

Specification of Works



Head Office
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Sports Ground Land Slippage and Associated Works Dawson Memorial Field Mayes Lane, Danbury, Essex



BA Ref: P18-529

February 2021

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Barker Associates (Essex) Ltd. Company Number: 11605920. Regulated by RICS
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RIBA 
Chartered Practice



Contents Page



Sports Ground Land Slippage and Associated Works

Dawson Memorial Field

Mayes Lane,

Danbury,

Essex

CM3 4NJ

Prepared For and on Behalf of:

Danbury Parish Council

The Old School House,

Main Road,

Danbury,

Essex

CM3 4NQ

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Prepared by	Robbie Ware BSc (Hons)
Authorised for issue by	John Lewin BSc (Hons) FRICS MCIOB
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Section	Contents & Collection	No. Pages	Cost £
-	Form of Tender	1	
Section 1	Preliminaries	41	£
Section 2	Preambles	23	N/A
Section 3	Schedule of Works	8	£
Appendix A :	Dawsons Memorial Field; Slope Repairs Specification & Contract Drawings by GEMCO Ltd	197	£
Appendix B :	Summary of Costs Schedule	1	£
Appendix C :	Pre-Construction Information Pack	22	£

TOTAL TO TENDER

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Form of Tender



**Sports Ground Land Slippage and
Associated Works**

For and on behalf of:
(Company Name)

AT

Signature:

Dawson Memorial Field

Print Name:

Mayes Lane,

Company Address:

Danbury,

Essex

Company

CM3 4NJ

Registration Number:

Date:

Dear Sirs,

I/We the undersigned, having read all the Tender Documentation delivered to me/us, and having examined all the documents referred to therein, do hereby offer to fully execute the whole of the Works and our Services in accordance with the Conditions of Contract for the fixed price sum of:

£ _____ (amount in words) excl VAT

£ _____ (amount in figures) excl VAT

based on an overall period for completion of the Works of _____ (weeks)

ALTERNATIVE TENDER

£ _____ (amount in words) excl VAT

£ _____ (amount in figures) excl VAT

based on an overall period for completion of the Works of _____ (weeks)

and based on an alternative specification, to meet all design, performance, planning requirements and the like; all proposals subject to approval of the Employer's Agent.

It is a requirement that a priced schedule of proposed savings is to accompany your tender.

I/We hereby declare that

This is a bona fide tender intended to be competitive and the amount of the tender has not been fixed or adjusted by or under or in accordance with any agreement or arrangement with any other person.

The amount or approximate amount of the proposed tender has not been communicated to a person other than the person calling for tenders.

I/We have not entered into any agreement with any other person that he shall refrain from tendering or as to the amount of any tender to be submitted.

The tender price submitted is on a fixed price basis.

The tender price submitted includes _____% for overheads and profit.

I/We agree that this tender shall remain open for acceptance within 12 weeks from the date for receipt of tenders.

I/We understand that the Employer is not contractually bound to consider all or any timely and conforming tenders nor to accept the lowest or any tender and that the Employer will not be responsible for any costs involved in the preparation of the tender.

If this tender should be accepted I/We hereby agree that this tender, together with your official order, the tender documents and drawings will constitute a Contract between the Client and me/us.

Your tender should be delivered in an unmarked envelope to the address below, clearly stating that it is a tender return:

Barker Associates

Majesty House

Avenue West , Skyline 120

Braintree, Essex CM77 7AA

Or via email to rware@barker-associates.co.uk

Tenders to be returned no later than 2pm on 26 March 2021

Section 1: **Preliminaries**



A10

Project particulars

Clauses

110 The Project

1. **Name:** Sports Ground Land Slippage and Associated Works
2. **Nature:** Rectification of ground slippage and associated works to footpaths and drainage
3. **Location:** Dawson Memorial Field
4. **Timescale for construction work:** 3 weeks

120 Employer (Client)

1. **Name:** Danbury Parish Council
2. **Address:** The Old School House, Main Road, Danbury, Essex CM3 4NQ
3. **Contact:** Michelle Harper
4. **Telephone:** 01245 225111
5. **E-mail:** michelle.harper@danbury-essex.gov.uk

130 Principal contractor (CDM)

1. **Name:** TBC
2. **Address:** TBC
3. **Contact:** TBC
4. **Telephone:** TBC
5. **E-mail:** TBC

140 Employer's Agent

1. **Name:** Barker Associates
2. **Address:** Majesty House, Avenue West, Skyline 120, Braintree, Essex CM77 7AA
3. **Contact:** Robbie Ware
4. **Telephone:** 01279 790057
5. **E-mail:** rware@barker-associates.co.uk

150 Principal designer

1. **Name:** Barker Associates – Note: Post Contract this will be the appointed Contractor's role under a Design and Build Contract
2. **Address:** Majesty House, Avenue West, Skyline 120, Braintree, Essex CM77 7AA
3. **Contact:** Robbie Ware
4. **Telephone:** 01279 790057
5. **Email:** rware@barker-associates.co.uk

A11

Tender and contract documents

Clauses

110 Tender Drawings

1. **The tender drawings are:** as detailed in Specification of Works document issued for tender.

120 Contract drawings

1. **The contract drawings:** The same as the tender drawings.
2. **Exceptions:** N/A

160 Preconstruction information

1. **Format:** The preconstruction information is described in these preliminaries in section A34. It refers to information given elsewhere in the preliminaries and other tender documents.

Ω End of Section



A12

The site/ existing buildings

Clauses

110 The site

1. **Description:** The site comprises the land directly north of the bowling green; comprising the southern end of the car park and the slope leading down to the bowling green situated in the south-eastern area of the larger recreational space. A footpath traverses the slope, which has been damaged by a localised landslide.

120 Existing buildings on/ adjacent to the site

1. **Description:** A central building in the centre of the site with the outdoor areas largely occupied by; playing fields, walking trails, tennis courts, car parking, and maintenance shed and storage area

140 Existing utilities and services

1. Drawings: (Information shown is indicative only): 1333 / 004.
2. **Other information:** Not all utilities and services have been identified.

160 Soils and ground water

1. **Information:** Included in the tender documents.

170 Site investigation

1. **Report:** Included in the tender documents.

180 Health and safety file

1. Availability for inspection: The health and safety file for the site/ building may be seen by appointment during normal office hours at: Danbury Parish Council.
2. **Other documents:** N/A
3. **Arrangements for inspection:** TBC

200 Access to the site

1. **Description:** Through the car park accessed directly from Mayes Lane.
2. **Limitations:** TBC at the Pre-Start Meeting
3. **Access for inspections:** Provide access at reasonable times for both on-site and off-site work.

210 Parking

1. **Restrictions on parking of the Contractor's and employees' vehicles:** TBC at the Pre-Start Meeting

220 Use of the site

1. **General:** Do not use the site for any purpose other than carrying out the Works.
2. **Limitations:** N/A



230 Surrounding land/ building uses

1. **General:** Adjacent or nearby uses or activities are as follows:
 - 1.1. Sports facilities and residential properties.

250 Site visit

1. **Assessment:** Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.
2. **Arrangements for visit:** via Employer's Agent

Ω End of Section



A13

Description of the work

Clauses

120 The works

1. **Description:** The proposed works comprise the reinstatement of the damaged footpath, the installation of groundwater control measures and local earthworks support on the slope.

Ω End of Section



A20

JCT design and build contract (DB)

Clauses

JCT design and build contract

- [The Contract](#): JCT Design and Build Contract (DB), 2016 Edition.
- [Requirement](#): Allow for the obligations, liabilities and services described.

The recitals

First - The Works

- [Comprise](#): The proposed works comprise the reinstatement of the damaged footpath, the installation of groundwater control measures and local earthworks support on the slope.

Fifth - Division of the works into sections

- The Fifth Recital will not be deleted.

Articles

3 - Employer's Agent

- [Employer's Agent](#): See clause A10/140.

5 - Principal Designer

- [Principal designer](#): See clause A10/150.

6 - Principal Contractor

- [Principal contractor](#): See clause A10/130.

Contract particulars


Fourth recital and clause 4.5 - Construction industry scheme (CIS)

- Employer at the Base Date is not a 'contractor' for the purposes of the CIS.

Fifth Recital - Description of Sections

- [Description of Sections](#)
 - None.

Seventh Recital and Part 1 of Schedule 2 - Supplemental provisions - Part 1

- Named subcontractors: Supplemental Provision 1 applies.
 - Valuation of changes - Contractor's estimates: Supplemental Provision 2 applies.
 - Loss and expense - Contractor's estimates: Supplemental Provision 3 applies.
- 

Seventh Recital and Part 2 of Schedule 2 - Supplemental provisions - Part 2

- Acceleration quotation: Supplemental Provision 4 applies.
- Collaborative working: Supplemental Provision 5 applies.
- Health and safety: Supplemental Provision 6 applies.
- Cost savings and value improvements: Supplemental Provision 7 applies.
- Sustainable developments and environmental considerations: Supplemental Provision 8 applies.
- Performance indicators and monitoring: Supplemental Provision 9 does not apply.
- Notification and negotiation of disputes: Supplemental Provision 10 applies.
- Where Supplemental Provision 10 applies, the respective nominees of the parties are:
 - Employer's nominee: TBC
 - Contractor's nominee: TO BE COMPLETED BY CONTRACTOR
- Or such replacement as each party may notify to the other from time to time.

Article 4 - Employer's Requirements, Contractor's Proposals, Contract Sum Analysis

- Employer's Requirements: P18-529 Specification of Works
- Contractor's Proposals: To be completed by the Contractor.
- Contract Sum Analysis: To be completed by the Contractor.
- Specific Requirements: N/A

Article 8 - Arbitration

- Article 8 and clauses 9.3 to 9.8 (arbitration) apply.

Clause 1.1 - Base Date

- Base Date: 2nd March 2021

Clause 1.1 - Date for completion of the Works

- Date for completion of the Works (where completion by sections does not apply): TBC


Clause 1.7 - Addresses for service of notices

- Employer
 - Address: TBC
 - Fax number: TBC
- Contractor
 - Address: TO BE COMPLETED BY CONTRACTOR
 - Fax Number: TO BE COMPLETED BY CONTRACTOR

Clause 2.3 - Date of possession of the site

- Date of Possession of the site: TBC

Clause 2.4 - Deferment of possession of the site

- Clause 2.4 does not apply.
- 

- Where clause 2.4 applies, maximum period of deferment is N/A.

Clause 2.17.3 - Limit of Contractor's liability for loss of use, etc.

- [Limit of Contractor's liability for loss of use](#): Unlimited

Clause 2.29.2 - Liquidated damages

- Damages: At the rate of £150 per calendar week or pro rata thereto.

Clause 2.35 - Rectification period

- Period: twelve months from the date of practical completion of the Works.

Clause 4.2, 4.12 and 4.13 - Fluctuations Provision

- [Fluctuations Provision](#): No Fluctuations Provision applies
- [Where Fluctuations Option A or B applies](#)
 - [Percentage addition \(paragraph A.12 or paragraph B.13\)](#): N/A
- [Where Fluctuations Option C applies](#)
 - Rule 3: Base Month: N/A.
 - Rule 3: Non-Adjustable Element: N/A.
 - [Rules 10 and 30\(i\)](#): N/A

Clause 4.6 - Advance payment and advance payment bond

- [Advance payment](#): Clause 4.6 does not apply.

Clause 4.7 - Method of payment - Alternative B

- [Payment](#): Periodically, in accordance with Alternative B.

Clause 4.7.2 - Interim Payments - Interim Valuation Dates

- The first Interim Valuation Date is: Not applicable due to programme length there is to be no interim valuation date.

Clause 4.18.1 - Retention percentage

- Retention: 2.5 per cent.


Clause 6.4.1 - Contractor's Public Liability Insurance: Injury to persons or property

- [Insurance cover for any one occurrence or series of occurrences arising out of one event](#): £200,000.00

Clause 6.5.1 - Insurance - liability of Employer

- [Minimum amount of indemnity for any one occurrence or series of occurrences arising out of one event](#): £1,000,000.00

Clause 6.7 and schedule 3 - Works Insurance - insurance options applicable

- [Schedule 3](#)
 - Insurance option C applies.
- 

- Percentage to cover professional fees: 15 per cent
- Where Insurance Option A applies, annual renewal date (as supplied by the Contractor): TO BE COMPLETED BY CONTRACTOR
- Where Insurance Option C applies
 - Paragraph C1 applies
 - If paragraph C1 does not apply, the C1 Replacement Schedule is: N/A

Clause 6.15 - Professional Indemnity insurance

- Level of cover: Amount of indemnity required:
 - is the aggregate amount for any one period of insurance.
 - and is £ 10,000,000.00.
- Cover for pollution and contamination claims: is not required
- Expiry of required period of Professional Indemnity Insurance: 6 years

Clause 7.4 - Third Party Rights and Collateral Warranties

- Details: As set out in the following documents: P18-529 Scope of Works.

Clause 8.9.2 - Period of suspension (termination by Contractor)

- Period of suspension: Two months

Clauses 8.11.1.1 to 8.11.1.6 - Period of suspension (termination by either Party)

- Period of suspension: Two months

Clause 9.2.1 - Adjudication

- The Adjudicator is: to be appointed by nominating body
- Nominating body: Where no Adjudicator is named or where the named Adjudicator is unwilling or unable to act (whenever that is established): The Royal Institution of Chartered Surveyors.

Clause 9.4.1 - Arbitration

- Appointor of Arbitrator (and of any replacement): President or a Vice President of the Royal Institution of Chartered Surveyors.



The conditions - No Amendments

Section 1: Definitions and Interpretation - No Amendments

Section 2: Carrying out the Works - No Amendments

Section 3: Control of the Works - No Amendments

Section 4: Payment - No Amendments

Section 5: Changes - No Amendments

Section 6: Injury, Damage and Insurance - No Amendments

Section 7: Assignment, Third Party Rights and Collateral Warranties - No Amendments

Section 8: Termination - No Amendments

Section 9: Settlement of Disputes - No Amendments

Project bank account - No Amendments

Execution

Execution

- The contract: Will be executed under hand.

Ω End of Section



A30

Tendering/ subletting/ supply

Main contract tendering

110 Scope

1. **General:** These conditions are supplementary to those stated in the Invitation to Tender and on the form of tender.

145 Tendering procedure

1. **General:** In accordance with the principles of: NBS Guide to Tendering for Construction Projects.
2. **Arithmetical errors:** Overall price is dominant.

160 Exclusions

1. **Inability to tender:** Immediately inform if any parts of the work as defined in the tender documents cannot be tendered.
2. **Relevant parts of the work:** Define those parts, stating reasons for the inability to tender.

170 Acceptance of tender

1. **Acceptance:** No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non acceptance will be given.
2. **Costs:** No liability is accepted for any cost incurred in the preparation of any tender.

190 Period of validity

1. **Period:** After submission or lodgment, keep tender open for consideration (unless previously withdrawn) for not less than three months.
2. **Date for possession:** See section A20.

Pricing/ submission of documents

210 Preliminaries in the specification

1. The Preliminaries/ General conditions sections (A10-A56 inclusive) have been prepared in accordance with SMM7.

220 Pricing of preliminaries

1. **Abbreviations:** The following have been used:
2. F = Fixed charge item.
 - 2.1. TR = Time related charge item.

310 Tender

1. **General:** Tenders must include for all work shown or described in the tender documents as a whole or clearly apparent as being necessary for the complete and proper execution of the Works.



440 Contract sum analysis

1. **Content of the Analysis:** A breakdown of the Contract Sum into at least the following categories:
 - 1.1. as tender document.
2. **Form:** PDF
3. **Fully priced copy:** Submit with tender.

480 Programme

1. **Programme of work:** Prepare a summary showing the sequence and timing of the principal parts of the Works and periods for planning and design. Itemize any work which is excluded.
2. **Submit:** within one week of request

500 Tender stage method statements

1. **Method statements:** Prepare, describing how and when the following is to be carried out:
 - 1.1. Sequence of Works.
2. **Statements:** Submit within one week of request.

515 Alternative time tenders

1. **General:** In addition to and at the same time as tendering based upon the date or period specified in section A20, an alternative tender based upon a different date for completion or period may be submitted.
2. **Date for completion:** If any such tender is accepted the date for completion inserted in the Contract will be the date stated in the alternative tender or determined from the period stated in the alternative tender.


520 Contractor's proposals

1. **Proposals:** Include the following:
 - 1.1. **Design drawings:** TBC
 - 1.2. **Technical information:** TBC
2. **Submit:** With tender.

540 Quality control resources

1. **Statement:** Describe the organisation and resources to control the quality of the Works, including the work of subcontractors.
2. **QA staff:** Identify in the statement the number and type of staff responsible for quality control, with details of their qualifications and duties.
3. **Submit:** Within one week of request

550 Health and safety information

1. **Content:** Describe the organization and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.
 2. **Include**
 - 2.1. A copy of the health and safety policy document, including risk assessment procedures.
 - 2.2. Accident and sickness records for the past five years.
 - 2.3. Records of previous Health and Safety Executive enforcement action.
- 

- 2.4. Records of training and training policy.
- 2.5. The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.
3. **Submit:** Within one week of request

570 Outline construction phase health and safety plan

1. **Content:** Submit the following information within one week of request:
 - 1.1. Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the contractor will be addressed.
 - 1.2. Details of the management structure and responsibilities.
 - 1.3. Arrangements for issuing health and safety directions.
 - 1.4. Procedures for informing other contractors and employees of health and safety hazards.
 - 1.5. Selection procedures for ensuring competency of other contractors, the self-employed and designers.
 - 1.6. Procedures for communications between the project team, other contractors, and site operatives.
 - 1.7. Arrangements for cooperation and coordination between contractors.
 - 1.8. Procedures for carrying out risk assessment and for managing and controlling the risk.
 - 1.9. Emergency procedures including those for fire prevention and escape.
 - 1.10. Arrangements for ensuring that all accidents, illness, and dangerous occurrences are recorded.
 - 1.11. Arrangements for welfare facilities.
 - 1.12. Procedures for ensuring that all persons on site have received relevant health and safety information and training.
 - 1.13. Arrangements for consulting with and taking the views of people on site.
 - 1.14. Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
 - 1.15. Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
 - 1.16. Review procedures to obtain feedback.

Subletting/ supply

645 'Listed' domestic sub-contractors

1. **General:** Contract Documents provide that certain work must be carried out by a person of the Contractor's choice selected from a list of not less than three persons given therein.
2. **The selected person:** Will become a subcontractor as provided for in the Contract Condition for Subletting.
3. **Additions to lists**
 - 3.1. The Employer or Employer's representative may, but only with the consent of the Contractor which shall not be unreasonably withheld, add additional person(s) to the list at any time prior to the execution of a binding subcontract agreement.
 - 3.2. The Contractor may, but only with consent, which will not be unreasonably withheld, add additional persons to the list and must, if requested, submit (in an approved form) evidence of the suitability of such additional person(s). Wherever possible, submissions for addition of person(s) must be made, and consent obtained, before return of the tender. When any submission for addition of person(s) is made with the tender the consequences, if any, to the tender price compared to the use of the listed persons are to be made clear or the tender will be treated as qualified.

4. **Shortage of names:** If at any time prior to execution of a binding subcontract agreement less than three persons named in the list (including any persons added as provided above) are able and willing to carry out the relevant work, give notice without delay. The Employer will then forthwith add the names of other persons as provided above so that the list comprises not less than three such persons or confirm that no names will be added. If the Employer fails to do either within one week of the Contractor's notification the Contractor, who may subcontract in accordance with the Contract, must carry out the work.
5. **Agreement:** Before the start of work to which the list relates enter into a binding subcontract agreement and confirm that this has been done, giving the name of the selected subcontractor.

Ω End of Section



A31

Provision, content and use of documents

Definitions and interpretations

110 Definitions

1. **Meaning:** Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification are as stated here or in the appropriate referenced document.

120 Communication

1. **Definition:** Includes advise, inform, submit, give notice, instruct, agree, confirm, seek, or obtain information, consent or instructions, or make arrangements.
2. **Format:** In writing to the person named in clause A10/140 unless specified otherwise.
3. **Response:** Do not proceed until response has been received.

130 Products

1. **Definition:** Materials, both manufactured and naturally occurring, and goods, including components, equipment, and accessories, intended for the permanent incorporation in the Works.
2. **Includes:** Goods, plant, materials, site materials and things for incorporation into the Works.

135 Site equipment

1. **Definition:** Apparatus, appliances, machinery, vehicles, or things of whatsoever nature required in or about the construction for the execution and completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
2. **Includes:** Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins, and other site facilities.
3. **Excludes:** Products and equipment or anything intended to form or forming part of the permanent works.

140 Drawings

1. **Definitions:** To BSRIA BG 6, 'A design framework for building services: Design activities and drawing definitions'.
2. **CAD data:** In accordance with ISO 19650.

145 Contractor's choice

1. **Meaning:** Selection delegated to the Contractor, but liability to remain with the specifier.

150 Contractor's Design

1. **Meaning:** Design to be carried out or completed by the Contractor and supported by appropriate contractual arrangements, to correspond with specified requirements.

155 Submit proposals

1. **Meaning:** Submit information in response to specified requirements.




160 Terms used in specification

1. **Remove:** Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings, and bedding materials. Dispose of unwanted materials. Excludes removal and disposal of associated pipework, wiring, ductwork or other services.
2. **Remediate:** Action or measures taken to lessen, clean up, remove, or mitigate the existence of hazardous materials; in accordance with standards, or requirements as may be set out by statutes, rules, regulations or specification.
3. **Fix:** Receive, unload, handle, store, protect, place, and fasten in position; dispose of waste and surplus packaging. To include all labour, materials and site equipment for that purpose.
4. **Supply and fix:** As above, but including supply of products, components, or systems to be fixed, together with everything necessary for their fixing. All products, components or systems are to be supplied and fixed unless stated otherwise.
5. **Keep for reuse:** Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, protect adequately and store until required by the employer/ purchaser, or until required for use in the works as instructed.
6. **Keep for recycling:** As 'keep for reuse' but relates to a naturally occurring material rather than a manufactured product.
7. **Make good:** Execute local remedial work to designated work. Make secure, sound, and neat. Excludes redecoration and/ or replacement.
8. **Replace:** Supply and fix new products matching those removed. Execute work to match original new state of that removed.
9. **Repair:** Execute remedial work to restore something to its original working state. Make secure, sound, and neat. Excludes redecoration and/ or replacement.
10. **Refix:** Fix removed products.
11. **Ease:** Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.
12. **Match existing:** Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
13. **System:** Equipment, accessories, controls, supports and ancillary items (including installation) necessary for that section of the work to function.

170 Manufacturer and product reference

1. **Definition:** When used in this combination:
 - 1.1. **Manufacturer:** the person or legal entity under whose name or trademark the particular product, component or system is marketed
 - 1.2. **Product reference:** the proprietary brand name and/ or identifier by which the particular product, component or system is described.
2. **Currency:** References are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.

200 Substitution of products

1. **Products:** If an alternative product to that specified is proposed, obtain approval before ordering the product.
 2. **Reasons:** Submit reasons for the proposed substitution.
 3. **Documentation:** Submit relevant information, including:
- 

- 3.1. manufacturer and product reference;
 - 3.2. cost;
 - 3.3. availability;
 - 3.4. relevant standards;
 - 3.5. performance;
 - 3.6. function;
 - 3.7. compatibility of accessories;
 - 3.8. proposed revisions to drawings and specification;
 - 3.9. compatibility with adjacent work;
 - 3.10. appearance;
 - 3.11. copy of warranty/ guarantee.
4. **Alterations to adjacent work:** If needed, advise scope, nature and cost.
 5. **Manufacturers' guarantees:** If substitution is accepted, submit before ordering products.

210 Cross references

1. **Accuracy:** Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
2. **Related terminology:** Where a numerical cross-reference is not given the relevant sections and clauses of the specification will apply.
3. **Relevant clauses:** Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
4. **Discrepancy or ambiguity:** Before proceeding, obtain clarification or instructions.

220 Referenced documents

1. **Conflicts:** Specification prevails over referenced documents.

230 Equivalent products

1. **Inadvertent omission:** Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.

240 Substitution of standards

1. **Specification to British Standard or European Standard:** Substitution may be proposed complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
2. **Before ordering:** Submit notification of all such substitutions.
3. **Documentary evidence:** Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

250 Currency of documents and information

1. **Currency:** References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to Tender.



260 Sizes

1. **General dimensions:** Products are specified by their coordinating sizes.
2. **Timber:** Cross section dimensions shown on drawings are:
 - 2.1. Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
 - 2.2. Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

Documents provided on behalf of employer

440 Dimensions

1. **Scaled dimensions:** Do not rely on.

460 The specification

1. **Coordination:** All sections must be read in conjunction with Main Contract Preliminaries/ General conditions.

Documents provided by contractor/ subcontractors/ suppliers

510 Changes/ amendments to Employer's Requirements

1. **Contractor's changes to Employer's Requirements:** Support request for substitution or variation with all relevant information.
2. **Employer's amendments to Employer's Requirements:** If considered to involve a variation, which has not already been acknowledged as a variation, notify without delay (maximum period 7 days), and do not proceed until instructed. Claims for extra cost, if made after the variation has been carried out, may not be allowed.
3. **Submit:** one copy


600 Contractor's Design information

1. **Master programme:** Make reasonable allowance for completing design/ production information, submission (including information relevant to the CDM Regulations), comment, inspection, amendment, resubmission, and reinspection.
2. **Information required:** Detailed drawings
 - 2.1. **Format:** PDF
 - 2.2. **Number of copies:** one copy
3. **Submit:** Within one week of request.

620 As-built drawings and information

1. **General:** Provide the following drawings/ information:
 - 1.1. Services and utilities location drawings.
2. **Submit:** At least two weeks before date for completion.

640 Maintenance instructions and guarantees

1. **Components and equipment:** Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
 2. **Information location:** In Building Manual.
 3. **Emergency call out services:** Provide telephone numbers for use after completion. Extent of cover: office hours only.
- 

Document/ data interchange - No Amendments

Ω End of Section



A32

Management of the works

Generally

110 Supervision

1. **General:** Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.
2. **Coordination:** Arrange and monitor a programme with each subcontractor, supplier, local authority and statutory undertaker, and obtain and supply information as necessary for coordination of the work.

117 Constructing Better Health scheme

1. **Membership:** Register and submit evidence of registration.
2. **Contact**
 - 2.1. Constructing Better Health, B&CE Building, Manor Royal, Crawley, West Sussex RH10 9QP.
 - 2.2. **Tel:** 0845 873 7726
 - 2.3. **Email:** info@cbhscheme.co.uk
 - 2.4. **Website:** www.cbhscheme.co.uk

120 Insurance

1. **Documentary evidence:** Before starting work on site submit details, and/ or policies and receipts for the insurances required by the Conditions of Contract.

130 Insurance claims

1. **Notice:** If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, immediately give notice to the employer/ client, the person administering the Contract on their behalf and the Insurers.
2. **Failure to notify:** Indemnify the employer/ client against any loss, which may be caused by failure to give such notice.

140 Climatic conditions

1. **Information:** Record accurately and retain:
 - 1.1. Daily maximum and minimum air temperatures (including overnight).
 - 1.2. Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

150 Ownership

1. **Alteration/ clearance work:** Materials arising become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.



Programme/ progress

210 Programme

1. **Master programme:** When requested and before starting work on site, submit in an approved form a master programme for the works, which must include details of:
 - 1.1. Design, production information and proposals provided by the contractor/ subcontractors/ suppliers, including inspection and checking (see section A31).
 - 1.2. Planning and mobilization by the contractor.
 - 1.3. Earliest and latest start and finish dates for each activity and identification of all critical activities.
 - 1.4. Running in, adjustment, commissioning and testing of all engineering services and installations
 - 1.5. Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)
 - 1.6. Work by or on behalf of the employer and concurrent with the contract (see section A50). The nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the contract documents.
2. **Exclusions:** Where and to the extent that the programme implications for work which is not so defined are impossible to assess, exclude it and confirm this when submitting the programme.
3. **Submit:** one copy

240 Notice of commencement of work

1. **Part of the work:** Work on-site
2. **Notice period (minimum):** one week

250 Monitoring


1. **Progress:** Record on a copy of the programme kept on site.
2. **Avoiding delays:** If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.
3. **Key Performance Indicators**
 - 3.1. **Details:**
 - 3.2. **Performance:** Record progress against each KPI.
 - 3.3. **Corrective action:** If performance falls below target, submit proposals as soon as possible.

290 Notice of completion

1. **Requirement:** Give notice of the anticipated dates of completion of the whole or parts of the Works.
2. **Associated works:** Ensure necessary access, services and facilities are complete.
3. **Period of notice (minimum):** One week

Control of cost

420 Removal/ replacement of existing work

1. **Extent and location:** Agree before commencement.
 2. **Execution:** Carry out in ways that minimize the extent of work.
- 

440 Measurement

1. **Covered work:** Give notice before covering work required to be measured.

470 Products not incorporated into the Works

1. **Ownership:** At the time of each valuation, supply details of those products not incorporated into the Works which are subject to any reservation of title inconsistent with passing of property as required by the Conditions of Contract, together with their respective values.
2. **Evidence:** When requested, provide evidence of freedom of reservation of title.

475 Listed products stored off site

1. **Evidence of Title:** Submit reasonable proof that the property in 'listed items' is vested in the Contractor.
2. **Include for products purchased from a supplier**
 - 2.1. A copy of the contract of sale and a written statement from the supplier that any conditions of the sale relating to the passing of property have been fulfilled and the products are not subject to any encumbrance or charge.
3. **Include for products purchased from a supplier by a subcontractor or manufactured or assembled by any subcontractor**
 - 3.1. Copies of the subcontract with the subcontractor and a written statement from the subcontractor that any conditions relating to the passing of property have been fulfilled.

480 Labour and equipment returns

1. **Records:** Provide for verification at the beginning of each week in respect of each of the previous seven days.
2. **Records must show**
 - 2.1. The number and description of craftsmen, labourers and other persons directly or indirectly employed on or in connection with the Works or Services, including those employed by subcontractors.
 - 2.2. The number, type and capacity of all mechanical, electrical and power-operated equipment employed in connection with the Works or Services

Ω End of Section



A33

Quality standards/ control

Standards of products and executions

110 Incomplete documentation

1. **General:** Where and to the extent that products or work are not fully documented, they are to be:
 - 1.1. Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
 - 1.2. Suitable for the purposes stated or reasonably to be inferred from the project documents.
2. **Contract documents:** Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

120 Workmanship skills

1. **Operatives:** Appropriately skilled and experienced for the type and quality of work.
2. **Registration:** With Construction Skills Certification Scheme.
3. **Evidence:** Operatives must produce evidence of skills/ qualifications when requested.


130 Quality of products

1. **Generally:** New. (Proposals for recycled products may be considered).
2. **Supply of each product:** From the same source or manufacturer.
3. **Whole quantity of each product required to complete the Works:** Consistent kind, size, quality and overall appearance.
4. **Tolerances:** Where critical, measure a sufficient quantity to determine compliance.
5. **Deterioration:** Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

135 Quality of execution

1. **Generally:** Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
2. **Colour batching:** Do not use different colour batches where they can be seen together.
3. **Dimensions:** Check on-site dimensions.
4. **Finished work:** Not defective, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
5. **Location and fixing of products:** Adjust joints open to view so they are even and regular.

140 Evidence of Compliance

1. **Proprietary products:** Retain on site evidence that the proprietary product specified has been supplied.
 2. **Performance specification:** Submit evidence of compliance, including test reports indicating:
 - 2.1. Properties tested.
 - 2.2. Pass/ fail criteria.
 - 2.3. Test methods and procedures.
 - 2.4. Test results.
 - 2.5. Identity of testing agency.
 - 2.6. Test dates and times.
- 

- 2.7. Identities of witnesses.
- 2.8. Analysis of results.

150 Inspections

1. **Products and executions:** Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
 - 1.1. Date of inspection.
 - 1.2. Part of the work inspected.
 - 1.3. Respects or characteristics which are approved.
 - 1.4. Extent and purpose of the approval.
 - 1.5. Any associated conditions.

160 Related work

1. **Details:** Provide all trades with necessary details of related types of work. Before starting each new type or section of work ensure previous related work is:
 - 1.1. Appropriately complete.
 - 1.2. In accordance with the project documents.
 - 1.3. To a suitable standard.
 - 1.4. In a suitable condition to receive the new work.
2. **Preparatory work:** Ensure all necessary preparatory work has been carried out.

170 Manufacturer's recommendations/ instructions


1. **General:** Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
2. **Exceptions:** Submit details of changes to recommendations or instructions.
3. **Execution:** Use ancillary products and accessories supplied or recommended by main product manufacturer.
4. **Products:** Comply with limitations, recommendations and requirements of relevant valid certificates.

180 Water for the works

1. **Mains supply:** Clean and uncontaminated.
2. **Other:** Do not use until:
 - 2.1. Evidence of suitability is provided.
 - 2.2. Tested to BS EN 1008 if instructed.

Samples/ approvals

220 Approval of products

1. **Submissions, samples, inspections and tests:** Undertake or arrange to suit the Works programme.
 2. **Approval:** Relates to a sample of the product and not to the product as used in the Works. Do not confirm orders or use the product until approval of the sample has been obtained.
 3. **Complying sample:** Retain in good, clean condition on site. Remove when no longer required.
- 

230 Approval of execution

1. **Submissions, samples, inspections and tests:** Undertake or arrange to suit the Works programme.
2. **Approval:** Relates to the stated characteristics of the sample. (If approval of the finished work as a whole is required this is specified separately). Do not conceal, or proceed with affected work until compliance with requirements is confirmed.
3. **Complying sample:** Retain in good, clean condition on site. Remove when no longer required.

Accuracy/ setting out generally

320 Setting out

1. **General:** Submit details of methods and equipment to be used in setting out the Works.
2. **Levels and dimensions:** Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.
3. **Inform:** When complete and before commencing construction.

330 Appearance and fit

1. **Tolerances and dimensions:** If likely to be critical to execution or difficult to achieve, as early as possible either:
 - 1.1. Submit proposals; or
 - 1.2. Arrange for inspection of appearance of relevant aspects of partially finished work.
2. **General tolerances (maximum):** To BS 5606, tables 1 and 2.

360 Record drawings

1. **Site setting out drawing:** Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the Contract and hand over on completion.

Services generally


410 Services regulations

1. **New or existing services:** Comply with the Byelaws or Regulations of the relevant Statutory Authority.

420 Water regulations/ byelaws notification

1. **Requirements:** Notify Water Undertaker of any work carried out to (or which affects) new or existing services and submit any required plans, diagrams and details.
2. **Consent:** Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.

430 Water regulations/ byelaws contractor's certificate

1. **On completion of the work:** Submit (copy where also required to the Water Undertaker) a certificate including:
 - 1.1. The address of the premises.
 - 1.2. A brief description of the new installation and/ or work carried out to an existing installation.
 - 1.3. The Contractor's name and address.
 - 1.4. A statement that the installation complies with the relevant Water Regulations or Byelaws.
 - 1.5. The name and signature of the individual responsible for checking compliance.
- 

1.6. The date on which the installation was checked.

Supervision/ inspection/ defective work

510 Supervision

1. **General:** In addition to the constant management and supervision of the Works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.
2. **Evidence:** Submit, including details of the person proposed, their relevant skills training and knowledge; practical experience; qualifications; membership or registration with professional bodies; employment history, work related assessments and management structure.
3. **Submittal date:**
4. **Replacement:** Give maximum possible notice before changing person in charge or site agent.

520 Coordination of engineering services

1. **Suitability:** Site organisation staff must include one or more persons with appropriate knowledge and experience of mechanical and electrical engineering services to ensure compatibility between engineering and the Works generally.
2. **Evidence:** Submit when requested CVs or other documentary evidence relating to the staff concerned.

530 Overtime working

1. **Notice:** Prior to overtime being worked, submit details of times, types and locations of work to be done.
 - 1.1. **Minimum period of notice:** Two days
2. **Concealed work:** If executed during overtime for which notice has not been given, it may be required to be opened up for inspection and reinstated at the Contractor's expense.


540 Defects in existing work

1. **Undocumented defects:** When discovered, immediately give notice. Do not proceed with affected related work until response has been received.
2. **Documented remedial work:** Do not execute work which may:
 - 2.1. Hinder access to defective products or work; or
 - 2.2. Be rendered abortive by remedial work.

610 Proposals for rectification of defective products/ executions

1. **Proposals:** Immediately any execution or product is known, or appears, to be not in accordance with the Contract, submit proposals for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.
2. **Acceptability:** Such proposals may be unacceptable and contrary instructions may be issued.

630 Quality control

1. **Procedures:** Establish and maintain to ensure that the Works, including the work of subcontractors, comply with specified requirements.
 2. **Records:** Maintain full records, keep copies on site for inspection, and submit copies on request.
 3. **Content of records**
- 

- 3.1. Identification of the element, item, batch or lot including location in the Works.
- 3.2. Nature and dates of inspections, tests and approvals.
- 3.3. Nature and extent of nonconforming work found.
- 3.4. Details of corrective action.

Work at or after completion

710 Work before completion

1. **General:** Make good all damage consequent upon the Works.
2. **Temporary markings, coverings and protective wrappings:** Remove unless otherwise instructed.
3. **Cleaning:** Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.
4. **Cleaning materials and methods:** As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.
5. **COSHH dated data sheets:** Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.
6. **Minor faults:** Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.
7. **Moving parts of new work:** Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

720 Security at completion

1. **General:** Leave the Works secure with, where appropriate, all accesses closed and locked.
2. **Keys:** Account for and adequately label all keys, and hand over together with an itemized schedule, retaining duplicate schedule signed as a receipt.

730 Making good defects

1. Remedial work: Arrange access with Employer.
2. **Rectification:** Give reasonable notice for access to the various parts of the Works.
3. **Completion:** Notify when remedial works have been completed.

Ω End of Section



A34

Security/ safety/ protection

Security, health and safety

110 Preconstruction information

1. **Location:** Integral with the project Preliminaries, including but not restricted to the following sections:
 - 1.1. **Description of project:** Sections A10 and A11.
 - 1.2. **Client's consideration and management requirements:** Sections A12, A13 and A36.
 - 1.3. **Environmental restrictions and on-site risks:** Section A12, A35 and A34.
 - 1.4. **Significant design and construction hazards:** Section A34.
 - 1.5. **The health and safety file:** Section A37.

120 Execution hazards

1. **Common hazards:** Not listed. Control by good management and site practice.
2. **Significant hazards:** The design of the project includes the following:
 - 2.1. **Hazard:** Unknown Live services
 - 2.2. **Precautions assumed:** Identification/location of cables using CAT scan before works begin. All excavation works to be carried out along with HSE guidance Excavation and Underground Services.
 - 2.3. **Specification reference:** N/A
 - 2.4. **Drawing reference:** As detailed in Specification of Works tender issued document

140 Construction phase health and safety plan

1. **Submission:** Present to the employer/ client no later than one week before commencement of works on site..
2. **Confirmation:** Do not start construction work until the employer has confirmed in writing that the construction phase health and safety plan includes the procedures and arrangements required by the CDM Regulations.
3. **Content:** Develop the plan from and draw on the outline construction phase health and safety plan, clause A30/570, and the pre-tender health and safety plan/ preconstruction information.


150 Security

1. **Protection:** Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
2. **Access:** Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.
3. **Special requirements:** N/A

160 Stability

1. **Responsibility:** Maintain the stability and structural integrity of the works and adjacent structures during the contract.
2. **Design loads:** Obtain details, support as necessary and prevent overloading.

170 Occupied premises

1. **Extent:** Existing buildings will be occupied and/ or used during the contract as follows: sports facilities.
- 

2. **Works:** Carry out without undue inconvenience and nuisance and without danger to occupants and users.
3. **Overtime:** If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be allowed, provided that such overtime is authorized in advance.

210 Safety provisions for site visits

1. **Safety:** Submit details in advance of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
2. **Protective clothing and/ or equipment:** Provide and maintain on site for visitors to the-site.

Protect against the following

310 Explosives

1. **Use:** Not permitted.

350 Pesticides

1. **Use:** Not permitted.

360 Nuisance

1. **Duty:** Prevent nuisance from smoke, dust, rubbish, vermin and other causes.
2. **Surface water:** Prevent hazardous build-up on-site, in excavations and to surrounding areas and roads.

370 Asbestos containing materials

1. **Duty:** Report immediately any suspected materials discovered during execution of the works.
 - 1.1. Do not disturb.
 - 1.2. Agree methods for safe removal or encapsulation.

371 Dangerous or hazardous substances

1. **Duty:** Report immediately suspected materials discovered during execution of the works.
 - 1.1. Do not disturb.
 - 1.2. Agree methods for safe removal or remediation.

380 Fire prevention

1. **Duty:** Prevent personal injury or death, and damage to the Works or other property from fire.
2. **Standard:** Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by Construction Industry Publications and The Fire Protection Association (The 'Joint Fire Code').

390 Smoking on-site

1. **Smoking on-site:** Not permitted.

400 Burning on-site

1. **Burning on-site:** Not permitted.



430 Waste

1. **Waste:** Includes rubbish, debris, spoil, containers and packaging, and surplus material requiring disposal.
2. **Requirement:** Minimize production and prevent accumulation of waste. Keep the site and works clean and tidy. Clean out voids and cavities in the construction before closing.
3. **Disposal:** Collect and store in suitable containers. Remove from site and dispose of in a safe and competent manner, as approved and directed by the waste regulation authority.
4. **Recyclable material:** Sort and dispose of at a materials recycling facility approved by the waste regulation authority.
5. **Documentation:** Retain on-site.

440 Electromagnetic interference

1. **Duty:** Prevent excessive electromagnetic disturbance to apparatus outside the site.

450 Laser equipment

1. **Construction laser equipment:** Install, use and store in accordance with BS EN 60825-1 and the manufacturer's instructions.
2. **Class 1 or Class 2 laser equipment:** Ensure laser beam is not set at eye level and is terminated at the end of its useful path.
3. **Class 3A and Class 3B laser equipment:** Do not use without approval and subject to submission of a method statement on its safe use.

460 Powder actuated fixing systems


1. **Use:** Not permitted.

470 Invasive species

1. **General:** Prevent the spread of species (e.g. plants or animals) that may adversely affect the site or works economically, environmentally or ecologically.
2. **Special precautions:** None
3. **Duty:** Report immediately any suspected invasive species discovered during execution of the works.
 - 3.1. Do not disturb.
 - 3.2. Agree methods for safe eradication or removal.

Protect the following

510 Existing services

1. **Confirmation:** Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
 2. **Identification:** Before starting work, check and mark positions of utilities/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
 3. **Work adjacent to services**
 - 3.1. Comply with service authority's/ statutory undertaker's recommendations.
 - 3.2. **Adequately protect, and prevent damage to services:** Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
 4. **Identifying services**
- 

- 4.1. **Below ground:** Use signboards, giving type and depth;
- 4.2. **Overhead:** Use headroom markers.
5. **Damage to services:** If any results from execution of the Works:
 - 5.1. Immediately give notice and notify appropriate service authority/ statutory undertaker.
 - 5.2. Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate.
 - 5.3. Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
6. **Marker tapes or protective covers:** Replace, if disturbed during site operations, to service authority's/ statutory undertakers recommendations.

520 Roads and footpaths

1. **Duty:** Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris.
2. **Damage caused by site traffic or otherwise consequent upon the Works:** Make good to the satisfaction of the Employer, Local Authority or other owner.

530 Existing topsoil/ subsoil

1. **Duty:** Prevent over compaction of existing topsoil and subsoil in those areas which may be damaged by construction traffic, parking of vehicles, temporary site accommodation or storage of materials and which will require reinstatement prior to completion of the Works.
2. **Protection:** Before starting work submit proposals for protective measures.

540 Retained trees/ shrubs/ grassed areas

1. **Protection:** Preserve and prevent damage, except those not required.
2. **Replacement:** Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.


550 Retained trees

1. **Protected area:** Unless agreed otherwise do not:
 - 1.1. Dump spoil or rubbish, excavate or disturb topsoil, park vehicles or plant, store materials or place temporary accommodation within an area which is the larger of the branch spread of the tree or an area with a radius of half the tree's height, measured from the trunk.
 - 1.2. Sever roots exceeding 25 mm in diameter. If unintentionally severed give notice and seek advice.
 - 1.3. Change level of ground within an area 3 m beyond branch spread.

560 Existing features

1. **Protection:** Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works.
2. **Special requirements:** N/A

570 Existing work

1. **Protection:** Prevent damage to existing work, structures or other property during the course of the work.
 2. **Removal:** Minimum amount necessary.
 3. **Replacement work:** To match existing.
- 

620 Adjoining property

1. **Permission:** Obtain as necessary from owners if requiring to erect scaffolding on or otherwise use adjoining property.

625 Adjoining property restrictions

1. **Precautions**
 - 1.1. Prevent trespass of workpeople and take precautions to prevent damage to adjoining property.
 - 1.2. Pay all charges.
 - 1.3. Remove and make good on completion or when directed.
2. **Damage:** Bear cost of repairing damage arising from execution of the Works.

630 Existing structures

1. **Duty:** Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
2. **Supports:** During execution of the Works:
 - 2.1. Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining that may be endangered or affected by the Works.
 - 2.2. Do not remove until new work is strong enough to support existing structure.
 - 2.3. Prevent overstressing of completed work when removing supports.
3. **Adjacent structures:** Monitor and immediately report excessive movement.
4. **Standard:** Comply with BS 5975 and BS EN 12812.

640 Materials for recycling/ reuse

1. **Duty:** Sort and prevent damage to stated products or materials, clean off bedding and jointing materials and other contaminants.
2. **Storage:** Stack neatly and protect until required by the Employer or for use in the Works as instructed.

Ω End of Section



A35

Specific limitations on method/ sequence/ timing

Clauses

110 Scope

1. **General:** The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

160 Use or disposal of materials

1. **Specific limitations:** Refer to Specification of Works tender issue document

170 Working Hours

1. **Specific limitations:** Refer to Specification of Works tender issue document

Ω End of Section



A36

Facilities/ temporary work/ services

Generally

110 Spoil heaps, temporary works and services

1. **Location:** Give notice and details of intended siting.
2. **Maintenance:** Alter, adapt and move as necessary. Remove when no longer required and make good.

Accommodation

260 Sanitary accommodation

1. **Requirement:** Provide sanitary accommodation for the Employer/ Purchaser, and other members of the consultant team, either separate or shared with the Contractor's supervisory staff. Maintain in clean condition and provide all consumables.

Temporary works

320 Temporary works

1. Employer's specific requirements: Provide: Refer to Specification of Works tender issue document.

340 Name boards/ advertisements


1. **Name boards/ advertisements:** Not permitted.

Services and facilities

420 Lighting and power

1. **Supply:** Electricity from the existing mains may be used for the Works as follows:
 - 1.1. **Metering:** Free of Charge
 - 1.2. **Point of supply:** Groundskeeper workshop/hut
 - 1.3. **Available capacity:** TBC by the Contractor
 - 1.4. **Frequency:** 50 Hz.
 - 1.5. **Phase:** TBC by the Contractor
 - 1.6. **Current:** Alternating.
2. **Continuity:** No responsibility will be accepted for the consequences of failure or restriction in supply.

430 Water

1. **Supply:** The existing mains may be used for the Works as follows:
 - 1.1. **Metering:** Free of Charge
 - 1.2. **Source:** Mains
 - 1.3. **Location of supply point:** Groundskeeper workshop/hut
 - 1.4. **Conditions/ Restrictions:** TBC by the Contractor
 2. **Continuity:** No responsibility will be accepted for the consequences of failure or restriction in supply.
- 

440 Telephones

1. **Temporary on site telephone:** Provide as soon as practicable after the start on site for joint use by the Contractor and Subcontractors and pay all charges.
2. **Responses:** Make arrangements (e.g. an external bell) to ensure that incoming calls are answered promptly.

540 Meter readings

1. **Charges for service supplies:** Where to be apportioned ensure that:
 - 1.1. Meter readings are taken by relevant authority at possession and/ or completion as appropriate.
 - 1.2. Copies of readings are supplied to interested parties.

Ω End of Section



A37

Operation/ maintenance of the finished works

Generally

115 The Health and Safety File

1. **Responsibility:** the contractor
2. **Content:** Obtain and provide the following information: Detailed drawings of services and utilities.
3. **Format:** Electronic
4. **Delivery to:** Employer's Agent By (date): one month after Practical Completion Certificate.

150 Content of the building manual part 4: the Health and Safety File

1. **Content:** obtain and provide the following, including all relevant details not included in other parts of the manual, including:
 - 1.1. residual hazards and how they have been dealt with
 - 1.2. hazardous materials used
 - 1.3. information regarding the removal or dismantling of installed plant and equipment
 - 1.4. health and safety information about equipment provided for cleaning or maintaining the structure;
 - 1.5. the nature, location and markings of significant services,
 - 1.6. information and as-built drawings of the structure, its plant and equipment
 - 1.7.
2. Information prepared by others: Details: Pre-Construction Information Pack.
3. **Timescale for completion:** one month post Practical Completion
4. **Submit to:** Employer's Agent

160 Presentation of building manual

1. **Format:** A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.
2. **Selected drawings needed to illustrate or locate items mentioned in the Manual:** Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.
3. **As-built drawings:** The main sets may form annexes to the Manual.

Ω End of Section



A40

Contractor's general cost items: management and staff

Clauses

110 Management and staff

1. **Cost significant items:** Full time site manager. Contractor to also detail cost significant items with their tender return.

Ω End of Section



A41

Contractor's general cost items: site accommodation

Clauses

110 Site accommodation

1. [Details](#): Site accommodation required or made/ not made available by the Employer: See section A36.
2. [Cost significant items](#): Contractor to define cost related items with their tender returns

Ω End of Section



A42

Contractor's general cost items: services and facilities

Clauses

110 Power

1. [Cost significant items](#): Contractor to define cost related items with their tender return

140 Water

1. [Cost significant items](#): Contractor to define cost related items with their tender return

160 Safety, health and welfare

1. See clause A34/210.
2. [Cost significant items](#): Contractor to define cost related items with their tender return

170 Storage of materials

1. [Cost significant items](#): Contractor to define cost related items with their tender return

180 Rubbish disposal

1. See clause A34/430.
2. [Cost significant items](#): Contractor to define cost related items with their tender return

190 Cleaning

1. See clause A33/710.
2. [Cost significant items](#): Contractor to define cost related items with their tender return

220 Security

1. See clause A34/150.
2. [Cost significant items](#): Contractor to define cost related items with their tender return

230 Maintain public and private roads

1. See clause A34/520.
2. [Cost significant items](#): Contractor to define cost related items with their tender return

240 Small plant and tools

1. [Cost significant items](#): Contractor to define cost related items with their tender return

310 Additional services and facilities items

1. [Heading](#): TO BE COMPLETED BY CONTRACTOR
2. [Cost significant items](#): Contractor to define cost related items with their tender return

A43

Contractor's general cost items: mechanical plant

Clauses

140 Transport

1. **Cost significant items:** Contractor to define cost related items with their tender return

150 Earthmoving plant

1. **Cost significant items:** Contractor to define cost related items with their tender return

180 Paving and surfacing plant

1. **Cost significant items:** Contractor to define cost related items with their tender return

200 Additional mechanical plant

1. **Cost significant items:** TO BE COMPLETED BY CONTRACTOR

Ω End of Section



A44

Contractor's general cost items: temporary works

Clauses

150 Hoardings, fans, fencing, etc.

1. **Cost significant items:** Contractor to define cost related items with their tender return

160 Hardstanding

1. **Cost significant items:** Contractor to define cost related items with their tender return

200 Additional temporary works

1. **Cost significant items:** TO BE COMPLETED BY CONTRACTOR

Ω End of Section



A54

Provisional work/ items

Clauses

110 Provisional sums for defined work, for use with SMM7/ NRM2

1. **Item:** Footpath paving slabs
2. **Description of work:** Replacement of any footpath paving slabs
3. Provisional Sums: Include £2,000.00.
4. Allow for general attendance.

110 Provisional sums for defined work, for use with SMM7/ NRM2 Type A

1. **Item:** Handrail replacement
2. **Description of work:** Replacement of any damaged handrails
3. Provisional Sums: Include £2,000.00.
4. Allow for general attendance.

520 Provisional sums not specifically for work – Building control prescribed inspection fee

1. Provisional sum: Include: £1,500.00.

590 Contingencies

1. Provisional sum: Include: £8,000.00.

Ω End of Section



Section 2: **Preambles**



C20

Demolition

General requirements

110 Desk study/ Survey

5. **Scope:** Before starting deconstruction/ demolition work, examine available information, and carry out a survey of: existing utilities and services
 - 5.1. the structure or structures to be deconstructed/ demolished,
 - 5.2. the site on which the structure or structures stand, and
 - 5.3. the surrounding area.
6. **Report and method statements:** Submit, describing: Location of services and utilities and the impact on the works
 - 6.1. Form, condition and details of the structure or structures, the site, and the surrounding area.
 - 6.1.1. **Extent:** Of works site as detailed in drawings in tender issued Specification of Works
 - 6.2. Type, location and condition of features of historical, archaeological, geological or ecological importance.
 - 6.3. Type, location and condition of adjoining or surrounding premises that might be adversely affected by removal of the structure or structures, or by noise, vibration and/ or dust generated during deconstruction/ demolition.
 - 6.4. Identity and location of services above and below ground, including those required for the Contractor's use, and arrangements for their disconnection and removal.
 - 6.5. Form and location of flammable, toxic or hazardous materials, including lead-based paint, and proposed methods for their removal and disposal.
 - 6.6. Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.
 - 6.7. Proposed programme of work, including sequence and methods of deconstruction/ demolition.
 - 6.8. Details of specific pre-weakening required.
 - 6.9. Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.
 - 6.10. Arrangements for control of site transport and traffic.
 - 6.11. **Special requirements:** Details of services supplied by the Statutory Authority
7. **Format of report:** Electronic

130 Groundworks

6. **Old foundations, slabs and the like:** Break out in locations and to the extents stated.
7. **Contaminated material:** Remove, and carry out remediation required by the Enforcing Authority.

140 Bench marks

6. **Unrecorded bench marks and other survey information:** Give notice when found. Do not remove marks or destroy the fabric on which they are found.



Services affected by deconstruction/ demolition

210 Services regulations

6. **Work carried out to or affecting new and/ or existing services:** Carry out in accordance with the byelaws and/ or regulations of the relevant Statutory Authority.

220 Location of services

6. **Services affected by deconstruction/ demolition work:** Locate and mark positions.
7. **Mains services marking:** Arrange with the appropriate authorities for services to be located and marked.
 - 7.1. **Marking standard:** In accordance with National Joint Utilities Group 'Guidelines on the positioning and colour coding of underground utilities' apparatus'.

230 Services disconnection arranged by contractor

2. **General:** Arrange with the appropriate authorities for disconnection of services and removal of fittings and equipment owned by those authorities prior to starting deconstruction/ demolition.

240 Disconnection of drains

3. **General:** Locate, disconnect and seal disused foul and surface water drains.
4. **Sealing:** Permanent, and within the site.

250 Live foul and surface water drains

2. **Drains and associated manholes, inspection chambers, gullies, vent pipes and fittings**
 - 2.1. Protect; maintain normal flow during deconstruction/ demolition.
 - 2.2. Make good any damage arising from deconstruction/ demolition work.
 - 2.3. Leave clean and in working order at completion of deconstruction/ demolition work.
3. **Other requirements:** N/A

260 Service bypass connections


2. **General:** Provide as necessary to maintain continuity of services to occupied areas of the site on which the deconstruction/ demolition is taking place and to adjoining sites/ properties.
3. **Minimum notice to adjoining owners and all affected occupiers:** 72 hours, if shutdown is necessary during changeover.

270 Services to be retained

2. **Damage to services:** Give notice, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction/ demolition.
3. **Repairs to services:** Complete as directed, and to the satisfaction of the service authority or owner.

Deconstruction/ demolition work

310 Workmanship

3. **Standard:** Demolish structures in accordance with BS 6187.
 4. **Operatives**
 - 4.1. Appropriately skilled and experienced for the type of work.
- 

4.2. Holding, or in training to obtain, relevant CITB Certificates of Competence.

5. **Site staff responsible for supervision and control of work:** Experienced in the assessment of risks involved and methods of deconstruction/ demolition to be used.

330 Dust control

2. **General:** Reduce airborne dust by periodically spraying deconstruction/ demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.
3. **Lead dust:** Submit method statement for control, containment and clean-up regimes.

340 Health hazards

2. **Precautions:** Protect site operatives and general public from hazards associated with vibration, dangerous fumes and dust arising during the course of the Works.

350 Adjoining property

4. **Temporary support and protection:** Provide. Maintain and alter, as necessary, as work proceeds. Do not leave unnecessary or unstable projections.
5. **Defects:** Report immediately on discovery.
6. **Damage:** Minimize. Repair promptly to ensure safety, stability, weather protection and security.
7. **Support to foundations:** Do not disturb.

391 Asbestos-containing materials – unknown occurrences

4. **Discovery:** Give notice immediately of suspected asbestos-containing materials when discovered during deconstruction/ demolition work. Avoid disturbing such materials.
5. **Removal:** Submit statutory risk assessments and details of proposed methods for safe removal.

410 Unforeseen hazards

2. **Discovery:** Give notice immediately when hazards such as unrecorded voids, tanks, chemicals, are discovered during deconstruction/ demolition.
3. **Removal:** Submit details of proposed methods for filling, removal, etc.

442 Site surface at completion


3. **Levels:** Grade the site to follow the levels of adjacent areas.
4. **Temporary surface:** Cover the site with N/A.

450 Site condition at completion

2. **Debris:** Clear away and leave the site in a tidy condition.
3. **Other requirements:** N/A

Materials arising

510 Contractor's property

3. **Components and materials arising from the deconstruction/ demolition work:** Property of the Contractor except where otherwise provided.
 4. **Action:** Remove from site as work proceeds where not to be reused or recycled for site use.
- 

511 Employer's property

2. **Components and materials to remain the property of the Employer:** Arising from ground works
3. **Protection:** Maintain until these items are removed by the Employer or reused in the Works, or until the end of the Contract.
4. **Special requirements:** N/A

520 Recycled materials

- **Materials arising from deconstruction/ demolition work:** Can be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification and in accordance with any site waste management plan.
- **Evidence of compliance:** Submit full details and supporting documentation.
 - **Verification:** Allow adequate time in programme for verification of compliance.

Ω End of Section



D20

Excavating and filling

Generally/the site

112 Site investigation report

- As provided in tender issue Specification of Works.

145 Variations in ground water level

- **Give notice:** If levels encountered are significantly different from levels in the site investigation report or previously measured.

150 Existing services, features and structures

- **Services:** See section A12 for locations.
- **Site features to be retained:** See section A12 for details.
- **Structures:** See section A34 for details of protection.

Clearance/excavating


164 Tree roots

- **Protected area:** Do not cut roots within precautionary protection area.
 - **Size of area:** Circle around each tree of radius 4 times trunk girth, measured 1.5 m above ground level
- **Excavation in protected area**
 - **Method:** Contractor's choice
 - Backfill as soon as possible or temporarily line with polyethylene sheet to reduce evaporation.
- **Outside protected area:** Give notice of roots exceeding 25 mm and do not cut without approval.
- **Cutting**
 - Make clean smooth cuts with no ragged edges.
 - Pare cut surfaces smooth with a sharp knife.
 - **Treatment of cut roots:** Not required
- **Backfill:** As dug material

168 Site clearance

- **Timing:** Before topsoil stripping, if any.
- **General:** Clear site of rubbish, debris and vegetation. Do not compact topsoil.
- **Treatment:**

170 Removing small trees, shrubs, hedges and roots

- **Identification:** Clearly mark trees to be removed.
 - **Small trees, shrubs and hedges:** Cut down.
 - **Roots:** Grub up and dispose of without undue disturbance of soil and adjacent areas.
 - **Safety:** Comply with Forest Industry Safety Accord safety leaflets.
- 

220 Stripping topsoil

- **General:** Before beginning general excavation or filling, strip topsoil from areas where there will be regrading, buildings, pavings/ roads and other areas shown on drawings.
- **Depth**
 - Remove to an average depth of 50 mm.
 - Give notice where the depth of topsoil is difficult to determine.
- **Handling:** Handle topsoil for reuse or sale in accordance with clause 225.
- **Around trees:** Do not remove topsoil from below the spread of trees to be retained.
- **Site storage:** Keep separate from excavated sub-soil

225 Handling topsoil

- **Standard:** To BS 3882.
- **Aggressive weeds**
 - **Species:** Notify the presence of species included in the Weeds Act, section 2, or the appropriate Wildlife and Countryside Act for the relevant jurisdiction.
 - **Give notice:** Obtain instructions before moving topsoil.
- **Contamination:** Do not mix topsoil with:
 - Subsoil, stone, hardcore, rubbish or material from demolition work.
 - Other soil or material containing aggressive weeds, sharps, plastics and non soil forming materials and notifiable animal or plant diseases.
 - Oil, fuel, cement or other substances harmful to plant growth.
 - Other classifications of topsoil.
- **Multiple handling:** Keep to a minimum. Use topsoil immediately after stripping.


240 Adjacent excavations

- **Requirement:** Where an excavation encroaches below a line drawn at an angle from the nearest formation level of another higher excavation, the lower excavation, all work within it and backfilling thereto, must be completed before the higher excavation is made.
- **Angle of line below horizontal:** 30°
- **Backfill material:** As detailed in tender issue Specification of Works

250 Permissible deviations from formation levels

- **Beneath mass concrete foundations:** ±25 mm.
- **Beneath ground bearing slabs and r.c. foundations:** ±15 mm.
- **Embankments and cuttings:** ±50 mm.
- **Ground abutting external walls:** ±50 mm, but such as to ensure that finished level is not less than 150 mm below dpc.

310 Unstable ground

- **Generally:** Ensure that the excavation remains stable at all times.
 - **Give notice:** Without delay if any newly excavated faces are too unstable to allow earthwork support to be inserted.
- 

- **Take action:** If instability is likely to affect adjacent structures or roadways, take appropriate emergency action.

330 Unrecorded features

- **Give notice:** If unrecorded foundations, beds, voids, basements, filling, tanks, pipes, cables, drains, manholes, watercourses, ditches, etc. not shown on the drawings are encountered.

350 Existing watercourses

- **Diverted watercourses which are to be filled:** Before filling, remove vegetable growths and soft deposits.

Disposal of materials

410 Excavated topsoil storage

- **Storage:** Stockpile in temporary storage heaps in location to be agreed .

420 Topsoil storage heaps

- **Location:** to be agreed
- **Standard:** To BS 3882.
- **Height (maximum):** to be agreed
- **Protection**
 - Do not place any other material on top of storage heaps.
 - Do not allow construction plant to pass over storage heaps.
 - Prevent compaction and contamination.

441 Surplus subsoil

- **Excavated material:** Stockpile in temporary storage heaps.
- **Retained material:** Spread and level surplus subsoil on site.
 - **Locations:** as detailed in tender issue Specification of Works
 - **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.
- **Remaining material:** Remove from site.

450 Water

- **Generally:** Keep all excavations free from water until:
 - Formations are covered.
 - Below ground constructions are completed.
 - Basement structures and retaining walls are able to resist leakage, water pressure and flotation.
- **Drainage:** Form surfaces of excavations and fill to provide adequate falls.
- **Removal of water:** Provide temporary drains, sumps and pumping as necessary. Do not pollute watercourses with silt laden water.

460 Permanent drainage system

- **Disposal of water from the excavations through system:** Not permitted



Filling

500 Proposed fill materials

- **Details:** Submit full details of proposed fill materials to demonstrate compliance with specification, including:
 - Type and source of imported fill.
 - Proposals for processing and reuse of material excavated on site.
 - Test reports as required elsewhere.
- **Timing:** At least 21 days before starting filling

510 Hazardous, aggressive or unstable materials

- **General:** Do not use fill materials which would, either in themselves or in combination with other materials or ground water, give rise to a health hazard, damage to building structures or instability in the filling, including material that is:
 - Frozen or containing ice.
 - Organic.
 - Contaminated or noxious.
 - Susceptible to spontaneous combustion.
 - Likely to erode or decay and cause voids.
 - With excessive moisture content, slurry, mud or from marshes or bogs.
 - Clay of liquid limit exceeding 80 and/or plasticity index exceeding 55.
 - Unacceptable, class U2 as defined in the 'Specification for highway works', clause 601.

530 Placing fill

- **Surfaces of excavations and areas to be filled:** Free from loose soil, topsoil, organic material, rubbish and standing water.
- **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
- **Adjacent structures, membranes and buried services**
 - Do not overload, destabilise or damage.
 - Submit proposals for temporary support necessary to ensure stability during filling.
 - Allow 14 days (minimum) before backfilling against in situ concrete structures.
- **Layers:** Place so that only one type of material occurs in each layer.
- **Earthmoving equipment:** Vary route to avoid rutting.

535 Compaction generally

- **General:** Compact fill not specified to be left loose as soon as possible after placing.
- **After compaction:** Surface of each layer must be well closed, showing no movement under compaction plant, and without cracks, holes, ridges, loose material and the like.
- **Defective areas:** Remove and recompact to full thickness of layer using new material.



540 Benching in fill

- **Adjacent areas:** If, during filling the difference in level between adjacent areas of filling exceeds 600 mm, cut into edge of higher filling to form benches 600 mm minimum width and height equivalent to depth of a layer of compacted filling.
- **New filling:** Spread and compact to ensure maximum continuity with previous filling.

610 Compacted filling for landscape areas

- **Fill:** Material capable of compaction by light earthmoving plant.
- **Filling:** Layers not more than 200 mm thick. Lightly compact each layer to produce a stable soil structure.

615 Loose tip filling for landscape areas

- **Filling:** Do not firm, consolidate or compact when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.


617 Type 1 unbound mixture

- **Fill:** To 'Specification for highway works', clauses 801 and 803:
 - Crushed rock (other than argillaceous rock).
 - Coarse crushed concrete aggregate.
 - Recycled aggregates.
 - Crushed non-expansive slag to clause 801.2.
 - Well-burned non-plastic colliery shale.
- **Amendments to requirements in the 'Specification for highway works':** None
- **Filling:** To 'Specification for highway works', clause 802.

618 Type 2 unbound mixture

- **Fill:** To 'Specification for highway works', clauses 801 and 804:
 - Crushed rock (other than argillaceous rock).
 - Coarse crushed concrete aggregate.
 - Recycled aggregates.
 - Crushed non-expansive slag to clause 801.2.
 - Well-burned non-plastic colliery shale.
 - Natural gravel.
 - Natural sand.
- **Amendments to requirements in the 'Specification for highway works':** None
- **Filling:** To 'Specification for highway works', clause 802.

620 Subgrade improvement layer (capping)

- **Fill:** To 'Specification for highway works', Table 6/1, Class 6F1 or 6F2.
 - **oFilling:** Place and compact to MCHW Volume 1: 'Specification for highway works' (SHW), Table 6/1, clause 612 and clause 613.3, 613.9 and 613.10.
- 

621 Type 3 unbound mixture

- **Fill:** To 'Specification for highway works', clauses 801 and 805:
 - Crushed rock (other than argillaceous rock) with well-defined edges.
 - Coarse crushed concrete aggregate.
 - Crushed non-expansive slag.
- **Amendments to requirements in the 'Specification for highway works':** None
- **Filling:** To 'Specification for highway works', clause 802.

622 Type 4 unbound mixture

- **Fill:** To 'Specification for highway works', clauses 801 and 807:
 - Asphalt road planings.
 - Granulated asphalt.
 - Crushed rock (other than argillaceous rock) with well-defined edges.
 - Coarse crushed concrete aggregate.
 - Crushed non-expansive slag.
 - Well-burned non-plastic colliery shale.
- **Amendments to requirements in the 'Specification for highway works':** None
- **Filling:** To 'Specification for highway works', clause 802.


626 Compacted general fill

- **Suitable material:**
- **Excavated material:** Select suitable material and keep separate.
- **Filling:** Spread and level material in layers. As soon as possible thoroughly compact each layer.
- **Required compaction:** To suit use of fill
- **Proposals:** Well in advance of starting work submit details of proposed:
 - Materials to be used, including quantities of each type.
 - Type of plant.
 - Maximum depth of each compacted layer.
 - Minimum number of passes per layer.

640 Starter layer of compacted filling

- **Fill:** Suitable hard granular material. Compact thoroughly.
- **Thickness:** 450 mm

650 Protection of compacted filling

- **Temporary protective filling:** Before allowing construction traffic, raise level of compacted cohesive soil filling at least 150 mm above formation level using properly compacted temporary filling.
 - **Removal:** Remove temporary protective filling from site before permanent construction.
- 

Bioremediation - Not Used

'specification for highway works: earthworks specification' appendices - Not Used

Ω End of Section



Q20

Granular sub-bases to roads/ pavings

To be read with preliminaries/ general conditions.

110 Thicknesses of sub-base/ subgrade improvement layers

- **Thicknesses:** See sections:
 - Q25 Slab/brick/sett/cobble pavings.

140 Excavation of subgrades

- **Final excavation to formation or subformation level:** Carry out immediately before compaction of subgrade.
- **Soft spots and voids:** Give notice.
- **Old drainage and service trenches:** Give notice
- **Wet conditions:** Do not excavate or compact when the subgrade may be damaged or destabilized.

145 Preparation and compaction of subgrades

- **Timing:** Immediately before placing sub-base.
- **Soft or damaged areas:** Excavate and replace with sub-base material, compacted in layers 300 mm (maximum) thick
- **Compaction:** Thoroughly, by roller or other suitable means, adequate to resist subsidence or deformation of the subgrade during construction and of the completed roads/ pavings when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.


150 Subgrades for vehicular areas

- **Preparation and treatment:** To Highways Agency 'Specification for highway works', clauses 616 and 617.

170 Geotextile filter/ separator membrane

- **Description:** below sub-base
- **Manufacturer:** Contractor's choice
 - **Product reference:** Contractor's choice
- **Jointing:** 300 mm overlap
- **Protect from**
 - Exposure to light, except during laying (maximum five hours).
 - Contaminants.
 - Materials listed as potentially deleterious by geotextile manufacturer.
 - Damage, until fully covered by fill.
 - Wind uplift, by laying not more than 15 m before covering with fill.
- **Preparation:** Remove humps and sharp projections and fill hollows before laying.

211 Granular material

- **Quality:** Of a known suitability for use in sub-bases, free from excessive dust, well graded, all pieces less than 75 mm in any direction, minimum 10% fines value of 50 kN when tested in a soaked condition to BS 812-111 or a
- 

resistance to fragmentation of LA50 for the Los Angeles test to BS EN 1097-2, and in any one layer only one of the following:

- Crushed rock (other than argillaceous rock) or quarry waste with not more binding material than is required to help hold the stone together.
- Crushed concrete, crushed brick or tile, free from plaster, timber and metal.
- Gravel or hoggin with not more clay content than is required to bind the material together, and with no large lumps of clay.
- Natural gravel.
- Natural sand.
- **Filling:** Spread and levelled in 150 mm maximum layers, each layer thoroughly compacted.

213 Blinding protection for membranes

- **Location:** above and below geotextile membrane
- **Material:** Approved fine material
- **Thickness (minimum):** Sufficient to fill interstices and cover all stones
- **Compaction:** Moisten as necessary before final rolling to provide a flat, closed, smooth surface.
- **Permissible deviations on surface level:** ± 20 mm

220 Frost susceptible granular material

- **Definition (non frost susceptible material):** To Highways Agency 'Specification for highway works' clause 801.8.
- **Depth of frost susceptible material below final surface of paving (minimum):** 350 mm
- **Testing:** Test materials used if required and supply certificates.

230 Placing granular material generally

- **Preparation:** Loose soil, rubbish and standing water removed.
- **Structures, membranes and buried services:** Ensure stability and avoid damage.

320 Surfaces to receive sand bedding for paving

- **Description:** to section Q25
- **Blind surface:** As necessary before compaction to ensure that surface is tight and dense enough to prevent laying course sand being lost into it during construction or use.
- **Material:** Contractor's choice

330 Cold weather working

- **Frozen materials:** Do not use.
- **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.

340 Protection

- **Sub-bases:** As soon as practicable, cover with subsequent layers, specified elsewhere.
- **Subgrades and sub-bases:** Prevent degradation by construction traffic, construction operations and inclement weather.



Q25

Slab/ brick/ sett/ cobble pavings

General

120 Concrete flag paving system

- Description:
- Subgrade improvement layer:
 - Compacted thickness:
- Granular sub-base:
 - Compacted thickness:
- Base:
 - Thickness:
- Laying course:
 - Accessories:
- Paving units:
- Jointing:
 - Bond:
- Accessories:

System performance

220 Design – concrete flag paving system

- Design: Complete the design of the concrete slab paving system in accordance with BS 7533-4.
 - Site category: III
- Ground conditions: Gravel, sand - compact
- Performance criteria: As detailed in tender issue Specification of Works
- Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

Products

305 Granular material for layer over existing bases

- Material: Type 1 unbound mixture, as section Q20

315 Concrete flags

- Description: for footpaths
- Standard: To BS EN 1339.
 - Manufacturer: Contractor's choice
 - Product reference: Contractor's choice
- Recycled content: Contractor's choice
- Colour: To match existing
 - Finish: To match existing



- **Nominal sizes:** To match existing
- **Arrises:** To match existing
- **Water absorption and freeze/ thaw resistance class:** 3
- **Bending strength class:** 3
- **Abrasion resistance class:** 3
- **Slip/ Skid resistance:** No requirement
- **Breaking load class:** 45

390 Sand/ fine aggregate for unbound laying course and jointing of concrete flag paving


- **Description:** to footpath as detailed in tender issue Specification of Works
- **Standard:** To BS 7533-4, unbound construction laying course and jointing material.
- **Purity:** Free from deleterious salts, contaminants, lime and cement.
- **Procurement:** Obtain from one source and ensure consistent grading.

Execution

620 Adverse weather

- **General**
 - **Temperature:** Do not lay or joint paving if the temperature is below 3°C on a falling thermometer or below 1°C on a rising thermometer.
 - **Frozen materials:** Do not use. Do not lay bedding on frozen or frost covered bases.
- **Paving with mortar joints and/ or bedding**
 - Protect from frost damage, rapid drying out and saturation until mortar has hardened.
- **Paving laid and jointed in sand/ fine aggregate**
 - **Stockpiled laying course sand/ fine aggregate:** Protect from saturation.
 - **Exposed areas of unbound laying course and uncompacted areas of unbound paving:** Protect from heavy rainfall.
 - **Saturated unbound laying course:** Remove and replace, or allow to dry before proceeding.
 - **Laying dry sand/ fine aggregate jointed paving in damp conditions:** Brush in as much jointing sand as possible. Minimize site traffic over paving. As soon as paving is dry, top up joints and complete compaction.

625 Laying pavings – general

- **Appearance:** Smooth and even with regular joints and accurate to line, level and profile.
 - **Falls:** To prevent ponding.
 - **Bedding of paving units:** Firm so that rocking or subsidence does not occur or develop.
 - **Bedding/ Laying course:** Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
 - **Slopes:** Lay paving units upwards from the bottom of slopes.
 - **Paving units:** Free of mortar and sand stains.
 - **Cutting:** Cut units cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.
- 

630 Levels of paving

- Permissible deviation from specified levels
 - Generally: ± 6 mm.
- Height of finished paving above features
 - At gullies: +6 to +10 mm.
 - At drainage channels and kerbs: +3 to +6 mm.

635 Regularity of paved surfaces

- Maximum variation in gap under a 3 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface)
 - Precast concrete paving blocks and clay pavers for flexible pavements: 10 mm.
 - Precast concrete flags or natural stone slabs: 3 mm.
- Difference in level between adjacent paving units (maximum): 2 mm.
- Sudden irregularities: Not permitted.

637 Regularity of paved surfaces

- Maximum undulations in the surface of pavings (except tactile paving surfaces) under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface): 3 mm.
- Joints between paving units or utility access covers
 - Joints flush with the surface: difference in level between adjacent units to be no more than twice the joint width (with a 5 mm max difference in level).
 - Recessed, filled joints: difference in level between adjacent units to be no greater than 2 mm; the recess to be no deeper than 5 mm.
 - Unfilled joints: difference in level between adjacent units to be no greater than 2 mm.
- Sudden irregularities: Not permitted.

645 Protection

- Cleanliness: Keep paving clean and free from mortar droppings, oil and other materials likely to cause staining.
- Materials storage: Do not overload pavings with stacks of materials.
- Handling: Do not damage paving unit corners, arrises, or previously laid paving.
- Mortar bedded pavings: Keep free from traffic after laying:
 - Pedestrian traffic (minimum): 4 days
 - Vehicular traffic (minimum): N/A
- Access: Restrict access to paved areas to prevent damage from site traffic and plant.

650 Cementitious bases and sub-bases

- General: Protect from moisture loss, if not covered by another pavement course within 2 hours of completion.

655 Condition of sub-bases/ bases before spreading laying course

- Trenches and excavation of soft or loose spots in subgrade: Fill and thoroughly compact.
- 

- **Granular surfaces:** Lay and compact so as to be sound, clean, smooth and close-textured enough to prevent migration of bedding/ laying course materials into the sub-base during compaction and use, free from movement under compaction plant and free from compaction ridges, cracks and loose material.
- **Prepared existing and new bound bases (roadbases):** Sound, clean, free from rutting or major cracking. Remove sharp stones, projections and debris.
- **Sub-base/ Roadbase level tolerances:** To BS 7533-7, Annex A.
- **Levels and falls:** Accurate and within the specified tolerances.
- **Drainage outlets:** Within 0-10 mm of the required finished level.
- **Features in unbound paving (including mortar bedded restraints and drainage ironwork):** Complete to required levels; adequately bed and haunch in mortar.
- **Sub-bases containing cement/ hydraulic binder:** Cure for minimum times specified in BS 7533-4.

Completion

915 Completion of paving with dry sand or fine aggregate filled joints

- **Sand dressing:** Leave a thin layer of dry jointing sand/ fine aggregate over the paving, sweep clean before practical completion
- **Final compaction of the surface course:** In accordance with BS 7533-3.
- **Vacuum cleaning machines:** Not allowed.

Ω End of Section



R12

Below ground drainage systems

Clauses

2 Existing drains

- **Setting out:** Before starting work, check levels and positions of existing drains, inspection chambers and manholes against drawings. Report discrepancies.

4 In situ concrete for use in drainage below ground

- **Standard:** To BS 8500-2.
- **Concrete:** Designated, GEN1, as section E10


11 Clay pipelines

- **Pipes, bends and junctions:** Vitrified clay to BS EN 295-1, with flexible joints, Kitemark certified.
 - **Manufacturer:** Contractor's choice
 - **Product reference:** Contractor's choice
- **Strength:** As detailed in tender issue Specification of Works
- **Sizes:** As detailed in tender issue Specification of Works
- **Type of subsoil:** As detailed in tender issue Specification of Works
- **Bedding class:** As detailed in tender issue Specification of Works
- **Warning marker tape:** As detailed in tender issue Specification of Works

14 Plastics pipelines

- **Pipes, bends and junctions:** PVC-U to BS EN 1401-1.
 - **Manufacturer:** Contractor's choice
 - **Product reference:** Contractor's choice
- **Recycled content:** Contractor's choice
- **Sizes:** As detailed in tender issue Specification of Works
- **Type of subsoil:** As detailed in tender issue Specification of Works
- **Bedding class:** As detailed in tender issue Specification of Works
- **Warning marker tape:** As detailed in tender issue Specification of Works

19 Excavating pipe trenches

- **Trench from bottom up to 300 mm above crown of pipe:** With vertical sides.
 - **Width:** As small as practicable but not less than external diameter of pipe plus 300 mm.
 - **Type of subsoil:** Where the type of subsoil at the level of the crown of the pipe differs from that stated for the type of pipeline, give notice.
 - **Timing:** Excavate to formation immediately before laying beds or pipes.
 - **Mud, rock projections, boulders and hard spots:** Remove. Replace with bedding material, well consolidated.
 - **Local soft spots:** Harden by tamping in bedding material.
- 

21 Bedding and jointing

- **Laying pipes:** To true line and regular gradient on even bed for full length of barrel with sockets (if any) facing up the gradient.
- **Jointing:** Lubricate. Leave gaps at ends of spigots to allow for movement.

39 Class Z concrete surround

- **Concrete blinding:** 25 mm thick, over full width of trench.
- **Temporary pipe support:** Folding wedges of compressible board, pipe inverts 100 mm (minimum) above blinding.
- **Vertical construction joints:** At face of flexible pipe joints using 18 mm thick compressible board precut to profile of pipe. Fill gaps between spigot and socket with resilient material to prevent entry of concrete.
- **Concrete surround:** After testing, place and compact concrete for full width of trench to encase pipe to 150 mm above crown.

41 Trenches less than 1 m from foundations

- **Class Z concrete surround:** Provide in locations where bottom of trench is lower than bottom of foundation.
 - **Top of concrete:** Higher than bottom of foundation.

58 Installation of fittings

- **Appearance:** Square with and tightly jointed to adjacent construction as appropriate.
- **Bedding and surround of fittings, traps, etc:** Concrete, 150 mm thick.
- **Permissible deviation in level of gullies:** +0 to -10mm.

84 Testing and inspection generally

- **Obstructions and debris:** Remove. Check that the installation is clear before testing.

85 Initial testing of pipelines

- **Before testing**
 - **Cement mortar jointing:** Leave 24 h.
 - **Solvent welded pipelines:** Leave 1 h.
- **Timing:** Before surround and backfilling
- **Method:** Block open ends of pipelines to be tested and pressurise. Air test short lengths to BS EN 1610

88 Final testing of drains

- **Before testing**
 - **Cement mortar jointing:** Leave 24 h.
 - **Solvent welded pipelines:** Leave 1 h.
- **Standard:** In accordance with Building Regulations Technical Handbook (Non-domestic) clause 3.7.10 .
- **Method:** Contractor's choice

89 Water testing of manholes and inspection chambers

- **Timing:** Before backfilling.
- 

- **Standard**
 - **Exfiltration:** To BS EN 1610, water testing (method W).
 - **Infiltration:** No identifiable flow of water penetrating the chamber.

91 Backfilling to pipelines generally

- **Backfill from top of surround or protective cushion:** Material excavated from trench, compacted in 300 mm layers. Do not use heavy compactors before there is 600 mm of material over pipes.

94 Backfilling under roads and pavings

- **Backfill from top of specified surround or protective cushion up to formation level:** Well graded gravel or hardcore passing a 75 mm sieve, well compacted in 150 mm layers.

97 Cleaning

2. **General:** Flush out the whole installation and remove silt and debris immediately before handing over.

Ω End of Section



R13

Land drainage

Generally

100 Existing drains and watercourses

3. **Setting out:** Before starting work, check invert levels and positions of existing drainage against drawings. Report any discrepancies.
4. **Drains to be retained:** Protect. Maintain normal operation.

103 Sequence of work

3. **General:** As detailed in tender issue Specification of Works

106 In situ concrete (general)

3. **Standards:** To BS 8500-2.
 - 3.1. **Concrete:** Designated. GEN1, as section E10

Drains

201 Filter drains

3. **Trench**
 - 3.1. **Depth:** Submit proposals
 - 3.2. **Width:** Submit proposals
4. **Backfill**
 - 4.1. **Material:** As detailed in tender issue Specification of Works
 - 4.2. **Recycled content of granular material:** Contractor's choice
 - 4.3. **Level:** As detailed in tender issue Specification of Works

205 Filter drains with geotextile trench lining

2. **Trench**
 - 2.1. **Depth:** Submit proposals
 - 2.2. **Width:** Submit proposals
3. **Geotextile trench lining**
 - 3.1. **Manufacturer:** Contractor's choice
 - 3.1.1. **Product reference:** Contractor's choice
4. **Backfill**
 - 4.1. **Material:** As detailed in tender issue Specification of Works
 - 4.2. **Recycled content of granular material:** Contractor's choice
 - 4.3. **Level:** To within 300 mm of finished ground level. Cover with geotextile membrane.
 - 4.4. **Filling to finished ground level:** As detailed in tender issue Specification of Works

211 Filter drains with pipe

3. Trench
 - 3.1. Depth: Submit proposals
 - 3.2. Width: Submit proposals
4. Pipe bedding: As detailed in tender issue Specification of Works
 - 4.1. Recycled content of granular material: Contractor's choice
5. Pipes: As detailed in tender issue Specification of Works
 - 5.1. Manufacturer: Contractor's choice
 - 5.1.1. Product reference: Contractor's choice
 - 5.2. Sizes: As detailed in tender issue Specification of Works
 - 5.3. Recycled content of plastics pipes: Contractor's choice
 - 5.4. Perforations: As detailed in tender issue Specification of Works
6. Pipe surround and backfill
 - 6.1. Material: As detailed in tender issue Specification of Works
 - 6.2. Recycled content of granular material: Contractor's choice
 - 6.3. Level: As detailed in tender issue Specification of Works

350 Laying pipes

2. Weather conditions: Lay pipes in good weather using methods suitable for the site conditions.
 - 2.1. Plastics pipes: Do not lay or backfill at temperatures lower than 5°C.
 - 2.2. Soil structure: Prevent compaction, smearing, top ponding, rutting and damage.
3. General: Lay to line and gradient on a firm bed free from loose soil to give a free-draining installation without backfalls. Do not lay on soil backfill or in slurry.
4. Drains closer than 6 m to trees or hedges: Unperforated pipes with positively sealed joints and as-dug backfill.
5. Junctions between branches and mains: Purpose made components.
6. Upper ends of drain runs: Plug to prevent ingress of soil or animals.
7. Backfilling: Do not damage, distort or displace pipes.


Culverts - Not Used

Excavating/ beddings/ surrounds/ backfill

500 Topsoiling

4. Filter drains: Do not lay until soiling operations, including spreading and grading of topsoil, have been completed.
5. Segregation: Carefully remove topsoil when forming trenches and prevent mixing with subsoil.

505 Excavation

3. Pipe gradients: Between 1 in 200 and 1 in 80.
 4. Subsoil: Remove from site or to approved locations at end of each day and before pipe laying. Do not disperse on topsoiled areas.
 - 4.1. Approved locations:
- 

515 Existing live land drains

3. **Drains exposed by excavation:** Mark positions.
4. **Cutting out:** Carefully break back piped drains to an undisturbed section.
5. **Reconnection:** Connect exposed drain to new work.
6. **Record drawing:** Show position of exposed system and new connections. Submit copy.

520 Formation for beds or pipes

3. **Timing:** Excavate to formation immediately before laying beds or pipes.
4. **Hard spots:** Remove rock projections, boulders, etc. Replace with consolidated bedding material.
5. **Soft spots:** Tamp in bedding material.
6. **Inspection:** Give notice of completed excavated formation for each section of the work.
 - 6.1. **Period of notice (minimum):** 1 working day

525 Granular beds

3. **Compacted thickness (minimum):** 50 mm.
 - 3.1. **Laying pipes:** Scoop out locally at couplings and sockets and lay pipes digging slightly into bed and resting uniformly on their barrels.

530 Granular surround and backfill – subsoil drains

4. **Material:** Clean gravel, broken stone, hard clinker or slag, with no fines, graded 40 to 10 mm or approved recycled material.
5. **Covering:** Cap to granular material Polyethylene sheet, 250 µm (1000 gauge), joints lapped by 300 mm and tucked 75 mm down sides of trench.


531 Granular surround and backfill – subsoil drains – precision graded

4. **Material:** Coarse aggregate to BS EN 13242:
 - 4.1. **Nominal pipe diameter up to 140 mm:** Size 4/10.
 - 4.2. **Nominal pipe diameter 140-400 mm:** Sizes 2/14, 4/20, 4/10, 6.3/14 or 10/20.
 - 4.3. **Nominal pipe diameter over 400 mm:** Sizes 2/14, 4/20, 4/40, 4/10, 6.3/14, 10/20 or 20/40.
5. **Covering:** Before topping off trench up to finished ground level, cap granular material with Polyethylene sheet, 250 µm (1000 gauge), joints lapped by 300 mm and tucked 75 mm down sides of trench.

540 Granular surround and backfill – surface water drains

2. **Material:** Clean gravel, broken stone, hard clinker or slag, with no fines, graded 75 to 20 mm or approved recycled material.

541 Granular surround and backfill – surface water drains – precision graded

6. **Material:** Granular, graded as follows by washing and sieving method to BS EN 933-1:
 - 6.1. **Percentage by mass passing BS sieve size 63 mm:** 100.
 - 6.2. **Percentage by mass passing BS sieve size 37.5 mm:** 85-100.
 - 6.3. **Percentage by mass passing BS sieve size 20 mm:** 0-25.
 - 6.4. **Percentage by mass passing BS sieve size 10 mm:** 0-5.
- 

546 Selected as-dug surround and backfill

2. **Material:** Selected as-dug, free from vegetable matter, rubbish, frozen soil, large lumps of clay and material retained on a 40 mm sieve.
3. **Placing material around sides of pipes and against fin drains:** Carefully pack. Prevent damage or disruption to pipelines or fin drains and compact thoroughly.

555 Granular backfilling to drains with pipes

4. **General:** Not applicable to narrow trenches where a backfill is placed continuously by machine.
5. **Placing:** In maximum 300 mm thick layers, with mechanical compaction from 300 mm above crown of pipe, up to finished ground level.
 - 5.1. **Surround and backfill material:** Do not heap in the trench before spreading.
 - 5.2. **Packing:** Carefully pack material around the sides of the pipe. Prevent damage or disruption to pipelines and compact thoroughly.

560 Granular backfilling to drains without pipes

3. **General:** Not applicable to narrow trenches where a backfill is placed continuously by machine.
4. **Placing:** Backfill in maximum 300 mm thick layers, with mechanical compaction, up to finished ground level.

565 Backfilling with as-dug material

4. **General:** Not applicable to narrow trenches where a backfill is placed continuously by machine.
5. **Material:** As excavated from the trench.
6. **Placing and compaction:** Maximum 300 mm thick layers, up to finished ground level. Compact each layer before placing the next.
7. **Heavy compactors:** Do not use before there is 600 mm of material over pipes.

570 Installing geotextile trench lining

3. **Preparation:** Trim trench. Remove sharp stones and other projections.
4. **Placing**
 - 4.1. **Dressing geotextile:** Uniformly to trench profile without stretching, perforation or rupture.
 - 4.2. **Top of aggregate:** Wrap free lengths of geotextile over top surface and overlap by 300 mm. Tuck top layer down trench side by 100 mm.

Ancillary constructions and work

800 Cleaning

2. **General:** Thoroughly flush out the whole of the installation with clean water to remove silt and debris immediately before handover.
3. **Washings and detritus:** Dispose of safely. Do not discharge into sewers or watercourses.

Ω End of Section



Section 3: **Scope of Works**





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3.1 Generally

3.1.1 Nature of Works

- 3.1.1.1 The works generally comprise of remedial works to repair ground slippage that has resulted in damage/collapse to a Paved Footpath and a need for new below ground drainage and stabilisation of the ground/sloped areas.
- 3.1.1.2 **Please note the site falls within Danbury Conservation Area.**
- 3.1.1.3 The following shall be read in conjunction with the preliminaries, preambles, specification, appendices, schedules, and drawings (**1333/01, 1333/02, 1333/03, 1333/04, 1333/05 and 1333/06**).
- 3.1.1.4 The works shall be awarded to the Contractor who has sole responsibility for the management of all specific items of work detailed here under inclusive of all those that shall be sub-contracted.
- 3.1.1.5 The Contractor is to price all items contained within the specification separately and within the price all associated items.
- 3.1.1.6 All elements of the works are to be undertaken by the Contractor in a logical order to minimise potential damage, disruption and the escape of dust and debris. Programme of works to be submitted upon Contract Award.
- 3.1.1.7 Deliveries shall be programmed to minimise noise and disruption to the neighbouring properties and Main Road as well as the operation of the sports grounds.
- 3.1.1.8 The Contractor shall be responsible for the supervision of all Health & Safety procedures on site in respect of their employees and that of all subcontractor(s) including the management of all out of hours work. This shall include fulfilling their duties as Principal Contractor under the CDM Regulations 2015 pre- and post-contract.
- 3.1.1.9 The works will be awarded to a Principal Contractor who will have the full and sole responsibility for the management and control of all specified works including those that are to be sub-contracted accordingly.
- 3.1.1.10 The works comprise in outline:
- Removal of vegetation (**1333/005 SHT 1 of 2 and 1333/005 SHT 2 of 2**).
 - Re-profiling of raised are of ground formed from reworked natural ground (**1333/005 SHT 1 of 2 and 1333/005 SHT 2 of 2**).
 - Re-profiling of primary back scar ground (**1333/005 SHT 1 of 2, 1333/005 SHT 2 of 2, and 1333/004**).
 - Creation of new filter drain type H including catchpits and rodding eyes (**1333/005 SHT 1 of 2, 1333/005 SHT 2 of 2, and 1333/004**).
 - Re-profiling and laying of path paving slabs, including all necessary sub-base works (**1333/005 SHT 1 of 2, 1333/005 SHT 2 of 2, and 1333/004**).

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- Removal and reinstatement of existing handrail (**1333/005 SHT 1 of 2** and **1333/005 SHT 2 of 2**).
- New below ground drainage (**1333/003** and **1333/006**).
- Necessary removal/relocation and reinstatement of existing below ground services (**1333/003**).

3.1.2 Programme of Works

3.1.2.1 All works are to be completed with minimal impact on the operation of the sports ground. This will mean liaising with the client and planning works to minimise impact on the use of the facilities.

- Commencement of works: 12th April 2021
- Completion of works: 30th April 2021

3.1.2.2 For the purposes of tendering, working hours are to be 8am – 5pm Monday – Friday only. Any weekend work will need to be agreed a minimum of 3 days before. (Exact days and times to be confirmed at the Pre-Start Meeting)

Note: Contractor to include costs within tender return for each works item to allow works to be undertaken at the weekend, as required, to complete the works to contract time restraints. Contractor's pricing to stipulate amount/expected weekends to be worked as part of the programme and project delivery under bullet point below. No additional claim for weekend working for works identified within this specification once the contract has been awarded will be entertained. Contractor is to confirm weekend working within their programme and detail which weekends and how many weekends are intended to be utilised to complete these works. Weekend working hours are to be confirmed at the Pre-Start Meeting but for the purposes of tendering assume weekend working is to be Saturday only, 8am - 5pm.

- If applicable, please detail below how many weekends are intended to be worked to complete the works within the contract time restraints detailed above:

3.1.3 Pre-Start Meeting

3.1.3.1 The appointed Contractor is to attend a Pre-Start Meeting onsite prior to commencement of works to discuss and agree the following:

- Sequence of works, and work programme.
- Location of site compound and full protection methods must be afforded. **Note:** the Contractor must make good any damage to existing finishes, structure, or building fabric on completion. The Contractor MUST undertake a Pre-Commencement Photographic Condition Record Survey of all areas to be affected and adjacent to the works, travel routes, and site setup and this is to be presented to the CA prior to commencement of site works.

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- Contractor to name Contracts Manager / Site Agent and provide contact details/numbers.
- Client day-to-day contacts.
- Communications process.
- Health & Safety issues and special requirements.
- Any other practical or logistical issues relating to the completion of the works.

Note: The above list is not meant to be an exhaustive list of items to be discussed at the Pre-Start Meeting but a general overview.

3.2 Insurance

3.2.1.1 The Client has Public Liability insurance through Hiscox, but the appointed contractor responsible for the works is expected to have their own public liability insurance and will be required to provide Danbury Parish Council a copy of their insurance certificate.

3.2.1.2 Further details relating to insurance can be found in the relevant sections within the Preliminaries of this tender document.

3.3 Services for the Works

3.3.1.1 Site Welfare Facilities, such as self-contained welfare facilities; Oasis units or similar, are to be provided by the Contractor within the site compound and will meet the requirements set out under the CDM Regulations 2015 and The Health & Safety at Work Act 1974.

3.3.1.2 Contractor will have access to on site power and water free of charge. Power and water will be from the ground keeper's workshop/hut. Allow for necessary protection from foot traffic and moving maintenance vehicles in the form of rubber cable covers/ramps suitable to resist loading from vehicle movements.

3.4 Security & Contractor's Compound

3.4.1.1 The Contractor shall assume responsibility and take all appropriate steps to ensure that the security of the School is not compromised throughout the duration of the works and shall accordingly liaise with the school's site manager as appropriate to always prevent unauthorised access during the day and night.

3.4.1.2 All site staff, including sub-contractors, will be required to wear appropriate PPE, branded clothing, and ID badges when on site. Exact details (Minimum levels) to be discussed at the Pre-Start Meeting.

3.4.1.3 The Client imposes a no swearing, no smoking, no fires, no radio, and no fraternising with staff and/or students' policy.

3.4.1.4 The Contractor must visit the site prior to submitting their tender to apprise themselves of the limitations of the site and ensure that adequate provision

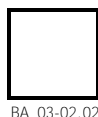
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has been made for carrying out the works in accordance with the programme. Site compounds and skips must be covered and fully secured at all times.

- 3.4.1.5 The Contractor is to allow to secure the Contractor's Compound and Works Site using 2.0m high double clipped Heras fencing and is to prevent unauthorised access for the duration of the works. Allow continued access for the grounds keepers to access the workshop/hut.
- 3.4.1.6 The Contractor is to provide all welfare facilities during the duration of the works to comply with the CDM Regulations 2015 including for a 'port-a-loo', mess facilities and suitable rest facilities, Oasis unit or similar. This can be provided by way of provision of a self-contained oasis unit if preferred. Protection of area containing welfare facilities must be carried out using 18mm thick WBP Plywood and minimum 1000 Gauge Polythene as required under cabins/welfare units etc.
- 3.4.1.7 Allow for the supply of skips as required to facilitate the clearance works. The skip is to be secured using 2.0m high double clipped Heras fencing. To prevent damage to existing surfaces, all skips must be laid on 18mm thick WBP Plywood to afford protection.
- 3.4.1.8 Security of site, adjacent buildings and compounds must always be maintained. The Contractor must ensure that a comprehensive Construction Phase Health & Safety Plan is in place prior to commencement of works on site. This is to be reviewed and approved by the consultant EA prior to works commencing on site.
- 3.4.1.9 The Contractor is to keep a written sign in sheet on site. All site staff must sign in with the Site Manager, who will in turn sign in at the school's entrance. Allow for inspection by site staff and EA.
- 3.5 Health & Safety
- 3.5.1.1 Works are to be undertaken in strict accordance with CDM Regulations 2015.
- 3.5.1.2 The works do not meet the minimum requirements for notification to the HSE.
- 3.5.1.3 The Contractor is to note areas of any combustible materials adjacent to works areas and include these specifically within their risk assessments to assist in fire prevention.
- 3.5.1.4 All site staff, including sub-contractors and visitors will be required to wear appropriate PPE whilst on site. The Contractor is to be responsible for the management of this. Exact details (Minimum point levels) to be discussed at the Pre-Start Meeting. The contractor is to allow for COVID-19 suitable PPE and working practices as per the governments guidelines and school's policy.
- 3.5.1.5 The Contractor shall allow for providing a site compound/fencing and welfare accommodation as deemed necessary to undertake the works.



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|----------|--|
| 3.5.1.6 | The Contractor shall allow for providing any temporary works in order to complete the works in a safe manner. |
| 3.5.1.7 | Contractor to submit Method Statements/ Risk Assessments/ Construction Phase Plan to the EA prior to undertaking any works on site (to include Hot Works information, if required). |
| 3.5.1.8 | All works to be undertaken in accordance with submitted Health & Safety information/ Method Statements/ Risk Assessments. |
| 3.5.1.9 | All 'near misses' are to be reported to the EA and logged accordingly. |
| 3.5.1.10 | All fire exit routes are to remain unobstructed during the course of the works. |
| 3.5.1.11 | Ensure that access routes for the Fire Brigade and vehicles are not compromised during the works. |
| | <u>Construction Design and Management (CDM) Regulations 2015</u> |
| 3.5.1.12 | The Contractor is to consider, when quoting, the designers risk assessment and all pertinent health and safety issues in conjunction with the schedule of work and is to provide any associated costs and additions here if applicable. |
| 3.6 | Tender Stage Site Visit |
| 3.6.1.1 | The Contractor is advised to attend site prior to tendering to fully evaluate the requirements of the specified works and site restrictions. No additional costs will be entertained following commencement on site unless instructed by the EA during the execution of the works. |
| 3.6.1.2 | No claims by any sub-contractor on the grounds of want of knowledge in these matters will be considered. |
| 3.6.1.3 | Access to site is to be by pre-arranged appointment via Michelle Harper (Parish Clerk) on T: 01245 225111 E: michelle.harper@danbury-esssex.gov.uk . |
| 3.7 | Contract Details |
| 3.7.1.1 | The Form of Construction Contract will be the JCT Design and Build Contract 2016 Edition. |
| 3.7.1.2 | The Contractor is to price the Preliminaries, Scope of Works, Schedule of Works and complete the Form of Tender as part of their return as per the instructions contained within this document. |
| 3.8 | Payment |
| 3.8.1.1 | The Contractor is to invoice for the full value of the works less 2.5% retention at the issue of Practical Completion Certification. |
| 3.8.1.2 | The single application for payment to a total of 97.5% of the project Final Account is to be made following Practical Completion with the Final |



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Certificate issued at the end of making good defects period (Twelve months from date of Practical Completion).

3.9 Provisional Sums

- 3.9.1.1 The Contractor is not permitted to insert any Contractor defined provisional sums in the formulation of their tender. Works items are to be priced as per this Schedule of Works alone.

3.10 Statutory Approvals

- 3.10.1.1 The works shall conform to the latest requirements of the following Authorities and Documents as necessary:
- Building Regulations: Approved Documents.
 - British Standard Specifications and Codes of Practice.
 - Statutory Authority Regulations.

3.11 Sub-Contractor Particulars

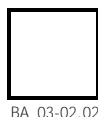
- 3.11.1.1 The Sub-Contractors whose tenders are accepted via the Main Contractor will enter a contract directly with the Main Contractor and will remain the responsibility of the Principal Contractor for the duration of the works and defects period.

3.12 Collateral Warranties

- 3.12.1.1 Collateral Warranties will also be required and executed between the Civil Engineer, Principal Contractor and Employer if they are undertaking any design and/or installation services outside of the scope of the Principal Contractor responsibilities. Collateral Warranties are to be taken out utilising the JCT Collateral Warranty for Employer SCWa/E.

3.13 Alternative Tenders

- 3.13.1.1 The Contractor is required to compile his tender on the basis of the stated programme but is also invited to provide an alternative tender on the basis of a shorter and/or more economic construction programme. If applicable, this is to be appended separately and clearly as a separate document that is clear and clearly separated from this document.
- 3.13.1.2 The following is a schedule of tenders required (See Form of Tender):
- Base Tender – Fixed price tender on stated programme.
 - Alternative Tender – Fixed price tender on Contractor's Programme.
- 3.13.1.3 Please note that qualified or non-compliant tenders; tenders referenced to other tenders and tenders that are calculable will not be considered. Any qualifications listed against Base or Alternative Tender must be scheduled



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separately on an addendum document that can be clearly cross referenced etc. to the Main Pricing Documentation.

3.14 General Conditions

Materials

3.14.1.1 All materials used shall comply with the appropriate British Standard Specification unless specified to the contrary. Where items are not specified the tender should include a list of proposed Manufacturers for approval by the EA at tender stage and prior to orders being placed.

3.14.1.2 The Main Contractor must adhere to all Manufacturers specified.

Equipment

3.14.1.3 Each item of equipment shall be delivered to site in sections suitable for installation in the position designated, bearing in mind the location, type of structure, construction programme and the method of access.

3.14.1.4 The duties and ratings of the plant and equipment described in the contract are minimal and the Contractor shall check them with the engineer, considering any variations of work which may have occurred.

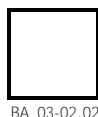
Variations

3.14.1.5 When a variation cannot reasonably be measured and valued in accordance with the Schedule, it shall either be the subject of a supplementary quotation or shall be priced at day works rates, as determined by the Architect. For all works carried out as day works, the sub-contractor shall submit for the EA's inspection, within seven days of the work being executed, day work sheets countersigned by the Main Contractor's Site Foreman or other responsible person. All cost estimates for variations shall first be submitted to the EA for approval before any claims for payments in respect of variations are made.

Provision of Everything Necessary

3.14.1.6 This Specification, drawings and Schedules are to be used jointly and should be read as such.

3.14.1.7 The drawings do not show existing mechanical and electrical routes but are primarily intended to enable the sub-contractor to prepare his estimate. Where runs of piping, ducts, cables, conduits etc. are shown to small scale (e.g. 1:50, 1:100) these do not necessarily indicate exact positions and the sub-contractor shall include for developing these drawings to suit his installation within the parameters set and is deemed to have included for all materials and associated costs. Large scale arrangement details are based on agreement with the EA and no alteration in principle will be allowed without the approval of the EA. In the event of any discrepancy between the drawings and the Specification this shall be referred to the EA whose decision will be final.



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3.15 Summary of Works

Note: Contractor is to complete **Summary of Costs Schedule** detailed in **Appendix B.**

- 3.15.1.1 Danbury Parish Council wishes to reinstate the existing footpath and carry out necessary groundworks to protect the existing bowls green and car park from future collapse/damage. Danbury Parish Council have appointed GEMCO Ltd to carry out investigation works and provide a performance specification and drawings which has been provided in **Appendix A – Dawsons Memorial Field; Slope Repairs Specification & Contract Drawings by GEMCO Ltd.**
- 3.15.1.2 The works are described in greater detail in **Appendix A** but the Client's brief comprises of the following:
- Remove vegetation from slope within site area, as shown on contract drawings (Existing trees to be retained).
 - All services within site area to be identified (In accordance with HSG47).
 - Locate unchartered electricity and water supplies.
 - Reinstatement of footpath and all associated works.
 - Re-profiling of slope as detailed in contract drawings.
 - Construction of new drainage system as detailed in contract drawings.
 - Historical movement repairs.
 - Creation of Landscape Bunds from excess excavated material.

3.15.2 Services and Utilities Location and Labelling Information

- 3.15.2.1 Contractor is to produce as built drawings with recordings of service and utilise locations (Including depths) and details on type of service or utility.
- 3.15.3 Pre-Commencement of Works on Site
 - 3.15.3.1 The Contractor shall prepare a written and photographic condition survey of any surfaces/finishes likely to be affected by the works immediately prior to commencement. A copy is to be provided to the EA. The Contractor should note that it is in their interest to fully record the existing condition so that any pre-existing damage can be assessed against any subsequent claims of damage.
- 3.15.4 Temporary Works
 - 3.15.4.1 As per item **3.4 Security and Contractor's Compound**, the Contractor is to allow for the supply, securing and removal on completion of the works a welfare facility, the necessary skips for removal of spoils, and securing of the Contractor's Compound and Works Site.



Contractor to Initial



3.15.5 Relocation of Arisings

3.15.5.1 Please provide a m³ bulking figure for arisings. Location to be confirmed but for the purposes of tender refer to **Appendix A – Dawsons Memorial Field; Slope Repairs Specification & Contract Drawings by GEMCO Ltd.**

3.15.5.2 Haulage route for arisings is approximately 210m and the contractor will be responsible for making good soft and hard landscape damaged by transportation of the arisings. Soft landscape will require suitable levelling (To be agreed with EA) and GSS School Sports & Playing Field grass seed as part of the making good. Contents of grass seed to be as follows:

- 45% Vermillion certified Amenity Ryegrass
- 25% Fancy certified Amenity Ryegrass
- 20% Ryder certified Strong Fescue
- 10% Miracle certified Meadow grass

3.15.6 Works upon Completion

3.15.6.1 During the course of the works the Contractor is to clear away all debris arising from the works on a regular basis to ensure the site is maintained in a safe and tidy state, surplus material, plant etc. is to be removed from site or stored at the end of each day.

3.15.6.2 Allow to clean down all working areas and leave in a condition as found upon commencement of works. All remaining rubbish and builders waste should be cleared from site and any hardstanding which has been marked with builder's materials is to be cleaned by jet washing.

3.15.6.3 Provide copies of trade literature, maintenance information, instruction manuals etc. for the health and safety file onsite.

3.15.7 Contingency Sum and Provisional Sums

3.15.7.1 Allow a general contingency of **£8,000.00** for any unforeseen and/or additional works agreed by Client. Expenditure of this will only be upon receipt of formal instruction and approval from the EA.

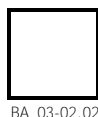
3.15.7.2 Allow a defined Provisional Sum of **£2,000.00** for the replacement of any footpath paving slabs that are not deemed suitable, to be agreed with the EA before expenditure.

3.15.7.3 Allow a defined Provisional Sum of **£1,500.00** for the appointment of an Approved Inspector or LA Building Control Officer.

3.15.7.4 Allow a defined Provisional Sum of **£2,000.00** for the replacement of any damaged section of existing handrail to be agreed with EA before expenditure.

3.15.7.5 Allow a defined Provisional Sum of **£1,000.00** for the appointment of an Arboriculturist to complete a Phase 1 Habitat Survey, to be agreed with EA before expenditure.

	£8,000.00
	£2,000.00
	£1,500.00
	£2,000.00
	£1,000.00



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