept to a minimum;
* Ensure that existing carriageways and footways affected by the *works* are kept clear of all dust, mud and other debris which either originates from the *works* or is being delivered in connection with the *works*;
* Ensure that no materials from whatever source are burnt on Site or on any other part of the highway network or at any Site compound and accommodation;
* Provide appropriate measures for the control of waste and measures and procedures for recycling relevant waste;
* Ensure that all vehicles delivering or transporting material to the Site or any Site compound are secured to prevent material falling or being blown from the vehicle;
* Ensure that all vehicles and mechanical equipment used for the purpose of the *works* are fitted with effective silencers and are maintained in good and efficient working order;
* Ensure that equipment in intermittent use are shut down in the intervening periods between work or throttled down to a minimum; Monitor the sound levels during construction by the methods set out in Appendix B of BS 5228. All measurements shall be made on a sound level meter to BS 4197 set at slow response; as an example, but not limited to, these values should not exceed an equivalent continuous noise level (Leq) of:-
  + 70dB(A) between the hours of 08.00 and 18.00 subject to an overall maximum level of 85dB(A) (Leq) for any five minute period,
  + 50dB(A) between the hours of 18.00 and 22.00 subject to an overall maximum level of 55dB(A) (Leq) for any five minute period,
  + 40dB(A) between the hours of 22.00 and 08.00 subject to an overall maximum level of 45dB(A) (Leq) for any five minute period,
  + 50dB(A) Saturdays between the hours of 13.00 and 18.00 subject to an overall maximum level of 55dB(A) (Leq) for any five minute period,
  + 50dB(A) Sundays between the hours of 08.00 and 18.00 subject to an overall maximum level of 55dB(A) (Leq) for any five minute period,
  + 40dB(A) Sundays between the hours of 18.00 and 22.00 subject to an overall maximum level of 45dB(A) (Leq) for any five minute period,
  + Or any such value determined after consultation with the Environmental Protection Unit
* Monitor the vibration levels during construction;
* Notify the *Project Manager* of the measures he proposes to undertake to achieve the above.

1. The contact details for the Environmental Protection Unit for Blackpool Borough Council are as follows
   1. e.mail [env.protection@blackpool.gov.uk](mailto:env.protection@blackpool.gov.uk)
   2. phone 01253 478345
2. The Contractor’s attention is drawn to the provisions of the following legislation:

* The Control of Pollution Act 1974
* The Environmental Protection Act 1990
* The Clean Air Act 1993
* BS 5228
* and BRE Controlling particles, vapour and noise pollution from construction sites - Pollution Control Guide

The *Contractor* shall notify the date of commencement of the works in writing to the Overseeing Organisation at least 7 days prior to the commencement of operations, together with the name, address and telephone number of an employee who will be available to respond outside of normal working hours to complaints arising from any alleged excessive noise or nuisance.

The *Contractor* shall notify the date of commencement of the works in writing to occupiers of nearby properties. The notification to include any exceptional out-of-hours working agreed with the Overseeing Organisation, and the name and telephone number of an employee who will be available to respond to complaints arising from any alleged excessive noise or nuisance

**APPENDIX 1/11: STRUCTURES TO BE DESIGNED BY THE CONTRACTOR**

The *contractor* shall comply with clause 106 if he wishes to submit an alternative design.

The *contractor* shall comply with Paragraph 1.5, Contractors Design, if he wishes to submit an alternative design.

The *contractor* shall comply with Paragraph 1.6, Employers Design Criteria, if he wishes to submit an alternative design.

**APPENDIX 1/12: SETTING OUT AND EXISTING GROUND LEVELS**

**1** The ground survey and the design of the Works have been undertaken. Reference points have been established by ground survey and information relating to all reference points will be given to the *Contractor* upon award of Contract.

**2** All co-ordinates are based on a plane metric grid with a local origin.

**3** At the commencement of the Contract, the *Contractor* shall carry out checks on the location and level of existing features affecting the Works, eg road levels, footway levels, drainage levels, features close to the site boundary etc, and notify any discrepancies found between the checks and the Contract drawings to the Overseeing Organisation.

**4** The *Contractor* shall, in accordance with the setting out information provided, set out, mark and maintain until they are no longer required, all reference lines, bench marks and markers, temporary or permanent, necessary for the setting out and checking of the works. The *Contractor* shall keep updated drawings of such information.

**5** Where setting out markers are likely to be disturbed during the works, the *Contractor* shall transfer such markers to an adjacent undisturbed point.

**6** No temporary setting out marks are to be made on the finished materials using permanent markers, paint or the like.

**7** The *Contractor* shall provide 48 hours’ notice in order that the Overseeing Organisation may undertake to verify the setting out of the works, when required to do so.

**8** No reference peg, marker, or survey station shall be moved or withdrawn without the approval of the Overseeing Organisation.

**Setting Out for, Traffic Signs, and other electrical equipment**

11 The locations of all traffic signs, street lighting and associated electrical equipment shall be agreed on Site with the Overseeing Organisation prior to the *Contractor* excavating for foundations.

12. The location and dimensions of all road markings shall be agreed on Site with the Overseeing Organisation prior to the *Contractor* commencing road marking installation.

13. The location of the traffic counter to be installed shall be agreed on site with the Overseeing Organisation prior to the installation of any loop cables.

**APPENDIX 1/13: PROGRAMME OF WORKS**

1. The *Contractor* shall provide a clause 31.1 compliant programme in the form of a Gantt chart in MS Project format and a copy in pdf format, clearly identifying the items required by clause 31.2 e.g. the Critical path, float, resources, earliest and latest start dates et al

2. The Contractor shall have due regard for the content of Paragraphs 1.7 and 1.9 in the Works Information and shall allow sufficient time within the programme for the requirements

3. The Contractor shall within the programme take due regard to the hours of work and restrictions of work when determining the sequencing of the works.

4. The Contractor is to programme the work for a **6-day** working week

**APPENDIX 1/14: PAYMENT APPLICATION**

The payment applications submitted to the Overseeing Organisation in accordance with the Conditions of Contract by the *Contractor* shall, whenever dealing with matters covered by the Activity Schedule, be set out under Part and Section headings similar to those in the Activity Schedule and shall separately identify each item and specify quantity, unit, rate and value. Items not described in the Activity Schedule but appropriate for inclusion as measured work shall be shown at the end of the relevant section or under section headings as appropriate indicating quantity, unit rate and value. In respect of all other matters referred to in the Conditions of Contract the *Contractor* shall separately show in the statement quantities, units and rates of goods and/or materials and also details of any other matters to which he considers himself entitled. The *Contractor* shall allow the Overseeing Organisation to inspect invoices for goods or materials included in the statement as may be required.

**APPENDIX 1/16: PRIVATELY AND PUBLICLY OWNED SERVICES AND SUPPLIES**

**1** The approximate position of services are shown on the existing services drawings included in the site information The *Contractor* is to verify the position of all services prior to commencing excavations and make arrangements with the appropriate Authority to determine the precise position of any apparatus.

**2** Disconnected apparatus shall be removed by the *Contractor* only with the prior consent of the Authority concerned.

**3** The *Contractor* is responsible for arranging electrical disconnections/connections and transfers for all electrical equipment associated with the permanent and temporary works. The costs for these charges are to be included in the Contract.

**4** The *Contractor* shall make the necessary arrangements to ensure that any cable or lighting faults arising directly or indirectly from the Works shall be identified and repaired within 24 hours of the incident causing the cable or lighting fault/damage. All incidents which result in damage to cables or columns shall be reported immediately to the Overseeing Organisation.

**5** The names, addresses and telephone numbers of the authorities serving in the locality are listed below:

|  |  |  |
| --- | --- | --- |
| **Names** | **Address** | **Contact Details** |
| National Grid Gas | Cadent Gas Ltd  Brick Kiln Street Hinckley Leicestershire LE10 0NA | <mailto:Julia.Greenhough@bbusl.com> Direct tel +44(0)161 790 3000  Mobile:+44(0)7702 759488 |
| BT Openreach |  | [dave.oleary@openreach.co.uk](mailto:dave.oleary@openreach.co.uk)  <mailto:stuart.worrall@openreach.co.uk>  <mailto:stephen.macfarlane@openreach.co.uk>  cbyd@openreach.co.uk |
| Electricity North West | Electricity North West Frederick Road Salford M6 6QH | christopher.brindle@enwl.co.uk |
| Vodaphone |  | [Krishnaraj.Kumar@atkinsglobal.com](mailto:Krishnaraj.Kumar@atkinsglobal.com) |
| Virgin Media | Virgin Media Diversionary Works Team Access Network Planning 1 Dove Wynd Strathclyde Business Park Bellshill ML4 3AL | [John.Lynch@virginmedia.co.uk](mailto:John.Lynch@virginmedia.co.uk) |
| United Utilities |  | [William.Harrison1@uuplc.co.uk](mailto:William.Harrison1@uuplc.co.uk) |
| Blackpool Data and Fibre Cables | TNP - The Networking People  Infolab21, Lancaster University, Lancaster, LA1 4WA  Julian Clements Blackpool Borough Council  CCTV Supervising Manager | [paul.astle@tnp.net.uk](mailto:paul.astle@tnp.net.uk)  DDI: 01524 510144  Mobile: 07789 403 167  julian.clements@blackpool.gov.uk  01253 749435 |

6 Services and supplies affected by the works. The *Contractor* is to check this information and identify any additional work required for the temporary and permanent works and include for these costs in his construction.

**APPENDIX 1/17 TRAFFIC SAFETY AND MANAGEMENT**

Yeadon Way forms part of the key road network (KRN) and is the major link to the town centre from the motorway network. The effective management of traffic flows to minimise disruption is therefore of high importance.

The *Contractor* shall prepare a Traffic Safety and Management Plan (**"TSM Plan"**), which shall be submitted to the Overseeing Organisation and *Project Manager* for acceptance prior to the commencement of the *works*. The *Contractor* shall allow for the period of reply for acceptance within his programme and costs. No works will be allowed to start without approval of the TSM Plan and/ or relevant risk assessments and method statements (RAMS) by the *Project Manager* or his delegate

The *Contractor* is responsible for the local traffic safety and management and associated work.

The TSM Plan should identify all activities that interface with existing traffic and pedestrian routes, local residents and local businesses and include proposals to minimise disruption. It should include the necessary risk assessments, details of access to the Site for personnel, equipment and materials and for any parking arrangements.

The TSM plan shall take due regard to the requirements of the latest versions of the Health and Safety Executive Guidance in texts such as, but not restricted to, HSG 136 Workplace Transport Safety and HSG 144 The Safe Use of Vehicles on Construction Sites

The *Contractor* is to nominate a person to be responsible for the management and safety outside normal working hours. The *Contractor* will give the name and contact telephone number of the person so nominated to both the *Project Manager* for the Works and the Police. The person so nominated will also be required to organise the checking and maintenance of the temporary traffic management for the works outside normal working hours. A daily log of the site visits for this purpose is to be kept and be presented to the *Project Manager* upon completion of the works.

The *Contractor* is to nominate a person to be responsible for the management and safety during the road closures. The nominated person will supervise the erection, maintenance and removal of all signing and guarding associated with the closures.

Without prejudice to the foregoing and the *Contractor's* obligations to comply with the Laws, the *Contractor* shall (unless and to the extent that this conflicts with the Laws):

* nominate a senior person to undertake the role of Traffic Safety and Control Officer (TSCO) who will be responsible for:

1. traffic safety and management;

1. Ensuring that designated staff are available and contactable 24 hours a day to deal with any incidents, accidents or changes the may be required
2. The *Contractor* will give the name and contact telephone number of the person(s) so nominated to both the *Project Manager* for the *works* and the Police. The person(s) so nominated will also be responsible for the management (including Site management) and safety during any road works and closures including but not limited to design, implementing, checking and maintaining the signage for the *works* and any necessary diversion routes throughout the course of the *works*. A daily log of the Site inspections for this purpose is to be kept and be presented to the *Project Manager* at intervals of no more than 4 weeks and upon completion of the *works*;

Save in relation to Employer Consents, the *Contractor* shall obtain, and pay all necessary fees, for all Consents, permits, licenses, authorizations and all approvals to Provide the Works.

The *Contractor* will be responsible for contacting Highways England to obtain permission for advance signage to be installed on the M55 Motorway, as shown on the Drawing Numbered 493272.T.002, and pay all necessary fees, for all Consents, permits, licenses, authorizations and all approvals to Provide the Works.

The Contractor will be responsible for all the localised traffic management and these will be set out in his TSM plan. The *Contractor* must liaise with the Overseeing Organisation and allow sufficient time within his programme for liaison, development and implementation of the Plan.

The Contractor will not be entitled to any additional time or any compensation event due to a failure to give adequate notice to the Overseeing Organisation.

The *Contractor* should be able to replace damaged signs, signals, cones, cylinders, lamps, barriers, road markings, etc within TWO hours of either identification during inspections or being informed of the defects by the Police, the Overseeing Organisation, site staff or members of the public.

The contractor should be aware that all vehicles associated with the works must be parked within the works, or within the compound area. Any vehicles that are parked outside these areas that receive a Penalty Charge Notice will not be rescinded.

**APPENDIX 1/18: TEMPORARY DIVERSIONS FOR TRAFFIC**

The Overseeing Organisation has established a strategic diversion route as shown on drawing 493272.T.002. The *Contractor* will be responsible for, establishing, maintaining and removal of the signage for the diversion route. The *Contractor* shall allow within his rates and programme for the full process

The *Contractor* is to nominate a person to be responsible for the management and safety of any temporary diversion routes. The signing is to be checked by the nominated person a minimum of 3 times during the working day, at the start, at lunchtime and upon completion of the working day.

**APPENDIX 1/19: ROUTING OF VEHICLES**

**Permitted Access Routes To and From the Site**

1. The *Contractor* shall ensure that all vehicles gain access to the site via Parkinson Way. It is brought to the contractor’s attention that some of the bridges on Blackpool’s Classified road network are weight limited. The contractor should plan his routing to avoid these bridges. Avoidance/limitation of use of residential roads shall predominate.
2. The *Contractor* is to provide, erect and maintain suitable barriers to ensure that the above conditions are adhered to at all times. Any barriers requiring removal for work at the tie-ins are to be replaced immediately following the completion of the work, and in any event, at the end of each working day.
3. The *Contractor* is to provide suitable temporary signs informing the public of the *Contractor*’s Site Entrances.

**Roads to be Kept Clean**

**4** Existing Public and Private roads including footpaths and car parks accesses used by vehicles of the *Contractor* or any of his Sub-Contractors or suppliers of materials or plant and similarly any new roads which are part of the Works and which are being used by traffic shall be kept clean and clear of all dirt, mud or other materials dropped by the said vehicles. The *Contractor* shall provide and maintain and keep available at all times road sweeping equipment incorporating a section device and collection compartment and such other plant and equipment as may be necessary to keep the road clean as required by this Clause.

**The Use of Permanent Works by Construction Traffic**

**5** Where the *Contractor* requires the Permanent Works to be used by construction traffic, the *Contractor* shall submit his proposals for protection of the Permanent Works, for approval, to Blackpool Council minimum two weeks in advance of the proposed works. The information will include location, types of vehicle or equipment, applied loads, frequency of loading, duration of operation, calculations of stresses, strains and deflections which will arise, and any measures proposed to protect the permanent works. The movement of tracked vehicles on public roads is prohibited.

**APPENDIX 1/21: INFORMATION BOARDS & ADVANCE WARNING SIGNS**

The *Contractor* shall erect a board detailing the company name, address and contact name and phone number at the limits of the scheme, including the compound location. The *Contractor* shall submit his proposed signboard details to the Overseeing Organisation for approval prior to manufacture.

**Appendix 1/22 : Progress Photographs**

The *Contractor* will provide the *Project Manager* with photographs, in digital electronic form, of the following in relation to the works

1. all frontages/walls/steps/forecourts to properties where works are to be undertaken, 1 day prior to commencement of the works in that location.
2. all frontages/walls/steps/forecourts to properties when works have been completed.

**APPENDIX 1/23: RISKS TO HEALTH AND SAFETY FROM MATERIALS OR SUBSTANCES**

**1 Restrictions in relation to traffic management measures**

1.1 Where site operations are carried out adjacent to or near to lanes open to traffic care should be taken to ensure that no dust, spray or other material is transferred to the lanes open to traffic by any means. Additional safety zones may be required locally if the above is likely to occur.

**2 Restrictions in relation to working practices**

2.1 As an alternative to the provision of additional safety zones where any dust, spray or other material could be deposited onto lanes open to traffic the *Contractor* may so arrange his operation, or stop his operations for short periods, when:

i) the wind direction would propel material onto traffic in the lanes open to traffic;

ii) slow moving or standing traffic would be contaminated by site operations. (Note: For the purpose of this appendix only, "slow moving traffic" is defined as traffic travelling at less than 20 mph.)

**3 Measures to be taken to protect members of the public**

3.1 During roadworks operations care should be taken to protect members of the public from their effects, particularly during:

i) Planing of bituminous pavement –material to planed or excavated to determine the tar level and all arisings to be dealt with accordingly;

ii) Application of herbicide;

iii) Any other operation likely to generate dust, or result in hazardous or unhealthy substances being released.

iv) Application of thermoplastic line markings;

**4 Monitoring to be undertaken by *Contractor***

4.1 No specific monitoring will be required but the *Contractor* should consider Section 3 above and his general obligation under the COSHH Regulations and take action to eliminate or reduce problems that occur due to his site operations.

4.2 The *Contractor* is required to keep records of all materials taken from the site and must record the location of the tips and the nature of the material deposited in them from the site. These records shall be available for inspection by the Overseeing Organisation on demand.

**5** Nothing in this appendix shall relieve the *Contractor* of his obligations under the current Control of Substances Hazardous to Health Regulations (COSHH) and his responsibility for the development of safe working practices.

**APPENDIX 1/24: QUALITY MANAGEMENT SYSTEMS**

**1** The *Contractor* shall institute and operate a quality management system complying with BS EN ISO 9001 and Clause 104. The quality management system shall be described in a Quality Plan that shall be submitted to the Overseeing Organisation for its acceptance.

The Quality Plan shall cover the following items:

(i) *Contractor*’s organisation and management

(ii) *Contractor*’s method statements and construction procedures

(iii) *Contractor*’s construction quality control

(iv) Organisation's Quality Plans

**2** Items i) and iii) of the Quality Plan shall be submitted to the Overseeing Organisation for its acceptance not later than 14 days after award of the Contract. The *Contractor* shall submit other parts of the Quality Plan prior to commencement of any related work or activity.

**3** Method statements are required for all items of work including but not limited to :

- Traffic management

- Site clearance

- Excavation

- Drainage

- Earthworks

- Piling

- Pavement construction including footways and lining and signing

- Each traffic management operation

- Any electrical work

Method statements should describe each stage of the construction, identify the equipment and materials to be used, temporary works, safety measures, working space considerations, and where appropriate the requirements for skilled labour and/or special supervision etc.

Where work is subject to environmental control, e.g. temperature, noise control, working hours, traffic conditions etc, these should be stated.

**4** Guidance on the compilation of Quality Plans is provided in the ‘Notes For Guidance On The Specification Of Highway Works’.

**APPENDIX 1/72 HEALTH AND SAFETY FILE**

The *Contractor* will on completion of the works and in accordance with the requirements of CDM provide the Client with a comprehensive Health and Safety file for the *works*. The documentation will include but not be limited to the following:

* Copies of amended drawings showing the “as constructed” condition;;
* A comprehensive list and supporting information for all materials and equipment, including specification, manufacturer and supplier information, serial numbers, data sheets and contact details;
* Details of any operating software used;
* A schedule of maintenance procedures and frequency of maintenance and checking for all elements of the *works* for a period of at least 5 years; and
* A list of recommended spare parts and their source.

The Health and Safety file will be first provided to the *Project Manager* for approval in draft form. This will be provided no later than the date of Completion and as a condition precedent to Completion. The *Project Manager* will provide comments to the *Contractor* within four weeks of receiving the draft Health and Safety file and the *Contractor* will return the final Health and Safety file to the *Project Manager* within four weeks of receiving any comments. The *Contractor* will provide two copies of the final Health and Safety file in both hard copy printed form and electronic digital form. For the avoidance of doubt the submission of the final Health and Safety file shall be a condition precedent to the final release of retention monies.

**APPENDIX 2/2: FILLING OF TRENCHES AND PIPES**

**1** All disused cables irrespective of depth below formation shall be removed by the *Contractor*.

**2** Disused sewers and drains shall be removed below sub-formation level.

**APPENDIX 2/3: RETENTION OF MATERIALS ARISING FROM SITE CLEARANCE**

1. Site clearance requirements are shown within the works information.
2. The *Contractor* shall be responsible for all electrical connections / disconnections / transfers, whether they are Electricity Board supplies or private supplies from other street furniture.
3. Voids, below the formation level, created by removal of these items of equipment are to be filled with lean Concrete ST2.

**APPENDIX 2/5: HAZARDOUS MATERIALS**

1. The following measures for the handling and disposal of hazardous material found in site clearance are given here as a guide.
2. Compliance with the Environmental Protection Act 1990, Section 34;
3. Compliance with ‘Waste Management, THE DUTY OF CARE, a Code of Practice’ published by HMSO;
4. Compliance with the Control of Pollution Act 1974 Section 17.

The *Contractor* shall be responsible for obtaining licences appropriate to the removal of hazardous substances from site, and shall be further responsible for providing appropriate measures to comply with the licence.

The *Contractor* shall submit a detailed method statement in relation to dealing with hazardous materials at least 7 days prior to the proposed instigation of the excavation of such hazardous material.

**APPENDIX 3/1: FENCING**

1. The timber fence shall comply to Clause 306.

1. Fencing shall be installed on both sides from CH 1140 to CH 3190. (contractor to design based on his design options.)

1. The type of fence shall be a 2.0m High Close Board fence, to match existing Phase 1. As installed by DWJ Fencing, Warrington.
2. The rails shall be 100mm x 50mm 3600mm long.
3. The boards shall feather edge 1900mm long x 2EX x 22mm x 125mm
4. The gravel boards shall be 3600mm long x 150mm x 50mm
5. The capping shall be 3600mm long x 75mm x38mm twice chamfered
6. Posts shall be 3200mm long x 150mm x 100mm
7. Posts will be at 1800mm c/s
8. Access points through the fencing will be located at each side of the bridge walls, on both sides of the carriageway.
9. All timber shall be FSC certified
10. All timber shall be pressure treated

**APPENDIX 4/1: VEHICLE RESTRAINT SYSTEMS**

1. The vehicle restraint system shall be as shown on the drawing numbered 03079AB/002.

1. The vehicle restraint system shall comply with Clause 401 and 403.
2. The vehicle restraint system shall be N1W1

**APPENDIX 5/1: DRAINAGE REQUIREMENTS**

1. The drainage requirements are to comply with the requirements of drawing number 03079AB/002

1. connections to be 150mm diameter with Type Z concrete surround
2. Fill material to Clause 505 shall exclude the use of limestone.
3. Pipe joints in the surface water drains shall be watertight (Clause 504.3).
4. The proposed connections and proposed connection directions shall be verified on site and the Supervisor notified if they are not valid.
5. All existing pipework to be cleaned and proven suitable that are being connected into shall be cleaned by the *Contractor* of any blockages (rodding before jetting). The *Contractor* shall also clean existing gullies that are to be retained as part of the works.

**Surface water pipes.**

1. The following types of pipe may be used for surface highway drains:

* Concrete pipes made with Sulphate resistant Cement to BS 5911-1:2002.
* PVCu twin walled with a smooth internal and ribbed external surface walls with current BBA certification.
* Vitrified Clayware pipes to BS EN 295-1:1991

1. Jointing and installation shall be undertaken to Manufacturers Specification.

**Jointing of pipes**

1. All joints in surface water drains shall be watertight complying with sub-clause 504.3.
2. No saddle connections will be allowed, all connections must be pre-formed junctions

**Requirements for backfilling of trenches**

1. Trenches shall be backfilled as described in Clause 505.2 except for trenches located within the carriageway where Type 1 sub-base shall be used in lieu of Class 8 lower trench fill and Class 1, 2 or 3 backfill. The Type 1 sub-base backfill shall be brought up to sub-formation level (bottom of capping layer).

**Connection of new drains to existing drains**

1. The locations where new drains are to be connected to existing drains are to be designed by the Contractor

**Works to Existing Covers or Gratings**

1. Existing covers or gratings, including frames, to be either raised or lowered, shall be carefully excavated for, taken up, cleaned, greased and set aside for re-use.
2. The construction below the frame shall, where necessary, be demolished to the required level where it shall be prepared to receive the new construction.
3. Brickwork shall be 225mm thick and shall comply with Series 2400 of the Specification and be built with Class 1 mortar in English Bond. The joints of the brickwork, where exposed, shall be flush pointed.
4. The maximum height of brickwork above any brick corbelling or cover slab with a clear opening of 600mm or less shall not be greater than 600mm – otherwise adjustment below the corbelling or slab will be necessary.
5. If the existing cover slab or chamber is affected, the *Contractor* shall, where applicable, undertake the following :
6. take up the existing cover slab, clean and set aside for re-use;
7. where covers or gratings are to be raised, add approved tiles, further brickwork or chamber sections;
8. where covers or gratings are to be lowered, either demolish brickwork to the required level, demolish insitu concrete chambers to the required level, remove precast chamber sections or replace chamber sections with shorter sections and, where necessary, add approved tiles, further brickwork or chamber sections;
9. where pre-cast concrete taper sections are to be removed, larger cover slabs shall be required;
10. all brick corbelling shall be reconstructed to the required level;
11. cover slabs shall be set on a 15mm bed of mortar;
12. The frames shall be re-set on a 15mm minimum bed of cement mortar;
13. On completion of the works, all gullies shall be cleaned and left free of any debris.
14. Manhole covers and frames for use in carriageway areas shall be cast iron (including ductile iron) complying with the requirements of BS EN 124. Frames shall have a minimum depth of 150mm and a minimum square clear opening of 600mm.
15. Manholes covers are to be non-rock heavy duty to loading class D400.

**APPENDIX 5/2: SERVICE DUCT REQUIREMENTS**

1. Ducts shall comply with the requirement of Clause 50, Table 5/2, and shall be manufactured from UPVC material.

2. Construction details shall comply with Highway Construction Detail I2 and the following

Ducts laid in footway areas excluding vehicle crossing areas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Duct Material | Cover Material | X | Ymin | Ymax |
| UPVC | Pipe bedding material or sand | 100 | 150 | 300 |
|  |  |  |  |  |

1. Duct marker warning tape is to be placed over the line of the ducts as shown on the standard detail.
2. Drawcords are to be inserted into the duct runs **immediately** the duct run has been installed. All duct runs must have drawcords inserted prior to the cable installation.
3. Ducting colours will be as follows: -

Street Lighting/Illuminated Signs/Bollards - Orange

Minimum cover for ducting is 750mm in carriageway

All ducts to be mandrel tested prior to backfilling in accordance with clause 509 (9)

**APPENDIX 5/5: COMBINED DRAINAGE AND KERB SYSTEMS**

**1** The location and size of the proposed combined kerb and drainage units with associated outfalls and rodding units shall comply with the requirements of IAN 117/08 Rev 2.

**2** The kerb drainage system proposed is Marshalls Mini Beany system (or an acceptable equivalent product) as supplied by Marshalls. All materials and components within the scope of the system shall be supplied by the same manufacturer. The kerb drainage units shall be fully compliant with BS EN 1433 with initial type test certification issued by a notified body independent of the manufacturer and shall comply with the Manual of Contract Document for Highway Works: Specification for Highway Works, clause 516.

**3** The KerbDrain units shall include the following:

* Access points at the start and end of each run. The access points shall be either sump units or rodding access points.
* End caps at the start and end of each run.

**4** Units shall not deviate in line or level by more than ±3mm from the alignments given in the Contract. Should a two-part system be utilised, the same tolerances shall apply to the bottom unit as apply to the top.

**5** Units shall be capable of withstanding a wheel D400 loading without damage or deformation to BS EN 1433.

**6** All outfalls shall be trapped unless otherwise stated.

**APPENDIX 6/1: requirements for acceptability and testing stc. of earthworks materials**

**General**

1. The contractors attention is drawn to the drawing numbered 03079AB/002.
2. All materials to be placed within 450mm of the finished surface shall be non-frost susceptible.

**Excavation of hard material**

1. The following materials shall be classed as hard material :

* Existing bituminous pavement layers
* Existing concrete sub-base layers
* Existing kerbs and foundations

**Planing**

3 A proper assessment of all the hazards associated with handling asphalt arisings should be carried out by the planning *Contractor*, including a COSHH assessment and suitable risk assessments.

**APPENDIX 6/5: GEOTEXTILES USED TO separate EARTHWORKS MATERIALS**

**General**

The contractor’s attention is drawn to the drawing numbered 03079AB/002.

**APPENDIX 6/13: GROUND IMPROVEMENT**

**General**

The contractor’s attention is drawn to the drawing numbered 03079AB/002, Option 2.

**APPENDIX 7/1: PERMITTED PAVEMENT OPTIONS**

**1** Location: as shown on the tender drawings.

**2** Grid for checking surface levels of pavement courses:

Longitudinally 10m,

Transverse 2m

Surface level tolerances shall be those given in Table 7/1 of Clause 702.

**3** Surface Regularity: Category A

**4** The surface texture should be measured using the Sand Patch method in accordance with BS EN 13036.-1-2002 or equivalent method

**5** Compaction requirements are given in amended Clause 903.23.

**6** Coating of mat edges.

This process, as detailed in Clause 903.22 (iii), shall not result in the formation of a longitudinal binder film of any significant width. Any binder films with an average width of more than 20mm shall be treated, at the *Contractor*’s expense, to provide a surface which is at least as resistant to skidding as the adjacent carriageway areas.

**7** Joints in existing surface course to be saw cut.

**8** Sub base material is to be spread evenly on the formation in layers not exceeding 150mm thick. The moisture content of the material is to be within the range optimum –2% or +1% and must not be segregated.

**9** The full thickness of the sub base should be continued to 300mm beyond the back of kerb.

**10** Any bituminous layer shall be kept clean and uncontaminated for so long as it remains uncovered by succeeding layers or surface treatment. All bituminous layers to be surfaced over, once cleansed appropriately must be sprayed with a suitable bituminous Bond Coat. This will be completed immediately prior to the laying of additional layers. For continuous laying works a bond coat shall be applied by the use of metered mechanical spraying equipment.

**11** All vertical edges including kerbs, ironwork and joints shall be painted with cold applied bitumen emulsion or hot applied bitumen immediately prior to the laying of any bituminous layer in accordance with BS 594987: 2010.

**12** The *Contractor* is to provide laying records for all bituminous layers to the requirements of Blackpool Council.

**Carriageway Inlay**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SHW  Clause | Material | Thickness  (mm) | Requirements |
| Surface Course | 937 |  | 40 | BS EN 13108-5 and PD6691  Laid and compacted to BS 594987 |
| Regulating Course | 910 |  | 10 - 20 | BS EN 13108-5 and PD6691  Laid and compacted to BS 594987 |
| **Total Pavement Thickness** | | | 50 - 60 mm |  |

**New Carriageway Construction**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SHW  Clause | Material | Thickness  (mm) | Requirements |
| Surface Course | 937 |  | 40 | BS EN 13108-5 and PD6691  Laid and compacted to BS 594987 |
| Binder Course | 906 | AC 20 HDM bin 40/60 DES | 60 | BS EN 13108-1 |
| Base | 906 | AC32 HDM Base 40/60 DES | 140 | BS EN 13108-1 |
| Sub Base | 803 | Granular Type 1 | 210 | Material shall be crushed rock, slag, crushed concrete or well burnt non-plastic shale. Minimum CBR: 30%. Site performance tests may be required to demonstrate suitability. |
| **Total Pavement Thickness** | | | 450 mm |  |

**APPENDIX 7/2: Excavation, Repair and Reinstatement of Existing Surfaces**

1 Any trench reinstatements in the existing Highway are to be undertaken in accordance with the requirements of ‘NRSWA Specification For The Reinstatement Of Openings In Highways’.

**APPENDIX 7/4: BOND COATS, TACK COATS AND OTHER BITUMINOUS SPRAYS**

**SHEET 1: Information by the compiler**

**Location on all new bituminous surfacing**

1. Bond Coats shall be used on all planed surfaces and intermediate layers of freshly laid bituminous material as shown on the series 700 pavement construction drawings.
2. All ironwork and kerbing is to be bond coated on the vertical faces to the level of the proposed finished surface level, prior to laying new material. The bond coat is to be brush applied only.

**Bond Coat**

1. Bond coats for the bituminous layers shall comply with BS 594987-2007.

**Rate of Spread**

1. The rate of spread shall comply with BS 594987-2007: Table 1 or Table 3 as appropriate.

**Limitations**

1. Any bituminous layer shall be kept clean and uncontaminated for so long as it remains uncovered by succeeding layers or surface treatment.

**SHEET 2: Information to be provided by the *Contractor***

The *Contractor* shall provide the following information prior to the commencement of the work:

1. The product or products he proposes to use together with their data sheets, product identification data, cohesivity data as specified, BBA/HAPAS certificate. [920.2, 920.4, 920.5]
2. For each product, a copy of the BS EN ISO 9001 certificate showing the name of the manufacturer, the name of the certification body and the reference number and date of the certificate.

The spraying equipment proposed, and a test certificate. [920.7, 920.9]

The results of any other tests or other data the *Contractor* considers would assist the Overseeing Organisation in assessing the technical merit of the treatment such as:

1. Tackiness test and/or trafficability time and methods of test.
2. Breaking time test results for different weather conditions and substrates.
3. Test results for bond to newly laid concrete [eg. from a BBA/HAPAS certificate if available].

The data supplied shall not be more than 6 months old.

**APPENDIX 7/9: COLD-MILLING (PLANING) OF BITUMINOUS BOUND FLEXIBLE PAVEMENT**

1. Locations of cold-milling (planning) of bituminous bound flexible pavement are shown on the tender drawings.

**APPENDIX 11/1: KERBS**

1. The dimensions and type designations of precast concrete kerbs are detailed on the tender drawing 03079AB/002 Rev A.
2. Kerb face heights above the carriageway/channel surface are indicated on the relevant tender drawing 03079AB/002 Rev A.
3. No cut kerb shall be less than 300mm in length.
4. The levels of units of kerb shall not deviate from the design levels +/- 6mm, nor shall the longitudinal surface regularity deviate more than 3mm in 3m when checked with a 3m straight edge. Horizontal alignment shall comply with Specification Clause 702.

**APPENDIX 12/1: Traffic Signs – GENERAL**

**General**

1. For posts with enlarged bases, unless otherwise specified on the relevant construction drawings, the sides of the excavation shall be increased by 75mm for all post diameters.
2. All traffic signs shall have a location identifying mark specifying the manufacturer, the assembly reference number, the reflective class and the date of manufacture, which should be located on the rear, bottom left hand corner of the sign plate. The height of the characters shall not be greater than 25mm.
3. The assembly reference number shall also be marked on the lower 150mm of each post.

**Sign Faces**

1. All sign faces shall be of Class R1 or R2 reflective material unless otherwise specified on the sign drawing.
2. Externally illuminated and non-illuminated signs shall be covered over the whole front face with the appropriate combination of reflective & non-reflective plastic sheeting, to the specified colours, for which a manufacturer's guarantee of not less than 7 years has been obtained. In the case of Class1 or other higher grade of reflective sheeting, a manufacturer's guarantee of not less than 10 years should be obtained.

**Sign Plates**

1. These shall be manufactured from sheet aluminium of not less 11swg, 3mm thickness, and extruded aluminium planks or from 1.25mm thickness steel sheet, suitably treated to meet British Standards.

1. The whole of the back surface of all signs shall be covered with grey non-reflective plastic sheeting or other grey finish for which a manufacturer's guarantee of not less than seven years has been obtained.

**Posts for Permanent Traffic Signs**

1. Unless otherwise specified on the relevant construction drawings, all posts shall be un painted but galvanised

1. All steel posts shall be fitted with a base plate and tight fitting closing cap. Stub posts shall have a cap at the top and bottom of the post.

**Construction and Assembly**

1. All stiffening and framing shall be in aluminium section of equivalent strength (section modulus) to that of mild steel tabulated in Chapter 13 of the Traffic Signs Manual and coloured grey to match the back of the sign.

1. All sign plates shall be provided with stiffening or framing, unless otherwise specified on the sign schedule.
2. Signs and frames shall meet the mechanical properties and construction requirements of BS 873. Puncturing of the sign face material for the purpose of affixing the stiffening is not permitted.
3. All brackets, U bolts and clips used in sign assemblies shall be manufactured from stainless steel, or in the case of plank type signs, extruded aluminium or cast aluminium. They shall be complete with stainless steel nuts and bolts and with 2 No. Stainless steel washers and 1 No. Stainless steel spring washer for each bolt.
4. Clips shall be provided on every sign plate at the intersection of all posts and channelling.
5. The Overseeing Organisation’s approval is to be obtained before using stainless steel banding in place of purpose made brackets.
6. For signs mounted on a single post an arrangement to prevent forced rotation shall be provided.
7. Where purlins are used the sign stiffening and framing shall be continuous in the vertical direction. Purlins shall be attached to each vertical member of the sign frame and the distance of the top and bottom purlins from the parallel sign edges shall not exceed 500mm. Intermediate purlins shall be spaced equally apart at centres not exceeding 1.0m. A connection shall be made at every point where a purlin crosses a post. Clamping brackets and locating plates used for purlin to post fixings shall be hot dipped galvanized in accordance with BS EN 1461. A nylon strip or similar approved insulating material shall be fixed between the purlins and the aluminium framing.
8. There may be occasions when specialist fixings will be required to erect signs. In all circumstances the approval of the Overseeing Organisation is required.

**Location and Erection**

1. Exact locations must be agreed on site with the Overseeing Organisation. The *Contractor* shall be responsible for recording all agreed locations.

1. Base housing posts and service boxes must have a minimum clearance of 125mm between the lower edge of the door and the finished ground level.
2. Where a sign is electrically illuminated a PVC sleeve shall be provided in the concrete foundation for the supply cable.

**Sign Plate Mounting Heights**

1. Where signs are erected the mounting height measured to the lower edge of the sign plate shall be 2300 mm

1. A tolerance of ±50mm will be permitted.
2. Sign poles shall be erected leaving 25mm protruding above the top edge of the highest sign.
3. Minimum 450mm clearance is required between the edge of the trafficked carriageways and the nearest edge of the sign assembly or street furniture.

**APPENDIX 12/3: Traffic Signs – ROAD MARKINGS AND STUDS**

**General**

1. The locations and layout of the proposed road markings are as existing. The precise alignment of the proposed road markings shall be in accordance with The Traffic Signs Regulations and General Direction 2016 and agreed with the *Project Manager* prior to the commencement of any associated works.

2. All permanent road markings shall be in place prior to the opening of any completed works.

3. The alignment of all new road markings must be located to tie-in exactly with any existing markings.

**Permanent Road Markings**

4. All permanent road markings shall be of thermoplastic material in accordance with BS EN 1871 and BS EN 1436. All road markings shall be white or yellow and shall be reflectorized in accordance with Clause 1212. All road markings shall have solid glass beads incorporated into the thermoplastic mixture in accordance with 1212.

5. The skid resistance level for all road markings should not be less than 55 (Class S3) at all locations, as identified in Table 7 of BS EN 1436.

6. Prior to the application of thermoplastic material a bond coat compatible with the road surface and the marking material shall be applied in accordance with the manufacturer’s instructions.

7. The *Contractor* shall be responsible for thoroughly cleaning the carriageway surface to enable a strong bond to be formed between the road marking material and the carriageway.

8. The *Contractor* shall protect the newly laid road markings from being trafficked by vehicles or pedestrians until the material has cooled sufficiently to prevent damage to the markings or injury to the public.

**Temporary Road Markings**

9. Temporary road markings to BS 1436 can be used for markings on surfaces which are to be overlaid or resurfaced but shall not be used on new final surfaces.

**Removal of Road Markings**

**10** As stated in Clause 1212(18) of the Specification, the removal of road markings shall be by mechanical means only. Unless otherwise agreed by the *Project Manager*, the method used shall be scabbling, abrasive blast cleaning or similar equivalent procedure. The use of a thermal lance will **not** be permitted.

**11** Any dust generated during the removal process shall not be permitted to escape into the atmosphere and adequate vacuum collection facilities must be provided to ensure all residual material is collected.

**APPENDIX 12\70: Traffic counter**

1. The Contractor will only be required to provide and fit the cabinet as per below.

1. The Contractor will be required to carry out all civils works to enable the traffic counter to operate, once the overseeing organisation install the counter. **This will include ducting and loop detection.**
2. The traffic counter cabinet is to have a solar panel fitted to the top surface.
3. The traffic counter cabinet is to be a GR100 as supplied by Clearview Intelligence Limited

Head Office,

A4 Telford Road

Bicester,

Oxfordshire

OX26 4LD

**APPENDIX 14\1: SITE RECORDS**

* 1. All electrical equipment and installation shall be in accordance with ‘the Specification for Road Lighting, Illuminated Traffic Signs and Bollards’ as produced by Community Lighting Partnership in consultation with Blackpool Council.

* 1. All as built drawings and test certificates should be provided to the *Project Manager* with 28 days of the commencement of the *Defect Correction Period,* or the *completion date* as specified in the works information, whichever is the sooner.

**APPENDIX 14\2: Location of lighting units and feeder pillars**

1. The design for the location of lighting units, feeder pillars and traffic signs is to be carried out by Community Lighting Partnership, or its nominated subcontractor.

**16/4: BORED PILES/RIGID INCLUSIONS**

The contractor’s attention is drawn to the drawing numbered 03079AB/002, Option 2.

**17/3: CONCRETE – SURFACE FINISHES**

1. Surface finish to any RC40/50XF concrete to be a U5 finish formed by a Hard or soft bristled broom

**23/2: CONCRETE – SEALING OF GAPS**

1. The contractor should saw cut the finshed surfacing at the bridge approach locations to prevent cracking of the surface course by potential ground movement.

1. The contractor will provide details of propriety materials to be used.
2. The locations will be as agreed with the *overseeing organisation.*

**APPENDIX 26/1**

**Ancillary Concrete**

|  |  |  |
| --- | --- | --- |
| **Mix** | **Grade to BS5328** | **Purpose** |
| ST1 | C7.5P | Backfill to overdig of post holes and preparation of formation to Clause 616.  Bedding and backing to precast concrete kerbs, channels, edgings and quadrants. |
| ST2 | C10P | Footings to fence posts and augured foundations for traffic sign posts;  Bed, haunch and surround to drains and ducts (other than Type A and Type Z);  Surround to gullies |
| ST3 | C15P |  |
| ST4 | C20P | Bed to drains Type A and Type Z.  Foundations, channels and benching to chambers.  (Non-augured) Foundations for traffic sign posts.  Feeder Pillar and Controller Bases. |

**Appendix A**

**Contract Drawings**

**Appendix B**

**Service Information.**

This information is provided for guidance purposes only, and the *Employer* is not and shall not be responsible for the accuracy, sufficiency or interpretation of this information.

**Appendix C**

**Pricing Schedule.**

1. The contractor should insert his prices for the activity schedule listed below. This list is an example but not exhaustive. If the contractor wishes to identify further items, he can do so.

1. The contractors pricing schedule **must** be provided to the *overseeing organisation* at the time of tender.
2. The rates and prices inserted by the Contractor in the pricing schedule will be inclusive of **ALL disbursements and exclusive of V.A.T.**
3. The Council will not be liable for any costs/prices not identified in the contractor’s submission.
4. The contractor must ensure his total cost is clearly identified in the *Contract Data Part 2.* This figure will be used to evaluate the tender.

**Full Scheme Costs**

|  |  |  |
| --- | --- | --- |
| Appendix No. | Title | Price (£) |
|  | Performance Bond |  |
| 1 | Preliminaries |  |
| 4 | Road Restraint Systems |  |
| 12 | Traffic Signs and Roadmarkings |  |
| 14 | Electrical Work for Road Lighting and Traffic Signs |  |
| 23 | Sealing of Gaps |  |
| **Total** |  |  |

**Option 1 Area Costs**

|  |  |  |
| --- | --- | --- |
| Appendix No. | Title | Price (£) |
| 2 | Site Clearance |  |
| 3 | Fencing |  |
| 5 | Drainage |  |
| 6 | Earthworks |  |
| 7 | Pavements |  |
| 11 | Kerbing |  |
| **Total** |  |  |

**Option 2 Area Costs**

|  |  |  |
| --- | --- | --- |
| Appendix No. | Title | Price (£) |
| 2 | Site Clearance |  |
| 3 | Fencing |  |
| 5 | Drainage |  |
| 6 | Earthworks |  |
| 7 | Pavements |  |
| 11 | Kerbing |  |
| 16 | Piling |  |
| **Total** |  |  |

**Option 3 Area Costs**

|  |  |  |
| --- | --- | --- |
| Appendix No. | Title | Price (£) |
| 2 | Site Clearance |  |
| 3 | Fencing |  |
| 5 | Drainage |  |
| 6 | Earthworks |  |
| 7 | Pavements |  |
| 11 | Kerbing |  |
| **Total** |  |  |

**Option 4 Area Costs**

|  |  |  |
| --- | --- | --- |
| Appendix No. | Title | Price (£) |
| 2 | Site Clearance |  |
| 3 | Fencing |  |
| 5 | Drainage |  |
| 6 | Earthworks |  |
| 7 | Pavements |  |
| 11 | Kerbing |  |
| **Total** |  |  |

**Project Cost**

|  |  |  |
| --- | --- | --- |
|  | Title | Price (£) |
|  | Full Scheme Cost |  |
|  | Option 1 Area Cost |  |
|  | Option 2 Area Cost |  |
|  | Option 3 Area Cost |  |
|  | Option 4 Area Cost |  |
|  |  |  |
|  | **GRAND TOTAL** (to be inserted in Contract Data Pt 2) |  |