

# Diocesan Advisory Committee for the Care of Churches

Secretary Ian Dodd  
Old Palace, Canterbury, Kent CT1 2EE  
Tel: 01227 459401  
Email: idodd@diocant.org



The Diocese of  
**Canterbury**



THE CHURCH  
OF ENGLAND

Lionel Marchant Esq  
7 The Platt  
Sutton Valence  
Maidstone  
Kent ME17 3BQ

30 April 2015

*Dear Lionel*

## CONFIRMATION OF DAC ADVICE MAIDSTONE, ALL SAINTS – DRAINAGE REPAIRS AND IMPROVEMENTS

I am writing to inform you that the Standing Committee of the DAC has agreed the Committee's formal advice on the above proposals, which is set out in the enclosed notification of advice. Please read the document carefully to note any comments, which the Committee may have made, or any conditions which may be linked to the Committee's decision. **Please take care to ensure that these documents are not lost or mislaid. We are increasingly finding that PCCs are submitting alternative copies of papers not bearing the DAC stamp and this is resulting in delays in the processing of faculty casework.**

In addition to the notification you will find enclosed stamped copies of the paperwork seen by the DAC and upon which the Committee's advice is based.

A copy of the notification has been sent direct to the Diocesan Registry (tel: 020 7593 5110) who will send you within the next few days a copy of the faculty petition and public notices.

Please do not hesitate to contact the Diocesan Registry or me if you have any questions.

*Best wishes*

*Iu*

DAC/2015/47

Form 2  
(Rule 3.6)  
Diocesan Advisory Committee  
Notification of Advice



The Diocese of  
**Canterbury**



THE CHURCH  
OF ENGLAND

**This notification constitutes advice only and does not give you permission to carry out the works or other proposals to which it relates. A faculty must be obtained from the court before the works or proposals may lawfully be carried out.**

**In the diocese of Canterbury**

**Parish of Maidstone, All Saints with St Philip and St Stephen, Tovil**

**Church of Maidstone, All Saints**

The church is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990.

The listing is grade I

At a meeting of the Standing Committee of the Diocesan Advisory Committee

The following works or other proposals were considered:

Drainage repairs and improvements in accordance with a Specification by Purcell dated February 2015 and two supporting drawings.

The Committee **recommends** the works or proposals for approval by the court subject to the following provisos:

- (1) A person approved in advance by the archaeological adviser to the DAC shall maintain an archaeological watching brief during the works of excavation, which will include the production of a written report.
- (2) No items of archaeological or historical interest may be removed from the church site without prior consultation with the DAC.
- (3) Any human remains disturbed during the works shall be immediately covered from public view and must be treated decently and with reverence at all times. Their discovery shall be notified immediately to the incumbent. They shall be labelled and preserved as an entity in locked premises until they are reburied in the churchyard at the direction of the incumbent, in a place as close as practicable to the location in which they were uncovered.

**This advice does not constitute authority for carrying out the works or proposals and a faculty is required.**

In the opinion of the Committee the work or part of the work proposed is not likely to affect—

- the character of the church as a building of special architectural or historic interest
- the archaeological importance of the church
- archaeological remains existing within the church or its curtilage

Because of the nature of the proposals, consultation has not been held with any of the statutory consultees.

**This advice is valid for 24 months from the date given below.**

Signed:

Date:

30/4/15

Secretary to the Diocesan Advisory Committee

Canterbury Diocesan Board of Finance (Custodian Trustee to Canterbury Diocesan Board of Education)

Diocesan House, Lady Wootton's Green, Canterbury, CT1 1NQ

A company limited by guarantee - Registered No 145650 Registered Charity No 249972

Footnotes:-

- (1) The insurance policy for the church building will include a condition that the PCC notifies the insurer of any activity which might increase the insured risk. Obvious examples are alterations to the wiring installation, the erection of any scaffolding or any disruption to the fabric of the building. The faculty petition includes a question as to whether the church's insurers have been informed about the work which is to be carried out and the Diocesan Registrar will need to see a copy of the letter from the insurers confirming that they have been notified.
- (2) If the PCC has received a grant from Historic England or the Heritage Lottery Fund under the Repair Grant Scheme for Places of Worship 2002 to 2005, the grant offer will have included a condition that they notify Historic England when seeking faculty or any other approval for works to the church. Historic England does not need to be told about maintenance and minor repairs, works in the churchyard (other than extensions) and reversible works of liturgical adaptation that are compatible with the building. This condition ceases to apply ten years after the last grant payment. Churches grant aided by Historic England before this scheme came into operation no longer need to obtain their separate approval for changes.

As one of the churches' secular partners Historic England will already have been consulted if significant alterations to the building are proposed, whether or not grant aid has previously been made available.

CLIENT PCC OF ALL SAINTS MAIDSTONE CHURCH

DRW 232624-4

JOB ALL SAINTS CHURCH MAIDSTONE

DATE 01-06-11

DRAINAGE REPAIRS AND IMPROVEMENTS

DRN RRE CHK-SNJJM

PROPOSED PHASE 1 DRAIN REPAIRS

SCALE 1 : 100



St Marys Hill, Rawstons Road, Colchester, Essex, CO3 3JH  
© PURCELL 2012. PURCELL IS THE TRADING NAME OF PURCELL MILLER TRITTON LLP

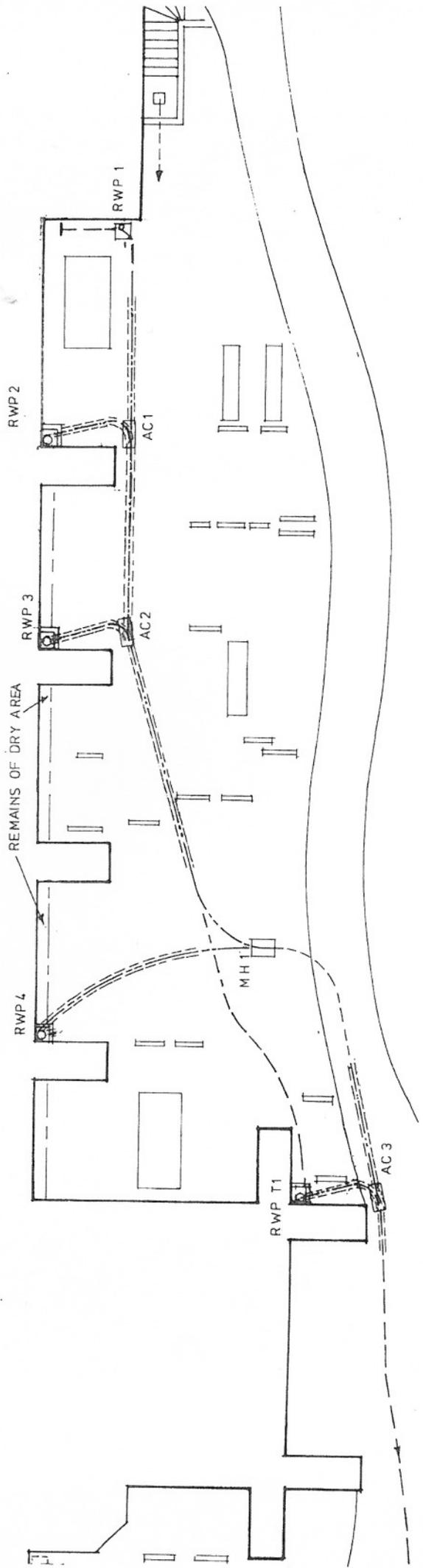
CANTERBURY DIOCESAN  
ADVISORY COMMITTEE

See Notification *DAC 2011/47*

*Jim Deal* Secretary  
*30/9/15* Date

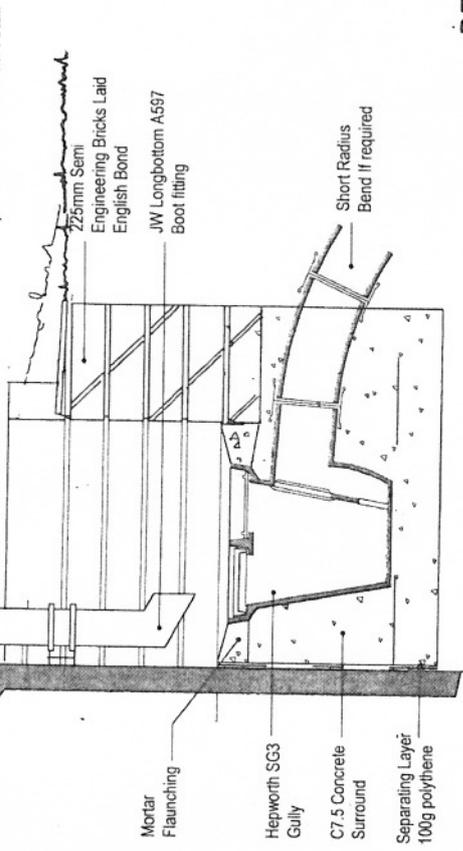
KEY

-  DRAIN ROUTE SHOWN ON RECORD DRAWINGS
-  DRAIN ROUTE ESTABLISHED FROM SURFACE EVIDENCE
-  ASSUMED DRAIN ROUTE
-  PROPOSED NEW DRAIN
- PROPOSED NEW ACCESS CHAMBER
- PROPOSED NEW GULLY
-  DRY AREA



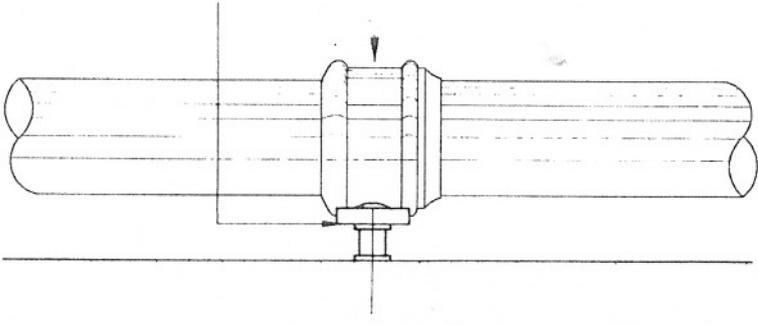
CANTERBURY DIOCESAN  
ADVISORY COMMITTEE

See Notification *Dochow/47*  
*Jim Deul* Secretary  
*30/4/15* Date



PLAN

DEEP GULLY scale 1:10



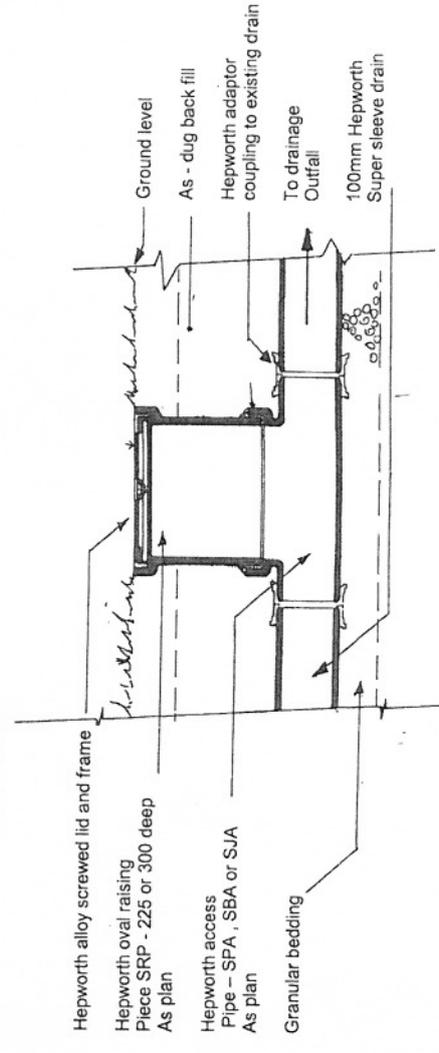
15mm DIA COPPER TUBE  
MINIMUM LENGTH 25mm AS  
SPACER WITH STAINLESS  
STEEL WASHERS 25mm DIA AT  
EACH END.

CAST IRON RAINWATER  
DOWN PIPE FIXED WITH  
OPEN JOINTS.

FIXING SHALL BE:  
M6 THREADED STAINLESS  
STEEL ROD RESIN BONDED  
INTO WALL MIN. 125mm.  
STAINLESS STEEL  
WASHERS AND NUTS.

RESIN SHALL BE RAWPLUG  
'KEMFAST 2' OR SIMILAR  
APPROVED.

RAINWATER PIPE FIXING  
scale 1:5

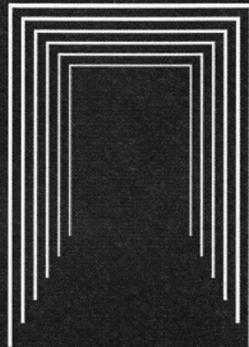


SECTION

ACCESS CHAMBER scale 1:10

CLIENT PCC OF ALL SAINTS MAIDSTONE CHURCH  
JOB ALL SAINTS CHURCH MAIDSTONE  
DRAINAGE REPAIRS AND IMPROVEMENTS  
TITLE PROPOSED DRAIN DETAILS  
DRW 232624- 3  
DATE 04-06-11  
DRN RRE CHK SNJ/M  
SCALE as shown





PURCELL

**ALL SAINT'S CHURCH, MAIDSTONE  
DRAINAGE, REPAIRS AND IMPROVEMENTS (PHASE I)**

**SPECIFICATION AND SCHEDULE OF WORKS - TENDER ISSUE**

February 2015

Simon Marks RIBA, AABC

CANTERBURY DIOCESAN  
ADVISORY COMMITTEE

See Notification *DACH015/47*

*Tim Dool*

Secretary

*30/4/15*

Date

**Simon Marks**

St Mary's Hall, Rawstorn Road, Essex, CO3 3JH

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18.02.15 HD 006-232624-RPT-002 Tender Issue

## **I.0 MAIN CONTRACT PRELIMINARIES / GENERAL CONDITIONS**

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### **A10 PROJECT PARTICULARS**

**110 THE PROJECT:**

Name: Drainage, Repairs and Improvements (Phase One)

Location: All Saints Church, Maidstone

**120 EMPLOYER:**

The PCC of All Saints with St Philip, Maidstone

c/o The Hon Treasurer Mr Lionel Marchant

Restoration Development Trust

7 The Platt, Sutton Valence

Maidstone

Kent

ME17 3BQ

Tel: 01622 843 298

**127 THE PRINCIPAL CONTRACTOR: (where Recital 5A applies)**

The Contractor

**140 ARCHITECT:**

Purcell Miller Tritton

St Mary's Hall

Rawstom Road

Colchester, Essex CO3 3JH

Tel: 01206 244844

**A10/190 CDM REGULATIONS 2007**

The project is not notifiable under the CDM Regulations.

### **A11 TENDER AND CONTRACT DOCUMENTS**

**110 THE TENDER DRAWINGS are:**

As listed in the first clause of the Schedule of Works.

**120 The contract drawings will be the same as the tender drawings.**

## **A12 THE SITE/EXISTING BUILDINGS**

### **110 THE SITE:**

The site will be described in the first clause of the Schedule of Works.

As described in the Schedule of Works, protect and identify the site area boundaries.

### **141♦ EXISTING MAINS:**

Services are present on the site and the Contractor must ascertain for himself the extent and the exact nature and location of these approximate locations where known are referred to in the Health and Safety Plan.

- The operation of services shall be maintained, altered and adapted to suit the works.

### **A12/A12/240 RISKS TO HEALTH AND SAFETY:**

- The nature and condition of the site/building cannot be fully and certainly ascertained before it is opened up.

The designers risk assessment is attached to this document at the end of the schedule of works.

- The accuracy and sufficiency of this information is not guaranteed by the Employer or the CA. Ascertain if any additional information is required to ensure the safety of all persons and the Works.
- Draw to the attention of all personnel working on the site the nature of any possible contamination and the need to take appropriate precautionary measures.

### **A12/A12/280 SITE VISIT:**

Before tendering, ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works.

### **A12/285 LIGHTING AND POWER:**

The electricity supply from the employer's mains may be used for the Works free of cost. Make temporary arrangements for distributing power around the site. The temporary installation must comply with HSE Guide "Electrical safety on construction sites".

### **A12/A12/290 A SITE VISIT may be made with the incumbent Hon Treasurer Mr Lionel Marchant tel: 01622 843 298.**

## **A20 THE CONTRACT**

### **A20/705 FORM OF CONTRACT:**

The form and conditions of contract will be as those issued by the joint Contracts Tribunal with the amendments described below.

For certain contracts a JCT Form may not be signed, however the terms and conditions of the contract specified below will apply and the submission of a tender shall be deemed to be an acceptance of these conditions.

A20/A20/710 JCT MINOR WORKS BUILDING CONTRACT WITH CONTRACTORS DESIGN:

The form of contract will be the JCT Minor works Building Contract with Contractors Design, Revision 2, 2009 Edition.

Requirement: Allow for the obligations, liabilities and services described therein against the headings below:

First Recital

The Works comprise as described at A10/110

The Architect will be as described at A10/140

Second Recital

The contractors designed portion

The works include the design and construction of:

Site protection works

Third Recital

The contract drawings are as listed in the first clause of the schedule of works.

The contract specification and work schedules is the tender specification and work schedules.

Fourth Recital

The priced tender specification/schedule of rates will form part of the contract documents.

Fifth Recital

The status of the Employer under the Construction Industry Scheme is at the base date as stated in the contract particulars.

Sixth Recital

The extent of the application of the Construction (Design and Management) Regulations 2007 is as stated in the contract particulars.

Seventh Recital

No framework agreement is included as a contract supplement.

Eighth Recital and Schedule 3

The supplemental provisions apply to the extent listed in the contract particulars.

## THE ARTICLES

### Article 1

The contractor shall carry out and complete the work in accordance with the Contract Documents.

### Article 2

The contract sum will be the sum stated in the letter of acceptance.

The employer will pay the contractor at the times and in the manner specified in the conditions.

### Article 3

Architect/Contract Administrator:

Purcell Miller Tritton LLP

### Article 4

CDM Co-ordinator:

Shall be omitted.

### Article 5

The principal contractor, for the purposes of the CDM Regulations, will be the contractor.

### Article 6:

Dispute or difference – adjudication

As contract particulars item 7.2

Article 7 – Arbitration - will be deleted.

### Article 8:

Dispute or difference – legal proceedings

**THE CONTRACT PARTICULARS:**

The following amendments to the standard form will apply:

Fifth Recital and Schedule 2 – the base date will be 2 weeks prior to submission of tender.

Fifth Recital and Clause 4.2:

Construction Industry Scheme:

The Employer at the base date is not a Contractor for the purposes of CIS.

Sixth Recital: CDM Regulations 7 and 13 apply.

The project is not notifiable.

Seventh Recital: The framework agreement does not apply.

**SUPPLEMENTAL PROVISIONS**

Eighth Recital

The supplemental provisions included are:

Collaborative working – paragraph 1 of Schedule 3 applies.

Health & Safety – paragraph 2 of Schedule 3 applies.

Cost savings and value improvements – paragraph 3 of Schedule 3 does not apply.

Sustainable development and environmental considerations – paragraph 4.1 does not apply.

Paragraph 4.2 applies.

Performance indicators and monitoring – paragraph 5 of Schedule 3 does not apply.

Notification and negotiations of disputes – paragraph 6 of Schedule 3 does not apply.

Notification and negotiation of disputes - paragraph 6 does not apply

Article 7 and schedule 1: Does not apply

1.1: CDM planning period

Does not apply.

**Clause 2.3 – COMMENCEMENT AND COMPLETION**

Date for commencement and completion of the works shall be agreed prior to the tender acceptance and the agreed dates shall form part of the contract.

**Clause 2.9 – LIQUIDATED DAMAGES**

At a rate of £50 per week

Clause 2.11 – RECTIFICATION PERIOD

Period: 12 months

Clause 4.3 – PERCENTAGE OF THE TOTAL VALUE OF THE WORK

Percentage: 95%

Clause 4.4 – PERCENTAGE OF THE TOTAL AMOUNT TO BE PAID TO THE CONTRACTOR (at practical completion)

Percentage: 97.5%

Clause 4.8.1 – SUPPLY OF DOCUMENTATION

Period: 3 months

Clause 4.11 and Schedule 2 – CONTRIBUTION, LEVY AND TAX CHANGES

Schedule 2 (fluctuations option) does not apply

Clause 4.11 will be deleted

Clause 5.3.2 – CONTRACTOR'S INSURANCE – INJURY TO PERSONS OR PROPERTY

Insurance cover (for any one occurrence or series of occurrences arising out of one event):

£5,000,000

Clause 5.4A & 5.4B – INSURANCE OF THE WORKS – ALTERNATIVE PROVISION

Clause 5.4B applies (works and existing structures insurance by Employer in joint names).

Clause 5.4C will be deleted.

Clause 5.4A 1 and 5.4B 1 – PERCENTAGE TO COVER PROFESSIONAL FEES

Addition 15%

Clause 5.4.B – INSURANCE FOR THE WORKS – TERRORISM COVER

Add "Terrorism cover (for Ecclesiastical Insurance Group based insurance group policies) is EXCLUDED from the insured risk under clause 5.4B 1.1 and is an excepted risk"

Clause 7.2 – ADJUDICATION

The adjudicator will be nominated by the President of a Vice President of The Royal Institute of British Architects.

Schedule 1 Paragraph 2.1 – ARBITRATION

Schedule 1 Paragraph 2.1 does not apply

## THE CONDITIONS

### SECTION 1: DEFINITIONS AND INTERPRETATION

#### 1.4 – RECKONING PERIODS OF DAYS

The reckoning period of days excludes Public and Bank Holidays.

#### 1.5 – CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999

Nothing in this contract confers or is intended to confer any right to enforce any of its term on any person who is not party to it.

#### 1.7 – APPLICABLE LAW

The Law of England shall be the law applicable to this agreement.

### SECTION 2: CARRYING OUT THE WORKS

### SECTION 3: CONTROL OF THE WORKS

#### CDM Regulations

Each party to the contract acknowledges that he is aware of and undertakes to the other that in relation to the works and the site he will duly comply with the CDM Regulations. Without limitation, where the project that comprises or includes the works, is notifiable.

### SECTION 4: PAYMENT

#### 4.1 VAT

The contract sum is exclusive of VAT and in relation to any payment to the contractor under this contract, the employer shall in addition pay the amount of any VAT properly chargeable in respect of it.

#### 4.2 Construction Industry Scheme (CIS)

Where the employer is a "contractor" as defined by the CIS scheme the obligation of the employer to make payments under this contract is subject to the provisions of the CIS.

#### 4.3 Progress Payments and Retention

Period between progress payments/minimum period 4 weeks

Period for payment by the employer: 14 days from the date of the architect's certificate.

Simple interest on late payment of sums certified: 5% over base rate of the Bank of England

### SECTION 5: INJURY DAMAGE AND INSURANCE

5.1: Liability of the contractor – personal injury or death – Clause 5.1 applies.

5.2: Liability of the contractor – injury or damage to the property – Clause 5.2 applies

Insurance conditions are as specified in the contract particulars.

SECTION 6: TERMINATION

SECTION 7: SETTLEMENT OF DISPUTES

Schedule 1, Arbitration, does not apply

EXECUTION

The contract will be executed under hand

CONTRACT GUARANTEE BOND

A contract guarantee bond is not required.

**A30 TENDERING/SUBLETTING / SUPPLY**

**MAIN CONTRACT TENDERING**

A30/A30/110

SCOPE:

These conditions are supplementary to those stated in the invitation to tender and on the Form of Tender.

A30/A30/145

TENDERING PROCEDURE

- General: Comply with the provisions of JCT Practice Note 6 (Series 2) 'Main Contract Tendering'.
- Errors: Alternative 1 is to apply

A30/A30/170

ACCEPTANCE OF TENDER:

The Employer and the Employer's representatives:

- Offer no guarantee that any tender will be recommended for acceptance or accepted.
- Will not be responsible for any cost incurred in the preparation of any tender.

A30/A30/190

PERIOD OF VALIDITY:

Tenders must remain open for consideration (unless previously withdrawn) for not less than 16 weeks from the date fixed for the submission or lodgement of tenders. Information on the date for possession/commencement is given in section A20.

**PRICING / SUBMISSION OF DOCUMENTS**

A30/A30/310

TENDER

General: Tenders must include for all the works 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.

A30/A30/320

PRICING OF SPECIFICATION:

Alterations and qualifications to the specification must not be made without the written consent of the architect. Tenders containing unauthorised alterations or qualifications may be rejected. Costs relating to items in the specification which are not priced will be deemed to have been included elsewhere in the tender.

**A31 PROVISION, CONTENT AND USE OF DOCUMENTS**

**DEFINITIONS AND INTERPRETATIONS**

A31/A31/110

DEFINITIONS

Meaning: Terms, derived terms and synonyms used in the preliminaries/general conditions and the specification are as stated therein or in the appropriate British Standard or British Standard Glossary.

A31/120

COMMUNICATION:

Definition: Includes advise, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consents or instructions, or make arrangements.

Format: In writing to the person named in the clause A10/I40 unless specified otherwise.

Response: Do not proceed until response has been received.

A32/I61

**TERMS USED IN SPECIFICATION:**

**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 taking out and disposing of associated pipework, wiring, duct work or other services.

**Fix:** Unload, handle, store, place and fasten in position including all labours and use of site equipment.

**Supply and fix:** includes all labour and site equipment for unloading, handling, storing and executions. All products to be supplied and fixed unless stated otherwise.

**Keep for reuse:** Do not damage designated products or works. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the employer or for use in the works as instructed.

**Make good:** Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/or replacement.

**Renew:** Supply and fix new products matching those removed. Execute work to match original new state of that removed.

**Repair:** Execute remedial work to designated products. Make secure, sound and neat excludes redecoration and/or replacement.

**Refix:** Fix removed products.

**Ease:** Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.

**Match existing:** Provide products and work of the same appearance and features as the original, excluding aging and weathering. Make joints between existing and new work as inconspicuous as possible.

**System:** Equipment, accessories, control, supports and ancillary items, including installation, necessary for that section of the work to function.

**DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER**

A31/A31/411

**ADDITIONAL COPIES OF DRAWINGS:**

Two copies of drawings (not counting any certified copy of the Contract Drawings) will be issued free of charge. Additional copies will be issued on request but will be charged to the Contractor.

A31/A31/431

**ADDITIONAL COPIES OF SPECIFICATION:**

After execution of the Contract, two copies of the Specification will be issued free of charge. Additional copies will be issued on request, if available, but will be charged to the Contractor.

A31/A31/440

**DIMENSIONS:**

Scaled dimensions: do not rely on.

A31/A31/460 THE SPECIFICATION:

Coordination: All sections must be read in conjunction with the main contract preliminaries/general conditions.

## **A32 MANAGEMENT OF THE WORKS**

- GENERALLY

A32/110 SUPERVISION

- General: Accept responsibility for co-ordination, supervision and administration of the works, including sub contracts.
- Co-ordination: Arrange and monitor a programme with each sub-contractor, supplier, local authority and statutory undertaker and obtain and supply information as necessary for the works.

## **A33 QUALITY STANDARDS/CONTROL**

### **MATERIALS AND WORK GENERALLY**

A33/A33/111 GOOD PRACTICE:

Where and to the extent that materials, products and workmanship are not fully detailed or specified they are to be:

- Of a kind and standard appropriate to the nature and character of that part of the works where they will be used.
- Suitable for the purposes stated or reasonably to be inferred from the project documents.
- 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.

A33/120 WORKMANSHIP SKILLS

Operatives: Appropriately skilled and experienced for the type and quality of the work.

Registrations: With construction skills certification scheme.

Evidence: Operatives must produce evidence of skills/qualifications when requested.

A33/A33/131 PROPRIETARY PRODUCTS:

- Handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations/instructions. Inform CA if these conflict with any other specified requirement. Submit copies to CA when requested.
- Ancillary products and accessories to be of a type recommended by the main product manufacturer, unless otherwise specified.
- The tender will be deemed to be based on the products specified and recommendations on their use as described in the manufacturers' literature current at the time of tender.

- Obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, inform CA and do not place orders for or use the affected products without further instructions.
- Where British Board of Agrément certified products are used, comply with the limitations, recommendations and requirements of the relevant valid certificates.

A33/A33/171 GENERAL QUALITY OF WORKMANSHIP:

- Operatives must be appropriately skilled and experienced for the type and quality of work.
- Take all necessary precautions to prevent damage to the work from frost, rain and other hazards.
- Inspect components and products carefully before fixing or using and reject any which are defective.
- Fix or lay securely, accurately and in alignment.
- Where not specified otherwise, select fixing and jointing methods and types, sizes and spacings of fastenings in compliance with section Z20. Fastenings to comply with relevant British Standards.
- Provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion. Do not overtighten fixings.
- Adjust location and fixing of components and products so that joints which are to be finished with mortar or sealant or otherwise left open to view are even and regular.
- Ensure that all moving parts operate properly and freely. Do not cut, grind or plane pre-finished components and products to remedy binding or poor fit without approval.

A33/A33/180 WATER FOR THE WORKS:

Mains supply: Clean and uncontaminated.

Other: Do not use until:

Evidence of suitability is provided.

Tested to BS EN 1008 if instructed.

**SUPERVISION/INSPECTION/DEFECTIVE WORK**

A33/540 DEFECTS IN EXISTING WORK:

Undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.

Documented remedial work: Do not execute work which may:

Hinder access to defective products or work; or

Be rendered abortive by remedial works.

A33/A33/561 SUPERVISION:

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.

#### **WORK AT OR AFTER COMPLETION**

A33/730

#### **MAKING GOOD DEFECTS**

Remedial work: Arrange access with the incumbent.

Rectification: Give reasonable notice for access to various parts of the works.

Completion: Notify when remedial works have been completed.

**A34**

#### **SECURITY, HEALTH AND SAFETY**

A34/A34/I 19

#### **EXECUTION HAZARDS**

- Common hazards: Not listed. Control by good management and site practice.

Prevention: Protect the site, the works and general environment including streams and water ways against pollution.

Contamination: If pollution occurs inform immediately, including to the appropriate authorities and provide relevant information.

A34/I31

#### **PRODUCT HAZARDS**

Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Occupational Exposure Limits.

Common hazards: Not listed. Controlled by good management and site practice: Significant hazards: Specified construction materials are as referred to in the attached designers risk assessment.

A34/I51♦

#### **SECURITY:**

Adequately safeguard the site, the Works, products, materials, plant, and any existing buildings affected by the Works from damage and theft. Take all reasonable precautions to prevent unauthorised access to the site, the Works and adjoining property.

At the end of each working day all ladders giving access to elevated areas, should have the ladders to the first lift removed and placed under lock and key.

A34/I55♦

#### **CHURCHES IN USE:**

The Contractor is to allow for:

- All work is to be suspended during normal weekend church services.
- In addition the contractor is to allow for suspending the works for an average of 3 working days per calendar month in order that weddings, funerals and other unforeseen observances may proceed without disturbance and hindrance. The Church is to be left in a clean and reasonable condition to allow services to take place.

A34/A34/160 STABILITY

- Responsibility: Maintain the stability and structural integrity of the Works during the Contract.
- Design loads: Obtain details, support as necessary and prevent overloading.

A34/A34/171 OCCUPIED PREMISES

- Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.

HOT WORKS POLICY

PROTECT AGAINST THE FOLLOWING

A34/331 NOISE CONTROL

Comply generally with the recommendations BS 5228 – 1, clause 9.3 to minimise noise levels during the execution of the works.

Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by the manufacturers of compressors, tools or vehicles.

Restrictions: Do not use:

Radios and other audio equipment or permit employees to use in ways or at times that may cause nuisance.

A34/340 POLLUTION

Prevention: Protect the site, the works and general environment including streams and water ways against pollution.

Contamination: If pollution occurs inform immediately, including to the appropriate authorities and provide relevant information.

A34/370 ASBESTOS CONTAINING MATERIALS

Duty: Report immediately any suspected materials discovered during execution of the works.

Do not disturb.

Agree methods for safe removal or encapsulation.

A34/376♦ ANTIQUITIES, CHURCHES:

Two weeks written notice is to

Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Occupational Exposure Limits.

Common hazards: Not listed. Controlled by good management and site practice: Significant hazards: Specified construction materials are as referred to in the attached designers risk assessment.

A34/391◆ SMOKING ON SITE:

Smoking will not be permitted on or in the Building or on the scaffold. An approved 'No Smoking' sign to be located at the site and building entrances(s). No smoking within the site boundary will be permitted.

A34/A34/400 BURNING ON SITE

- Burning on site: Not permitted.

A34/A34/410 MOISTURE

- Wetness or dampness: Prevent where this may cause damage to the Works.
- Drying out: Control humidity and application of heat to prevent:
  - Blistering and failure of adhesion.
  - Damage due to trapped moisture.
- Excessive movement.

A34/A34/430 WASTE

- Includes: Rubbish, debris, spoil, containers and surplus material.
- Minimize: Keep the site and Works clean and tidy.
- Remove: Frequently and dispose off site in a safe and competent manner:
  - Non-hazardous material: In a manner approved by a Waste Regulation Authority.
  - Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
  - Documentation: Retain on site.
- Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.

A34/494◆ PROTECTION OF BATS:

All species of bats and their breeding/resting places are protected under Regulation 39 of the Conservation (Natural Habitats) Regulations 1994, and Section 9 of the Wildlife & Countryside Act 1981.

Before the commencement of any contract the whole site is to be thoroughly checked for the presence of bats. If any are discovered, or their presence suspected, the CA should be notified without delay.

Should a bat be discovered in the course of an operation which is likely to be detrimental to the bat, the work should cease immediately and the CA informed.

In all cases no work is to take place which in any way can be shown to be detrimental to bats or their habitat without written instruction.

A DEFRA licence has not been obtained. Natural England have inspected the building and have confirmed that there are bat roosts in the building envelope.

A34/495 ♦ PUBLICITY:

No information, either written or verbal, photographs or drawings concerning the contract to be supplied by the contractor to any persons without the CA's written authority which is to be at the CA's sole discretion.

PROTECT THE FOLLOWING

A34/A34/510 EXISTING SERVICES

- Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
- Before starting work: Check and mark positions of mains/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
- Work adjacent to services:
- Comply with service authorities'/ statutory undertakers' recommendations.
- Adequately protect, and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
- Identifying services:
- Below ground use signboards, giving type and depth; overhead use headroom markers.
- If disturbed during site operations replace marker tapes or protective covers to service authority's/ statutory undertaker's recommendations.
- Damage to services: If any results from execution of the Works:
- Immediately give notice and notify appropriate service authority/ statutory undertaker.
- Make arrangements for the work to be made good without delay to the satisfaction of service authority/statutory undertaker or other owner as appropriate.
- Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.

A34/A34/520 ROADS AND FOOTPATHS

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

A34/A34/621 ADJOINING PROPERTY

- Precautions: Prevent trespass of workpeople and damage to adjoining property.

**A36 FACILITIES / TEMPORARY WORK/SERVICES**

A36/A36/110 TEMPORARY WORKS AND SERVICES:

Give notice of intended site siting

Maintain: Alter, adapt and move as necessary. Remove when no longer required and make good.

A36/230 TEMPORARY ACCOMMODATION:

Proposals for temporary accommodation and storage for the works: Submit 2 weeks prior to commencement date.

Details to be included: Type of accommodate and storage, its siting and the programme for site installation and removal.

A36/231 TEMPORARY ACCOMMODATION, SANITARY FACILITIES:

Facilities: Sanitary accommodation will be provided for the duration of the contract by the Employer.

**A55 DAYWORKS**

- A55/100 PRIME COST OF DAYWORKS: to be calculated in accordance with the 'DEFINITION OF PRIME COST OF DAYWORK CARRIED OUT UNDER A BUILDING CONTRACT, refer to the contract clause 3.7.6' published by the RICS and BEC applies, subject to any amendments stated below.
- A55/101 'Hourly Base Rates' for labour are to be computed in accordance with Item 3.2 of the above 'Definitions' and are to be inclusive of all incidental costs, overheads and profit as defined in Section 6 of the above 'Definitions'. They will be subject to no further adjustment.
- A55/103 Materials and goods as defined in Section 4 of the 'Definition', except that cash discounts allowable under Item 4.1 shall not exceed 2½%.
- A55/104 Plant as defined in Section 5 of the above 'Definition' calculated in accordance with the 'Schedule of basic Plant Charges for Use in Connection with Daywork under a Building Contract, refer to the contract clause 3.7.6 published by the RICS.
- A55/105 Incidental costs, overheads and profit as defined in Section 6 of the Definition. Note: hourly base rates for labour will be deemed to include all items referred to in Section 6 of the Definition.
- A55/106 The Contractor shall insert rates and/or percentages as appropriate in accordance with Section No. 1 of the Specification and shall include the total within the tender sum. The inserted rates and percentages shall remain fixed for the duration of the contract.

## **2.0 DESCRIPTION OF MATERIALS AND WORKMANSHIP**

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### **C41 BRICKWORK MORTARS**

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS ALSO REFER TO WORK SECTION F21 F10 BRICKWORK

#### **C41/557 MORTAR FOR BEDDING AND JOINTING EXTERNAL BRICKWORK**

- Following analysis of existing mortar prepare new mortar based on the following (to be confirmed after sample approval)

1 part Portland cement

- Mix: 2 parts lime putty as Z21/127
- 4 parts pit sand sieved to < 2.36 mm
- 5 parts silicon quartz sand sieved to < 1000 microns

### **E10 MIXING/ CASTING/ CURING IN SITU CONCRETE**

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

CONCRETE

#### **E10/101 SPECIFICATION**

Concrete generally: To BS EN 206-1 and BS 8500-2.

See also structural engineer's schedule of work

#### **E10/125 SUBSTITUTION OF STANDARDIZED PRESCRIBED CONCRETE FOR DESIGNATED CONCRETE**

- General: Conform to BS 8500-2, clause 8.
- Substitution: In accordance with BS 8500-1, table A.7.
- Proposals: Submit for each substitution, stating reasons.
- Mixing: If standardized prescribed concretes are made on site conform to BS 8000-2.1, subsections 2, 3 and 4.

See table at end of this section for general purpose concrete for small areas.

MATERIALS, BATCHING AND MIXING

#### **E10/215 READY-MIXED CONCRETE**

- Production plant: Currently certified by a body accredited by UKAS to BS EN 45011 for product conformity certification of ready-mixed concrete.
- Source of ready-mixed concrete: Obtain from one source if possible. Otherwise, submit proposals.

- Name and address of depot: Submit before any concrete is delivered.
  - Delivery notes: Retain for inspection.
  - Declarations of nonconformity from concrete producer: Notify immediately.
- E10/450\*      MAKING CONCRETE ON SITE: Mix handle and cast concrete in accordance with BS 5328.
- IDENTITY TESTING/ CERTIFICATION
- PLACING/ COMPACTING/ CURING AND PROTECTION
- E10/630      PREMATURE WATER LOSS
- Requirement: Prevent water loss from concrete laid on absorbent substrates.
  - Underlay: Select from:
    - Polyethylene sheet: 250 micrometres thick.
    - Building paper: To BS 1521, grade B1F.
  - Installation: Lap edges 150 mm.
- E10/650      SURFACES TO RECEIVE CONCRETE
- Cleanliness of surfaces immediately before placing concrete: Clean with no debris, tying wire clippings, fastenings or free water.
- E10/680      PLACING
- Records: Maintain for time, date and location of all pours.
  - Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
  - Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum). Do not place against frozen or frost covered surfaces.
  - Continuity of pours: Place in final position in one continuous operation up to construction joints. Avoid formation of cold joints.
  - Discharging concrete: Prevent uneven dispersal, segregation or loss of ingredients or any adverse effect on the formwork or formed finishes.
  - Thickness of layers: To suit methods of compaction and achieve efficient amalgamation during compaction.
  - Poker vibrators: Do not use to make concrete flow horizontally into position, except where necessary to achieve full compaction under void formers and cast-in accessories and at vertical joints.
- E10/690      COMPACTING
- General: Fully compact concrete to full depth to remove entrapped air. Continue until air bubbles cease to appear on the top surface.

- Areas for particular attention: Around reinforcement, under void formers, cast-in accessories, into corners of formwork and at joints.
- Consecutive batches of concrete: Amalgamate without damaging adjacent partly hardened concrete.
- Methods of compaction: To suit consistence class and use of concrete.

E10/810

CURING GENERALLY

- Evaporation from surfaces of concrete: Prevent, including from perimeters and abutments, throughout curing period.
- Surfaces covered by formwork: Retain formwork in position and, where necessary to satisfy curing period, cover surfaces immediately after striking.
- Top surfaces: Cover immediately after placing and compacting. If covering is removed for finishing operations, replace it immediately afterwards.
- Surface temperature: Maintain above 5°C throughout the specified curing period or four days, whichever is longer.
- Records: Maintain details of location and timing of casting of individual batches, removal of formwork and removal of coverings. Keep records on site, available for inspection.

E10/840

PROTECTION

- Prevent damage to concrete, including:
  - Surfaces generally: From rain, indentation and other physical damage.
  - Surfaces to exposed visual concrete: From dirt, staining, rust marks and other disfiguration.
  - Immature concrete: From thermal shock, physical shock, overloading, movement and vibration.
  - In cold weather: From entrapment and freezing expansion of water in pockets, etc.

TABLE SHOWING COMPARISON OF CONCRETE TYPES FOR GENERAL PURPOSES AND NOT EXPOSED IN THE COMPLETED BUILDING				
Use	CCA Designation Before 1991	Standard mix to BS 8500-2 Part 4	Designated Mix to BS 8500-2	Traditional Site Mix Description
Kerb Bedding				
Pipe Surrounds in Domestic Situations	C7 P	St 1	GEN 0	1:3:6
Oversite concrete	C10P	St 2	GEN 1	1:2½:5
Where CCA or site mixes are described or specified the standard or designated mix shown may be substituted. This table does not supersede concrete specifications issued by the Structural Engineer				

#### IN SITU CONCRETE IN VERY SMALL AREAS

NB: Designated or standard mixes as described above should be used wherever possible.

This section concerns small isolated areas of concrete used in repairs.

E10/907

#### MAKING CONCRETE GENERALLY:

Water content of concrete must be carefully controlled and adjusted to allow for moisture content of aggregates to give consistent quality and workability.

Ensure workability of concrete is such that it can be readily worked into corners and angles of forms and around reinforcement, constituent materials do not segregate and free water does not collect at the surface during placing.

E10/902

#### MAKING CONCRETE:

- 1 If site mixed, use mechanical mixer capable of handling whole bag mixes. Mix until materials are uniform in colour.
- 2 Transport quickly and place without segregation.
- 3 Thoroughly compact to form a dense mass without voids. Use mechanical vibration to ensure compaction around reinforcement.
- 4 Allow to cure by preventing evaporation of water by suitable means
- 5 Withdraw all levelling pegs as concrete is laid

- E10/903 MIXING ON SITE:
- Mix proportions by weight: maximum amounts of aggregate per 50 kg bag of cement:
- C75P: Fine 170 kg, Coarse 300 kg (1:3:6)
- C10P: Fine 150 kg, Coarse 240 kg
- C20P: Fine 110 kg, Coarse 190 kg
- C25P: Fine 85 kg, Coarse 170 kg
- C30P: Fine 75 kg, Coarse 155 kg
- Acceptable range of slump: 25-75 mm.

## F10 BRICK/BLOCK WALLING

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

TYPES OF WALLING

- F10/114 NEW CLAY FACING BRICKWORK
- Bricks: Smeed Dean London / Antique Multi or Mayfair Yellow (to match existing)
    - Manufacturer: The Brick Business Ltd, Cheadle SK8 5QY Tel. 0161 485 8211
    - Special shapes: As required to match existing
  - Mortar: As C41 / 557
    - Additional requirements: Mix bricks as necessary to achieve good colour match
  - Bond: To match existing
  - Joints: As F10/491

- F10/496\* JOINTING
- Unless specified otherwise, all joints in new work built to match existing.
  - Finish joints as the work proceeds.
  - Once the mortar has taken its initial set brush over with a Hessian rag, stick or bristle brush to leave slightly recessed joint and to give the mortar a slightly textured surface.

- F10/500 LAYING GENERALLY
- Mortar joints: Fill vertical joints. Lay bricks, solid and cellular blocks on a full bed.
  - Bond where not specified: Half lap stretcher.

- Vertical joints in facework: Even widths. Plumb at every fifth cross joint.
- F10/560 COURSING BRICKWORK
- Gauge: Four brick courses including bed joints to 300 mm.
- F10/580 LAYING FROGGED BRICKS
- Single frogged bricks: Frog uppermost.
  - Double frogged bricks: Larger frog uppermost.
  - Frog cavity: Fill with mortar.
- F10/635 JOINTING
- Profile: Consistent in appearance.
- F10/645 ACCESSIBLE JOINTS NOT EXPOSED TO VIEW
- Jointing: Struck flush as work proceeds.
- F10/690 ADVERSE WEATHER
- General: Do not use frozen materials or lay on frozen surfaces.
  - Air temperature requirements: Do not lay bricks/ blocks:
    - In cement gauged mortars when at or below 3°C and falling or unless it is at least 1°C and rising.
    - In hydraulic lime:sand mortars when at or below 5°C and falling or below 3°C and rising.
    - In thin joint mortar glue when outside the limits set by the mortar manufacturer.
  - Temperature of walling during curing: Above freezing until hardened.
  - Newly erected walling: Protect at all times from:
    - Rain and snow.
    - Drying out too rapidly in hot conditions and in drying winds.
- ADDITIONAL REQUIREMENTS FOR FACEWORK
- F10/710 THE TERM FACEWORK
- Definition: Applicable in this specification to brick/ block walling finished fair.
  - Painted facework: The only requirement to be waived is that relating to colour.

## M60 PAINTING / CLEAR FINISHING

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

### COATING SYSTEMS

#### M60/120\* HAMMERITE PAINT FINISH ON EXTERNAL METALWORK

- Location: See schedule of works
- Manufacturer: Hammerite Products Ltd
- Colour: From standard range (black mixed with white to match existing colour)
- Surface(s): Rainwater pipes, gutters, brackets, etc
- Preparation: As clause M60/400\*,401\*, and to manufacturer's recommendations for specific circumstances.
- Ferrous metals: Steel/cast iron:
  - Existing/new: Remove all loose millscale. For rusted areas prepare surfaces to minimum standard St 2 (Swedish Std SIS 05 59 00). Depending on degree of rusting this can be achieved by wire brushing in two directions. Degrease all surfaces with Hammerite Brush Cleaner & Thinners.
  - Initial coat(s):  
Ferrous metals: Steel/cast iron
  - Existing: Patch prime with Hammerite No 1 Rust beater or Hammerite High Performance Red Oxide Primer.
  - New: On shiny/smooth metal surfaces, extra abrasion is required to ensure maximum adhesion of finish.
  - Finishing coats:  
Ferrous metals: Steel/cast iron
  - Existing/new: Apply Hammerite Smooth Finish to achieve a minimum wet film thickness of 200 microns (100 microns dry film thickness). To achieve this recommended thickness it may be necessary to apply two or more coats; particular attention should be paid to all edges and corners - this is essential.

NOTE: Painting must be planned so that all subsequent coats of Hammerite are applied within 3 hours of the previous coat. After this period, Hammerite must be left to cure for 6 weeks before further coats can be applied. It is essential to follow all manufacturer's recommendations when using Hammerite products.

GENERALLY

M60/211\* PAINT COLOURS

- Colours not yet selected to be confirmed by CA. Paints may not always be from all manufacturers' standard ranges. If special colours are required in accordance with the specification, then the contractor is to allow for obtaining these paints from particular manufacturers.

M60/214\* LEAD BASED PAINTS

ENVIRONMENTAL PROTECTION ACT 1992

Where lead based paints are specified, obtain from CA a Declaration on Intended supply, and obtain from the supplier confirmation that a Declaration of Supply has been sent to the Competent Authority. send a copy of this confirmation to the CA.

M60/215 HANDLING AND STORAGE

- Coating materials: Deliver in sealed containers, labelled clearly with brand name, type of material and manufacturer's batch number.
- Materials from more than one batch: Store separately. Allocate to distinct parts or areas of the work.

M60/220 COMPATIBILITY

- Coating materials selected by contractor:
- Recommended by their manufacturers for the particular surface and conditions of exposure.
- Compatible with each other.
- Compatible with and not inhibiting performance of preservative/ fire retardant pretreatments.

M60/280 PROTECTION

- 'Wet paint' signs and barriers: Provide where necessary to protect other operatives and the general public, and to prevent damage to freshly applied coatings.

M60/300 CONTROL SAMPLES

- General: Carry out sample areas of finished work, including preparation, as follows:

Types of coating Nature of sample:

M60/120 Patch paint downpipe for approval of colour sample

- Approval of appearance: Obtain before commencement of general coating work.

PREPARATION

M60/400 PREPARATION GENERALLY

- Standard: To BS 6150, Section 4.

- Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Substrates: Sufficiently dry in depth to suit coating.
- Efflorescence salts: Remove.
- Dirt, grease and oil: Remove.
- Give notice if contamination of surfaces/ substrates has occurred.
- Joints, cracks, holes and other depressions:
  - Fill with stoppers/ fillers. Work well in and finish off flush with surface.
  - Abrade to a smooth finish.
- Water based stoppers and fillers:
  - Apply before priming unless recommended otherwise by manufacturer.
  - If applied after priming: Patch prime.
- Oil based stoppers and fillers: Apply after priming.
- Surface irregularities: Abrade to a smooth finish.
- Dust, particles and residues from abrasion: Remove.
- Doors, opening windows and other moving parts:
  - Ease before coating.
  - Prime resulting bare areas.

M60/401\* METAL SURFACES

- For galvanised surfaces, treat with 1 coat etching primer prior to initial coats.
- Where ferramenta is to be re-tipped, see also section L40. Brush down/scrape insitu metalwork to remove loose paint and rust. De-rust metalwork removed for repair by dry abrasive (or flame cleaning, off site only).
- For decorative ironwork, clean off rust and old paint by dry abrasive cleaning. (or flame cleaning off-site only)
- Apply primer before erection .

M60/615\* PROTECTION OF SURROUNDING SURFACES

- At each stage of painting provide protection to existing floors and newly coated surfaces to prevent contamination from dust, dirt, other deleterious matters, and paint.
- Protection will comprise, at least, on vertical surfaces of polythene sheet held by low tack masking tape and on horizontal surfaces, clean or new absorbent 'dust sheets'.

- Old or dirty dust sheets will not be permitted and the decorator will be instructed to remove them from the site.
- Where polythene protection is used on floors it must be covered with sheets of hardboard to ensure a safe non-slip working area. Loose dust sheets on polythene will not be accepted as an appropriate floor covering.

M60/622 ORGANIC GROWTHS

- Loose growths and infected coatings: Scrape off and remove.
- Treatment biocide: Apply appropriate solution to growth areas and surrounding surfaces.
- Dead growth: Scrape off and remove.
- Residual effect biocide: Apply appropriate solution to inhibit re- establishment of growths.

M60/711 COATINGS GENERALLY

- Application standard: To BS 6150, Section 5.
- Conditions: Maintain suitable temperature, humidity and air quality during application and drying.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing of coatings: Not permitted unless recommended by manufacturer.
- Overpainting: Do not paint over intumescent strips or silicone mastics.
- Priming coats:
- Thickness: To suit surface porosity.
- Application: As soon as possible on same day as preparation is completed.
- Finish:
- Even, smooth and of uniform colour.
- Free from brush marks, sags, runs and other defects.
- Cut in neatly.

M60/750\* COMPLETION: Ensure that opening lights and other moving parts move freely. Remove all masking tape and temporary coverings.

## R10 RAINWATER PIPEWORK/GUTTERS

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

TYPES OF PIPEWORK/ GUTTER

R10/126 CAST IRON PIPEWORK FOR EXTERNAL USE

- Pipes, fittings and accessories:
- Standard: To BS 460.
- Manufacturer: As clause R10/140; 1, 2 and 3  
Product reference: Round socketed pipes with ears
- Nominal sizes: 100mm diameter
- Finish as supplied: Primed
- Accessories: As manufacturer's recommendations
- Jointing: None
- Fixing: 8mm stainless steel rod, resin bonded to masonry as detail
- Site applied finish: paint as section M60
- 1. Saint Gobain Pipelines, Lows Lane, Ilkeston, DE7 4QU, Tel: 0115 930 500
- 2. J & J W Longbottom Ltd, Holmfirth HD7 1AW Tel: 01484 682141
- 3. Hargreaves Foundry Drainage Ltd, Halifax HX3 9HG Tel: 01422 330607

INSTALLATION

R10/400 PREPARATION

- Timing: Before commencing work specified in this section.
- Work to be completed:
  - Below ground drainage. Alternatively, make temporary arrangements for dispersal of rainwater without damage or disfigurement of the building fabric and surroundings.
- Painting of surfaces which will be concealed or inaccessible

R10/410 INSTALLATION GENERALLY

- Discharge of rainwater: Complete, and without leakage or noise nuisance.
- Components: Obtain from the same manufacturer for each type of pipework/ guttering.
- Electrolytic corrosion: Avoid contact between dissimilar metals where corrosion may occur.
- Plastics and galvanized steel pipes: Do not bend.
- Protection:
  - Fit purpose made temporary caps to prevent ingress of debris.
  - Fit access covers, cleaning eyes and blanking plates as the work proceeds.

- Fixings/ Fasteners: As section Z20.

R10/460      FIXING PIPEWORK

- Pipework: Fix securely at specified centres plumb and/ or true to line.
- Branches and low gradient sections: Fix with uniform and adequate falls to drain efficiently.
- Externally socketed pipes/ fittings: Fix with sockets facing upstream.
- Additional supports: Provide as necessary to support junctions and changes in direction.
- Vertical pipes:
- Allowance for thermal and building movement: Provide and maintain clearance as fixing and jointing proceeds.
- Expansion joint pipe sockets: Fix rigidly to building. Elsewhere, use brackets/ fixings that allow pipes to slide.

**R12    DRAINAGE BELOW GROUND**

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

GENERALLY

R12/100      EXISTING DRAINS

- Setting out: Before starting work, check invert levels and positions of existing drains, sewers, inspection chambers and manholes against drawings. Report discrepancies.
- Protection: Protect existing drains to be retained and maintain normal operation.

R12/106      IN SITU CONCRETE FOR USE IN DRAINAGE BELOW GROUND

- Standard: To BS 5328-1, -2, -3 and -4, or to BS 8500-1, -2 and BS EN 206-1.
- Mix: Gen I or ST2
- Equivalent or better mix: Submit proposals.
- Different mixes may be used for different parts of the drainage work.

TYPES OF PIPELINE

R12/122      CLAY PIPELINES FOR DRAINAGE GENERALLY

- Pipes, bends and junctions: Vitrified clay to BS EN 295:1:1991, with flexible joints and Kitemark certified.
- Manufacturer and reference: Hepworth Building Products Limited, Edlington Lane, Doncaster, DN12 1BY, Tel: 01709 856300

SuperSleve Vitrified Clay Drainage System.

- Bedding: Class F Granular bed.
  - Install generally as recommended by manufacturer.
- EXCAVATING/ BACKFILLING
- R12/203 EXCAVATING:
- It is to be assumed that excavations will be by hand digging unless otherwise mentioned in the Schedule of Works or express consent is given by the CA. While any permitted mechanical excavation is in progress a supervising operative shall be present keeping watch on the bucket to immediately stop work and to avoid disturbance of any artifact or findings. See Preliminaries Clause A34 – ANTIQUITIES.
- R12/205 EXCAVATED MATERIAL
- Turf, topsoil, hardcore, etc: Set aside for use in reinstatement.
- R12/210 LOWER PART OF TRENCH GENERAL
- Trench from bottom up to 300 mm above crown of pipe: With vertical sides and of a width as small as practicable but not less than external diameter of pipe plus 300 mm.
- R12/230 TYPE OF SUBSOIL
- General: Where type of subsoil at level of crown of pipe differs from that stated for the type of pipeline obtain instruction before proceeding.
- R12/240 FORMATION FOR BEDS
- Timing: Excavate to formation immediately before laying beds or pipes.
  - Mud, rock projections, boulders and hard spots: Remove. Replace with consolidated bedding material.
  - Local soft spots: Harden by tamping in bedding material.
  - Inspection of excavated formations: Give notice.
- R12/270 BACKFILLING TO PIPELINES
- Backfilling from top of surround or protective cushion: Material excavated from trench, compacted in layers 300 mm (maximum) thick.
  - Heavy compactors: Do not use before there is 600 mm of material over pipes.
- R12/280 BACKFILLING UNDER ROADS AND PAVINGS
- Backfilling from top of surround or protective cushion up to formation level: Granular Subbase Material Type 1 to HA Specification for Highway Works, Clause 803, laid and compacted in 150 mm layers.
- R12/295 WARNING MARKER TAPES
- Type: Heavy gauge polyethylene.
  - Installation: During backfilling, lay continuously over pipelines.

- Depth: 300-400 mm.
- Pipelines deeper than 1.5M: Lay an additional tape 600 mm above the top of the pipeline.

BEDDING/ JOINTING

R12/310

INSTALLATION GENERALLY

Generally to BS EN 752-1 and relevant sections of the building regulations.

- Pipes and fittings: From same manufacturer for each pipeline.
- Jointing: Use recommended lubricants. Leave recommended gaps at ends of spigots to allow for movement.
- Jointing differing pipes and fittings: With adaptors recommended by pipe manufacturer.
- Laying pipes: To true line and regular gradient on even bed for full length of barrel with sockets (if any) facing up the gradient.
- Protect from damage and ingress of debris. Seal all exposed ends during construction.
- Timing: Minimize time between laying and testing. Backfill after successful initial testing.

R12/350

CLASS F GRANULAR BED (FOR PLASTIC AND CLAY SLEEVED PIPES GENERALLY)

- Granular material to BS 882:
 

Pipe size (DN)	Nominal single size (mm)
100 & 150	10
225 & 300	10 or 20
- Bedding: Granular material, compacted over full width of trench:
- Thickness (minimum): 50 mm for sleeve jointed pipes, 100 mm for socket jointed pipes. Where trench bottom is uneven due to hard spots or other reason, increase thickness by 100 mm.
- Pipes: Digging slightly into bed, resting uniformly on their barrels and adjusted to line and gradient.
- Backfilling:
- Timing: Laid after successful initial testing.
- Material: Protective cushion of selected fill, free from vegetable matter, rubbish, frozen soil and material retained on a 40 mm sieve.
- Depth: 150 mm (250 mm for adoptable sewers) above crown of pipe.
- Compaction: By hand in 100 mm layers.

- R12/470 PIPE RUNS NEAR FOUNDATIONS
- Class Z concrete surround: Provide in locations where bottom of trench is lower than bottom of foundation. Measurements are horizontal clear distances between nearest edges of foundations and pipe trenches.
  - Trenches less than one metre from foundations: Top of concrete surround not lower than bottom of foundation.
  - Trenches more than one metre from foundations: Top of concrete surround not lower than D mm below bottom of foundation, where D mm is horizontal distance of trench from foundation, less 150 mm.

- R12/570 FLEXIBLE COUPLINGS (CLAY DRAINS)
- Standard: To BS EN 295-4, WIS 04-41-01, or Agrément certified.
  - Product reference: As general pipework manufacturer's recommendation.
  - Ends of pipes to be joined: Cleanly cut and square.
  - Outer surfaces of pipes to be joined: Clean and smooth. Where necessary, e.g. on concrete or iron pipes, smooth out mould lines and/ or apply a cement grout over the sealing area.

TERMINAL/ ACCESS FITTINGS

- R12/611 PLAIN CLAY RAINWATER GULLY
- Standard Drawing: Clay Rainwater Gully Detail.
  - Access gully, SuperSleve ref SG3/1, with integral vertical back inlet.
  - Square alloy grate, ref IG1
  - Square alloy sealing plate and frame, ISI bedded in mortar.
  - Brick gully surround and cement and sand (1:3) benching.

- R12/690 INSTALLATION OF FITTINGS
- Setting out: Square with and tightly jointed to adjacent construction.
  - Bedding and surrounds: Concrete, 150 mm thick.
  - Permissible deviation in level of gully gratings: +0 to -10 mm.
  - Exposed openings in fittings: Fit purpose made temporary caps. Protect from site traffic.

MANHOLES/ CHAMBERS/ SOAKAWAYS/ TANKS

- R12/739 CLAY INSPECTION CHAMBERS (FOR USE WITH HEPWORTH CLAY PIPES)
- For drains with a invert between 600 and 350mm below ground level
- Manufacturer and reference: Hepworth access pipe (SPA, SBA or SJA)

type 100/110mm with raising piece SRP – height as drawing.

- Bedding: 100mm Granular material to BS 882
- Surround: 100mm Granular material to BS882
- Backfilling: 100mm Granular material to BS 882
- Access cover: Hepworth Alloy cover

#### CLEANING/ TESTING/ INSPECTION/ COMPLETION

#### R12/900 REMOVAL OF DEBRIS AND CLEANING

- Preparation: Before cleaning, final testing, CCTV inspection if specified and immediately before handover, lift covers to manholes, inspection chambers and access points. Remove wrappings, mortar droppings and any other debris.
- Cleaning: Thoroughly flush with water to remove silt and check for blockages. Rod pipelines between access points if there is any indication that they may be obstructed.
- Washings and detritus: Do not discharge into sewers or watercourses.
- Covers: Securely replace after cleaning and testing.

#### R12/920 WATER/ AIR TESTING OF GRAVITY DRAINS AND PRIVATE SEWERS UP TO DN 300

- Initial testing: To ensure that pipelines are sound and properly installed, air test short lengths to BS 8301, clause 25.6.3 immediately after completion of bedding/ surround.
- Final testing: For final checking and statutory authority approval, water test to BS 8301, clause 25.6.2 all lengths of pipeline from terminals and connections to manholes/ chambers and between manholes/ chambers.

## Z20 FIXINGS/ADHESIVES

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

#### Z20/110 FIXINGS GENERALLY

- Integrity of supported components: Types, sizes and quantities of fasteners/ packings and spacings of fixings selected to retain supported components without distortion or loss of support.
- Components/ substrates/ fasteners of dissimilar metals: Fixed with isolating washers/ sleeves to avoid bimetallic corrosion.
- General usage: To recommendations of fastener manufacturers and/ or manufacturers of components, products or materials fixed and fixed to.
- Appearance: As approved samples.

#### Z20/150 PACKINGS

- Function: To take up tolerances and prevent distortion of materials/ components.

- Materials: Noncompressible, no corrodible, rot proof.
- Locations: Not within zones to be filled with sealant.

Z20/160

CRAMP FIXINGS

- Cramp positions: Maximum 150 mm from each end of frame sections and at 600 mm maximum centres.
- Fasteners: Cramps fixed to frames with screws of same material as cramps.
- Cramp fixings in masonry work: Fully bedded in mortar.

Z20/180

FIXINGS TO MASONRY

- Fasteners:
  - Light duty: Plugs and screws.
  - Heavy duty: Expansion anchors or chemical anchors.

Z20/510

ADHESIVES

- Storage/ Usage: In accordance with manufacturer's and statutory requirements.
- Surfaces: Clean. Regularity and texture adjusted to suit bonding and gap filling characteristics of adhesive.
- Finished adhesive joints: Fully bonded. Free of surplus adhesive.

Z20/552

RESIN BONDED FIXINGS:

To fix stainless steel in stonework / masonry.

Manufacturer: Hilti (Gt. Britain) Ltd., Manchester, M17 1BY Tel: 0800 083 0858

Type: Hilti HIT – HY 50

Stainless steel studding: stainless steel to BS 1449; Part 2: 1983, grade 316 (18/ 10/ 3) to BS 970 pt.1. Size as specified or shown on drawings.

Thoroughly clean out bore holes.

Form a temporary shuttering or resin stop at the rear face of the stone and grout in the studding shafts and fill any voids with resin injected or pumped into the studding holes.

On completion of injection remove shuttering and repoint.

Hilti products are to be installed by operatives skilled in the techniques involved.

Hilti products should be used in accordance with the recommendations of the manufacturer.

## Z21 MORTARS (HISTORIC BUILDINGS)

TO BE READ WITH PRELIMINARIES/ GENERAL CONDITIONS.

- Z21/100\*      SAMPLE PANELS
- Allow to prepare three sample panels of each mortar mix colour at the commencement of work. Each panel is to be a minimum of 0.5sqm in area prepared on a selected area of existing masonry previously raked out. Sample is to test colour and texture and each sample is to be allowed to dry for at least two days before a decision is taken.
- Z21/105      WATER
- Clean and uncontaminated. Obtain approval for other than mains supply. Test to BS3148 if instructed
- Z21/111      MORTAR MIX PROPORTIONS
- Proportions and other particulars are specified elsewhere in previous work sections.
- Z21/120      SAND FOR COLOURED MORTARS
- Standard for sand: To BS 1200.
- Permitted use: Where a special colour is required and in lieu of pre bagged material.
- This is to be prepared by mixing several coloured sands to achieve the desired colour and range of aggregates sizes referred to in sections C41, F21, F10. The mixes listed below are approximate and are to be used for initial trial panels.
- Lime sand Mortars:
- 3 parts sharp sand
  - 3 parts soft washed sand
  - 3 parts pit sand (flooring grade)
- Sand for facework mortar: Obtain from one source. Mix different loads if necessary for consistent colour and texture.
- Z21/122      SILVER SAND
- Supplier to be from an approved source
- Z21/123      STONE DUST
- To match the type of stone being used, or as specified in previous work sections.
  - Stone dust to be washed before supply and use.
- Z21/124      GRIT
- Clean, crushed shingle washed and cleaned with water, bagged.
  - Available from local Tilcon depots (as used for pebble dash)

- Z21/I26                    AGGREGATES
- Other than sands are specified elsewhere in previous work sections.
- Z21/I27                    READY PREPARED LIME PUTTY
- Use lime putty slaked directly from CL 90 (high calcium) quicklime to BS 890, using an excess of water and matured in pits/ containers that allow excess water to drain away.
  - Density of matured lime putty: 1.3 - 1.4 kg/litre.
  - Maturation period before use (minimum): Not less than 30days after slaking.
- Z21/I29                    NATURAL HYDRAULIC LIME
- To be mixed in accordance with manufacturer's instructions.
- Obtain fresh and do not store.
- Unless otherwise specified obtain from:
  - St Astier, obtainable from: Sole importers "Setra Marketing Ltd" Consortium of suppliers. NHL 2.0 or 3.5 as specified in mortar mix in previous work sections.
  - Refer to the Best Practice Guide for Hydraulic Lime Mortar for Stone, Brick and Block Masonry produced by Foresight Lime Research July 2002 for general guidance on the use of Natural Hydraulic Lime on site.
- Z21/I60                    CEMENTS FOR MORTARS
- Cement:
    - Standard: To BS EN 197-1.
    - Types: Portland cement, CEM I.
    - Strength class: 42.5 or 52.5.
- Z21/I81                    ADMIXTURES
- Do not use in mortar unless specified or approved.
  - Do not use calcium chloride or any admixtures containing calcium chloride (if specified to BS 4887)
- Z21/221                    SITE STORAGE
- Store different sands and aggregates in different stockpiles on hard clean bases which allow free drainage and cover to prevent excessive wetting.
  - Store premixed lime:sand for mortars in covered containers to prevent excessive drying out or wetting.
  - Store bags of cement and hydrated lime in dry conditions, raised off the ground and not touching damp surfaces. Do not use cement or hydrated lime affected by damp.

- Avoid intermixing and contamination between stored materials and other building materials, debris or other deleterious matter.
- Z21/231 MORTAR SAMPLES
- A palette of mortars shall be prepared from the base mixes. Colours can be adjusted as necessary using more or less strongly pigmented aggregate.
- Artificial pigments must not be used.
- Z21/312 SITE PREPARED LIME:SAND MIX
- Use lime putty to BS 890 prepared from quicklime
  - Thoroughly mix lime putty with sand, store in air tight bins and prevent from drying out
  - Before gauging with other constituents, thoroughly ram, beat and chop the mix
  - Incorporate sands of varying colours and grade to achieve required colour/texture
- Z21/351 SITE STORAGE OF LIMES AND MORTAR MATERIALS
- Store different sands and aggregates in different stockpiles on hard clean bases that allow free drainage.
  - Store bags of hydrated hydraulic lime powder in dry conditions, raised off the ground and not touching damp surfaces. Do not use hydrated hydraulic lime affected by damp.
  - Store ready prepared no hydraulic lime putty in conditions that prevent drying out and protect from frost.
  - Store no hydraulic lime:sand mortar either on clean bases or in clean containers that allow free drainage. Keep covered to prevent drying out or wetting and protect from frost.
  - Avoid intermixing and contamination between stored materials and other building materials, debris or other deleterious matter.
- Z21/361 MAKING LIMES AND MORTARS GENERALLY
- Use operatives who are skilled and experienced in the making and use of lime:sand mortars. Provide evidence of their experience to the CA on request.
  - Keep plant and banker boards clean at all times. Avoid contamination of lime:sand mortar by other materials or by any set material (including Portland cement).
  - Measure materials accurately by volume using clean gauge boxes or clean undamaged buckets.
  - Do not mix mortar when the air temperature is at or below 5°C and falling or below 3°C and rising
- Z21/371 SITE PREPARED NON - HYDRAULIC LIMES AND MORTARS
- Lime putty: As clause 127

- Thoroughly mix the lime putty and sand together by compressing, beating and chopping using a roller pan mixer, or other approved mixing method. Do not add water.
- Store mortar in conditions that prevent drying out or wetting. Allow to mature for not less than 60 days before use.

Z21/372\* SITE PREPARATION OF PURE LIME PUTTY AND MORTAR

- Use lime putty to BS 890, ready prepared from quicklime.
- Thoroughly mix lime putty with sand using a roller pan mortar mill. Mix as dry as possible. No extra water to be added, and any excess water is to be removed from the lime putty.
- Prepare the mortar in advance and store for a minimum of one month, preferably longer, to achieve maximum lime-aggregate contact. Store in airtight, watertight containers and protect from frost. All frosted mix is to be discarded.
- Before use, or before gauging with other constituents, thoroughly ram, beat and chop the mortar till plastic or knock up again in the mortar mill, without the addition of water.
- Incorporate sands of varying colours and grade to achieve required colour/texture to the approval of the CA

Z21/391 KNOCKING UP NON - HYDRAULIC LIME/ SAND MORTARS

- When required for use, thoroughly knock up mortar to a workable consistency by compressing, beating and chopping using a roller pan mixer, or other approved mixing method. Do not add water.
- During use, prevent drying out or wetting. Retain workability by chopping and beating.

Z21/401 SITE PREPARATION OF HYDRAULIC LIMES AND MORTARS

- Thoroughly mix hydrated hydraulic lime powder with sand, first in the dry state and then with water. Follow the lime manufacturer's recommendations for each stage of the mix. Add only sufficient water to produce a workable mix.
- Use mortar within time limits recommended by the lime manufacturer. Do not use mortar that has begun to stiffen.

Z21/402 SITE PREPARATION OF HYDRAULIC LIME

- Using a concrete mixer, thoroughly mix eminently hydraulic hydrated lime powder with sand, first in the dry state and then with water. Add only sufficient water to produce a workable mix.
- Sufficient mortar must be mixed for use within 1-2 hours maximum. Do not use mortar which has begun to stiffen
- Do not use hydraulic hydrated lime powder which exceeds its shelf-life (approximately one month).
- Carry out a site trial to test initial setting period prior to carrying out the work.

## 1.0 GENERAL

The works comprise repairs and improvements to the rainwater outlets and underground drainage.

The site for the purposes of the contract will be the churchyard of All Saints Church, Maidstone.

- 1.1 The schedule of works is to be read in conjunction with the standard preliminaries attached and drawings nos: 232624/03 and 04.
- 1.2 Unloading of materials from delivery lorries etc is to be carried out from (with the local authorities permission) the cul-de-sac between the churchyard and the college to the south (see drawing no 103). However access must be maintained to the gatehouse of the college at all times. No onsite parking is available for workmen associated with the work. Adequate public car parking space is available nearby.
- Note that no vehicles will be allowed in the churchyard due to the delicate nature of the existing paving. The Contractor will be required to obtain all necessary licence from the local authority for the use of the unloading area for the works.
- 1.3 There will be no storage facilities available within the church for the storage of building materials or plant. An area to the west of the north porch will be made available for a site yard. The area must be surrounded by a hoarding and paving surfaces protected. See also sections on protection for each stage.
- 1.4 The Main Contractor will be required to reinstate any surfaces damaged by plant, materials and machinery during the work. Due to the delicate nature of the existing pavings around the church, skips cannot be brought into the churchyard. The Contractor should allow for removing debris and redundant building materials in small quantities as and when they arise. Alternatively, the Contractor may at his own cost, obtain the necessary licenses from the local authority to locate a skip in the public highway section of the road between the churchyard and the college. This area may also be used for the storage of some materials provided that the area is surrounded by hoardings, minimum 3m high.
- Tenderers should allow for all double handling of materials and plant arising from the site access restrictions.
- 1.5 There is no sanitary accommodation available on site for the workforce. There is a toilet which will be made available in the college building to the south west.
- 1.6 The interior of the church is not to be used for site accommodation for the workforce. If the Contractor requires mess huts the location must be agreed by negotiation and be within the hoarded area.
- 1.7 Water and electricity will be made available free of charge to the Contractor and the Main Contractor will be responsible for temporary connections and the removal of temporary facilities on completion of the specification. The temporary site installation should be in accordance with BS 7375.
- 1.8 The Contractor should take extreme care to protect the fabric against ingress of water, fire damage, impact damage and any other damage during the work. Take particular notice of the requirements in Section A34 and A36 of the specification concerning protection.
- 1.9 The Contractor is responsible for the structural security of the building within the site area at all times during the work. If there is any cause for concern whatsoever the Contractor must bring this to the Architects attention.
- 1.10 Prior to the works commencing on site, the Contractor and Architect will prepare a schedule of defects for the doors, windows and other surfaces adjacent the works in the

ALL SAINTS CHURCH, MAIDSTONE  
DRAINAGE, REPAIRS AND IMPROVEMENTS (PHASE ONE)  
Specification and Schedule of Works

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site area, noting any defects in these areas. Any additional defects identified subsequently will be held to be the responsibility of the Contractor.		
1.11 Measured Allowances:		
In this specification, allowances for parapet drain replacement and excavations are provisional and are to be re-measured before covering up. Allow adequate time in the programme of work for the Architect to confirm the extent of replacement/repairs, once access is available.		
<b>2.0 PROVISIONAL SUMS</b>		
2.1 Allow the following provisional sums for works that cannot be defined in advance:		
2.1.1 Allow the provisional sum of £500 for materials for additional repairs to conceal drainage routes.	500	00
2.1.2 Allow the provisional sum of £750 for additional excavation of drains.	750	00
<b>3.0 PROTECTION/SCAFFOLDING INVESTIGATION</b>		
3.1 Protection		
3.1.1 Erect chestnut paleing fencing 0.9m high around the areas to be excavated.  Remove on completion.		
3.1.2 To the area within the hoarding used for mortar mixing and granule material storage:  Cover the existing surface with polythene sheet overlaid with 19mm OSB board with slurry boards to the edging on three sides.  Do not flush cleaning water from mixers into the existing drains and landscaped areas  Remove on completion.		
<b>3.2 INVESTIGATION / RECORDING</b>		
3.2.1 Allow access for the client's representative to photographically record the existing drains exposed by the excavations investigation period. Prior to removal of defective pipework.		
3.3.2 Mark up a survey drawing of the existing drains exposed to identify the existing system and report findings to the Architect who will confirmed the extent of drainage pipe removal.		
3.3.3 Observe archaeological requirements as section A34 of the specification.		

## 4.0 DRAINAGE AND GROUND LOWERING

### 4.1 RAINWATER DOWNPIPES

These works apply to rainwater pipes no's RWP 1, 2, 3, 4 and T1 as identified on drawing 04.

4.1.1 Remove the existing shoe or (where there is no shoe) lower straight length downpipe. Set aside the existing shoes/pipes for reuse. Inspect the downpipes for defects and report to the Architect.

4.1.2 Remove the existing ferrous fixings:

Include the following provisional item for the repair of the down pipes:

Provide 4No new lengths of downpipe with collars and ears generally as section R10/I26. Diameter of pipe to match existing.

Cut new lengths of pipe to suit revised level of gully.

4.1.3 Fix new and salvaged sections of rainwater pipes with M10 studding, resin bonded into the wall. See drawing.

4.1.4 Decorate new sections of downpipe as section M60/I20.

### 4.2 DRAINAGE INVESTIGATION

4.2.1 The routes of the drains from each gully is only partially known. Prior to confirmation of the drainage alterations, it will be necessary to determine the depths of the existing drains and establish new falls for each drain serving the gulleys to be modified.

4.2.2 To the drain serving the gulleys for RWP 03:

Excavate a cross trench on the drain line approximately 1.5 metres from the gully. The trench to be 300mm wide to the maximum depth of 750mm to determine the location and depth of the main drain run.

Break in to the pipe and rod the drain to identify obstructions, the direction of the drain run and its depth.

Report to the Architect.

4.2.3 To the drains serving the gulleys for RWP 04 and T1:

Excavate cross trenches on the drain line approximately 1.5 and 4 metres from the existing downpipe gully. The trenches to be 300mm wide to a maximum 750mm to determine the location and depth of the drain runs.

Break into the pipe and rod the drain to identify obstructions and the direction of drain runs and its depth.

Report to the Architect.

4.2.4 To the drain runs serving gully for RWP 02:

Excavate cross trenches on the drain line approximately 1.5, 6, 12 and 16 metres from the gully position to determine the location and depth of the drain runs.

Break into the pipe and rod the drain to identify obstructions and the direction of drain runs and its depth.

Report to the Architect.

4.2.5 The Architect will then confirm the extent of drains to be removed and relaid.

### 4.3 GULLEY LOWERING

#### PREPARATION

4.3.1 The areas of drain lowering are shown on drawing 04. The intention is to lower the gulleys to below existing floor level in the building to allow for future ground lowering and to reduce the works are to be carried out in conjunction with the drainage adjustment and shown be programmed to ensure that the drains continue to provide adequate drainage to all low points during the works.

4.3.2 Carefully remove the turf in the areas where the gully is to be lowered and reprofiled, and new drains laid. Set aside turf for reuse where possible.

4.3.3 Set aside selected topsoil to reline surface on completion.

4.3.4 Break out the existing gully surrounds, trap and base. Excavate down up to 600mm below the existing gully base; use hand tools. Maintain an archaeological watch

Report any items of interest as A34 and suspend work. Seek further instructions from the Architect.

4.3.5 Back fill around the new gully with selected as-dug materials.

4.3.6 Line the excavation surface with topsoil to received turf finish using either salvaged or new turf.

### 4.4 NEW GULLEYS

4.4.1 To the existing gulleys to RWP's nos 02, 03, 04 and T1:

Carefully excavate the existing drain serving the gully and determine the depth and direction of the existing drain line.

Expose the existing drain line and disconnect the existing gully and any traps and bends.

Provide and fix a new gully as detailed on drawing 03 with a new trapped accessible gully as R12/611. Form a new brick edged surround as drawing. Note the surround overflow should be at a level flush with the turf level of the revised ground levels.

Allow to connect the new gully to the existing drain with transition pipework as section 4.5.

### 4.5 NEW DRAINS

4.5.1 To the drains serving the gulleys to RWP's nos 02, 03, 04 and T1:

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Allow to excavate and remove a 12 metre length of existing drainage pipe in short sections between the new gullies and the existing main runs to modify the drain runs to suit the revised depth of the gullies. The amount of pipe work to be replaced will be confirmed once the inverts of the existing drains have been established. Allow to provide and fix 12 metre of 100mm dia. clay drainage pipe as R12/122, laid as R12/350. Incorporate bends and transition pipes as necessary.

Connect the new pipe work to the existing with a flexible conversion coupling at the junction between new and existing pipework. Form new access chambers A/C 1, 2, 3 and 4 in locations shown on drawing 04, to detail on drawing 3.

4.5.2 In the locations shown on drawing 04, form access chambers as described at specification section R12/739, incorporating branch junctions where indicated on the drawings.

Provide and fit a raising piece to the inspection chamber of a height to suit the revised depth of the drain and cap with an alloy cover. Incorporate the new chambers into the new lengths of drains described at clause 4.5.1.

**4.6 MISCELLANEOUS WORKS**

4.6.3 At proposed inspection access chamber AC3, allow to take up approximately a 5 metre run of existing paving. Carefully set aside the existing paving stones for reuse following relaying of the drains system. Following installation of the access chamber and new drains, relay the paving on hardcore and lean mix concrete bedding the paving in sand and cement mortar 1:4. Point up in sand and cement mortar 1:4. Colour to match the existing.

**RISKS TO HEALTH AND SAFETY**

A12/226

**GENERAL RISKS TO HEALTH AND SAFETY**

The nature and the condition of the building site cannot be fully and certainly ascertained before it is opened up. The contractor must ascertain for himself further information he may require to ensure the safety of all persons and the works. Common place hazards which should be controlled by good management and good site practices are not listed.

A12/227

**SPECIFIC HEALTH AND SAFETY RISK ASSESSMENT**

The following schedule is provided as part of the designers duty under regulation 13(2)B of the Construction (Design & Management) Regulations 1994. It should be read in conjunction with information provided by other consultants. The suggested "further action" is for guidance only and for possible inclusion in the project Health and Safety plan. The principle contractor must make his own assessment of the construction hazards and inform the planning supervisor of intended site procedures.

A12/228

**RESIDUAL RISK ASSESSMENTS**

The schedule considers activities that may constitute a hazard in the light of design actions to reduce the risk. Each item is graded on a scale of 1 (low) to 3 (high). The residual risk is calculated from the probability and severity.

ALL SAINTS CHURCH, MAIDSTONE – DRAINAGE REPAIRS AND IMPROVEMENTS  
RISK ASSESSMENT MASTER



Project Architect: Simon Marks

Stage: Construction

Risk Assessment no: 1

ACTIVITY	HAZARD	GROUP AT RISK	ACTION TAKEN AT DESIGN STAGE (incorporate clause in contract documents)	A - Probability B - Severity C - Risk LIST 0 - 10			OPTIONAL CONTROLS FOR ACTION
				A	B	C	
				Continued use of the building during construction phase	Contact with materials and plant.	Public Building staff Visitors	
Intermittent access required to the building by employers staff during the construction phase	Contact with materials and plant.	Building staff	(Contractor to identify and mark the route through the building for Employers staff members and keep route clear of obstructions - times at which the access routes are not available should be programmed and agreed with the Employer). (H & SP to require a method statement).	2	2	4	
Continued public access to areas in close proximity to contractors site	Contact with materials and plant.	Public	(Contractor to erect a security hoarding around the external perimeter of the site to enclose external areas affected by construction work).	1	3	3	
Vehicular access to the site via a publicly accessible pedestrian routes	Contact with builders plant and delivery lorries	Public.	(Contractor to limit vehicular access to site to delivery vehicles and necessary plant vehicles). (Delivery times to be restricted to times when public access is limited or not available). (Delivery vehicles to be escorted). (H & SP to require a method statement).	1	3	3	
Works adjacent to unrecorded concealed electrical wiring	Electrocution, burns.	Contractors	(Obtain available record information). (Contractor to use cable detection device to locate services prior to work operations).	1	2	2	
Working with lime mortars	Irritants to skin/eyes	Contractor	None - no alternative material	3	1	3	
Excavation of foundation trenches	Injury from falls into excavated area. Collapse of trench sides	Contractors	(Excavation less than .9 metres deep. A contractual obligation to protect open trench with boarding prior to filling in).	1	1	1	Consider temporary strutting to side wall for deeper excavations

ALL SAINTS CHURCH, MAIDSTONE – DRAINAGE REPAIRS AND IMPROVEMENTS  
RISK ASSESSMENT MASTER



Project Architect: Simon Marks

Stage: Construction

Risk Assessment no: 1

ACTIVITY	HAZARD	GROUP AT RISK	ACTION TAKEN AT DESIGN STAGE (incorporate clause in contract documents)	A - Probability B - Severity C - Risk LIST 0 - 10			OPTIONAL CONTROLS FOR ACTION
				A	B	C	
				Rainwater outlets from parapet gutters constricted by existing structure	Accidental blockage of gutter outlet causing surcharging of gutter and water penetration of building envelope affecting electrical systems – electrocution, burns	Tenants Visitors	
Isolating and capping off of redundant drains/sewers	Risk of build up of explosive gases in unventilated areas – fire/explosion	Contractors	(Locate all drains in advance of opening up) (Adequately ventilate drain runs to external air prior to breaking out redundant drains)	1	2	2	

Project Architect: Simon Marks

Stage: Construction

Risk Assessment no: 1

ACTIVITY	HAZARD	GROUP AT RISK	ACTION TAKEN AT DESIGN STAGE (incorporate clause in contract documents)	A - Probability B - Severity C - Risk LIST 0 - 10			OPTIONAL CONTROLS FOR ACTION
				A	B	C	

**NEW BUILD**

Installation of new drains	Contact with existing live services	Contractors	(Obtain available record information) (Contractor to use cable detection device to locate services prior to works operations)	1	3	3	
Installation of new drains	Contact with existing gas main	Contractors	(Obtain available record information) (Contractor to use gas detection device to locate services prior to works operations)	1	3	3	

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 DRAINAGE, REPAIRS AND IMPROVEMENTS (PHASE ONE)  
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**SCHEDULE OF RATES**

A55/112

	LABOUR	No.	Hourly
		Hours	Rate
A. (unskilled)	8	x	Building labour [redacted]
B.	8	x	Building labour (skilled) [redacted]

Note: The Contractor must complete A and B above.

A55/A55/120

**MATERIALS AND GOODS:**

Add for percentage addition to cover incidental costs, overheads and profit on materials and goods supplied for dayworks instructed during the contract: \_\_\_\_\_%

### TENDER SUMMARY

- I. Preliminaries and General Conditions
- Ia Dayworks (as A55/I 12)
- 2. Work Sections (preambles)
- 3. Schedule of Works (sections 1 to 4)

TOTAL CARRIED TO FORM OF TENDER £

Contractor .....

Address .....

.....

.....

.....

Signature .....

Date .....