

**VOLUME 'A' WORKS REQUIREMENT COMPRISING
GENERAL CONDITIONS
AND
SPECIFICATION OF WORK TO BE DONE
AND
MATERIALS TO BE USED**

in

RE-PLASTERING AT ST JOSEPHS BUILDING

at

**ST. ANGELA'S SECONDARY SCHOOL,
URSULINE CONVENT,
BALLYTRUCKLE,
WATERFORD.**

for

**THE BOARD OF MANAGEMENT,
ST. ANGELA'S SECONDARY SCHOOL.**

under the supervision of:

CARROLL ARCHITECTS.

APRIL 2026.



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GENERAL INFORMATION, CONDITIONS AND CONTRACT PARTICULARS

General description of the overall work involved.

The work is described and illustrated on the accompanying Architect's drawings and tender documentation.

The works consists of external re-plastering and replacement of rainwater goods, vent covers and associated electrical fittings at the St. Joseph's Building within the St. Angela's Secondary School campus, Ursuline Convent, Ballytruckle, Waterford.

Parties and consultants

Employer:	Board of Management, St. Angela's Secondary School, Ursuline Convent, Waterford.
Employers Representative	Mr. Declan Carroll Carroll Architects 6, Colbeck Street, Waterford.
Architect/PSDP:	Mr. Declan Carroll Carroll Architects 6, Colbeck Street, Waterford.
Quantity Surveyors / Cost Managers:	Mr. Dermot O'Reilly McMinn O'Reilly Mahon Chartered Quantity Surveyors Wyse House Adelphi Quay Waterford.

Overall Areas:

The floor area of the existing St. Josephs building is 1,596m². The Contractors site area is shown on the Architect's site layout Drawing. No areas outside of these boundaries are to be used as Contractors compound space without prior agreement from the architect and Board of Management. Work areas are to be adequately screened off with Harris fencing and mesh netting. The contractor shall confine his activities to these work areas.

Waterproofing and Securing Existing Premises.

The work will be carried out in a way that the existing building is to be kept waterproof and secure during the building works.

Boundaries.

The boundaries of the site are shown on Architect's drawing no. 9007.08.

Access.

The Contractor's access will be from the public roadway via the entrance at the Kilcohan road. The public roadway at these locations shall be kept clean and free from building site debris at all times. Parking of contractors and subcontractors vehicles shall not be permitted at these entrances, during the summer months, parking will be permitted in the staff carpark.

Services on and over the site

The Contractor shall make himself aware of the presence and location of existing underground and overground services and shall take all necessary precautions to avoid interference or damage to these services during the execution of the works. The Contractor will be deemed to make the necessary allowance in his rates for working in and around and maintaining live these services. In relation to existing services, the contractor shall give utmost consideration to the dependence of the adjacent residences and school buildings on these services.

Phasing of Work.

The proposed works are to be carried out in one single phase.

Tender Documents.

A list of the drawings which comprise the tender drawings is set out in *Appendix A*.

Contract.

The form of Contract will be the 'Short Public Works Contract PW-CF6v1.15 25-11-2025' form of government contract.

Contract Documents

1. This Document (which forms part of the Specification for this project).
2. Drawings listed in *Appendix A*.
3. Preliminary Health and Safety Plan in *Appendix B*
4. PSCS Agreement in *Appendix D*

Supervision

The appointed Contractor must engage a full time Supervising Foreman whose responsibilities shall include supervision of his own employees, domestic sub-contractors and nominated sub-contractors, plus liaison with the Employer.

Starting and Completion Dates.

As stated in the form of tender, the contractor is required to state the earliest commencement date and completion date for the proposed works and these dates will be inserted in the building contract and will be strictly adhered to.

Acceptance

The Employer does not bind himself to accept the lowest or any tender and no Contractor will be remunerated for any expense incurred in making up his tender.

Errors in tenders

In the event of non-arithmetical errors being found in a tender, the tenderer shall be informed of the errors and asked to formally confirm or withdraw the tender. If the tender is confirmed, a signed endorsement shall be attached to the tender stating that all rates or prices (except Preliminary Items) are to be regarded as having been reduced or increased appropriately. Where the tenderer refuses to confirm the tender, the Employer may treat the tender as being invalid.

Un-priced items

Unless otherwise stated in the tender documentation, any item left un-priced shall be deemed to be included for in the tender and the cost of the item shall be deemed to be spread across and included in the rates generally.

Variations

Variations will be dealt with in accordance with the terms of the contract.

Pension fund and sick pay

The successful tenderer must be a fully paid up member of the Construction Industry pension and sick pay schemes. A tenderer asked to do so shall promptly submit contribution receipts or other evidence of membership acceptable to the Employer. Any tenderer unable to provide such evidence may be deemed to have withdrawn his tender. The contractor shall remain in membership of the schemes for the duration of the contract.

Prompt payment of account

The provisions of the European Communities (Late Payment in Commercial Transactions)) Regulations 2002 concerning the prompt payment of amounts due in commercial transactions shall apply to all sums payable to or by the Contractor or any subcontractors for work or items supplied for this project.

Freedom of Information Act 1997 and 2003

The Employer undertakes to use its best endeavours to hold confidential any information provided by the tenderer subject to the Employer's obligations under law, including the Freedom of Information Act, 1997 and 2003. Should the tenderer wish that any of the information supplied by him with the tender submission should not be disclosed because of its sensitivity he should, when providing the information, identify same and specify the reasons for its sensitivity. The Employer will consult with the tenderer about this sensitive information before making a decision on any Freedom of Information request received.

If the tenderer considers that none of the information supplied is sensitive, he shall make a statement to that effect. Such information may be released in response to a Freedom of Information request.

Publication of Tender information

Tenderers are advised that the Employer is obliged to circulate the name and address of the Contractor awarded the work, the type of work involved and the address of the site to a nominee of the Irish Congress of Trade Unions (ICTU).

Submission of a tender shall be deemed to confirm the tenderers' acceptance that he agrees to the circulation by the Employer of the above information. Any tender which is accompanied by a statement stating or implying that the tenderer does not agree to the release of the above information shall be deemed to have been qualified and may be treated as an invalid tender.

Certificate of standard

All materials and goods are to be of the best quality.

All works and materials required under this Contract shall be in compliance with the requirements of this Specification and the standard referred to therein.

Products/materials shall either be certified as complying with the latest relevant Irish Standard Specifications and shall bear the Irish Standard Mark or shall be certified to a national standard of another member state of the European Union which provides an equivalent guarantee of safety and suitability – certification to be by the National Standards Authority of Ireland.

Currency

The Contractor, at the time of tendering, must furnish a **priced Breakdown / Schedule of Works in the currency of the European Monetary Union (i.e. € / EURO)**

No adjustment will be made to the contract sum in respect of changes in the cost of materials, fuel or other prices due to variation in the currency exchange rate.

Workmanship

Workmanship shall comply with the latest European Codes of Practice (Eurocodes) for the work involved.

Safety, Health and Welfare at Work (Construction) Regulations 2013

The Contractor shall comply with all applicable acts and regulations and shall provide for all costs in complying with the Safety, Health and Welfare at Work Acts and Regulations current at the date of tender and for complying with the requirements of the Project Supervisor for the Construction Stage and shall include for full co-operation, the supply of additional information and resources, and all other matters to ensure that the Project Supervisor (Construction) can fulfil his function as defined in Clause 6 of the Safety, Health and Welfare at Work (Construction) Regulations 2013.

The Contractor shall be deemed to have included in his tender sum for complying with the terms of the items below:

- Safety Health and Welfare at Work (Construction) Regulations 2013 (SI 291)
- Safety, Health & Welfare (General Applications) Regulations 1993;
- Safety, Health and Welfare at Work Act 2005 (No. 106 of 2005);
- Safety, Health and Welfare at Work (Construction) Regulations 2001 (SI 481/2001);
- Safety, Health and Welfare at Work (Construction) Regulations 2006 (SI 504/2006);
- Factories Act, 1955;
- Safety in Industry Act, 1980;
- Conditions of Employment Act;
- Safety, Health and Welfare a Work Act (General Applications Regulations) 2007;
- And all other relevant legislation.

The Contractor shall be deemed to have included for the preparation of Safety Statements and Health and Safety Plans and for taking all steps necessary to ensure the safety of all persons likely to be affected by the execution of the Works.

The Contractor shall submit a Safety Statement and the various documents required which shall identify hazards and risks arising during the course of the Works and specifying how it is intended to safeguard the safety, health and welfare of parties likely to be affected.

The Contractor shall comply in all respects with the requirements of the above Acts and Regulations with respect to his employees, subcontractors, visitors and other third parties.

The safety documentation shall be updated during the course of the Works to include any further hazards, which may arise.

The tenderer is to examine the site and all the information supplied regarding the nature and extent of the proposed works, so as to be satisfied as to what it required to be done to fulfil the duties of Project Supervisor Construction Stage and also what measures are required to be taken to meet the requirements of the regulations in the execution of the works. All costs arising in respect of these matters are to be included in the tender figure. The Client will not be liable for any such costs which are reasonably foreseeable and which are not so included. It should be noted that where the Contractor or any sub-contractor carries out any design (as defined in the Regulations) the duties set out in Regulation 15 apply.

Project Supervisor for the Construction Stage

It is the intention of the Client that the firm appointed as main contractor for the construction of the works shall undertake the duties of Project Supervisor Construction Stage of the project as set out in Regulations 16, 17, 18 and 19 of the Regulations. A form of agreement setting down the terms of the agreement is contained in **Appendix B**. The successful tenderers will subsequently be required to complete this form. The appointment of the Contractor as Project Supervisor Construction Stage is separate to and independent of the contract for the construction works.

The person providing the expertise required of a Project Supervisor for the Construction Stage may be either an employee or a consultant retained for the specific purpose. The firm shall not assign the Collateral Agreement without the Employer's written consent.

Where a tenderer is not deemed competent by the Employer to act as Project Supervisor for the Construction Stage, then the tender submitted by that party shall be passed over and deemed invalid.

In the event of the Employer deciding to enter into a contract for the execution of the Works, the successful firm shall enter into a contract (the 'Main Contract') using the SHORT PUBLIC WORKS CONTRACT as specified elsewhere. The firm shall also enter into a Collateral Agreement to the Main Contract for the provision of the service of Project Supervisor for the Construction Stage and the performance of the duties outlined in the above mentioned Regulations in consideration of the acceptance by the Employer of the tender, or any modifications thereof.

Designers not being part of the Design Team

All those with design input in relation to either the Permanent Works or the Temporary Works, who are not part of the Design team appointed by the client, are required to submit details of their design proposals to the PSDP and the Design Team for approval in advance of their elements of the works proceeding. This requirement arises under the elements of the regulations requiring Designers to co-operate with the PSDP and requiring the PSDP to co-ordinate the activities of designers.

The main contractor is to include in his tender for all costs, resources, programming and co-ordination measures for the liaison outlined above by such designers under his direction, as required to achieve PSDP and Design Team approval of all such elements before each proceeds.

Where such elements form part of sub-contracts, it is the Design Team's intention that this requirement be identified and allowed for in the tender process for that element. However, the main contractor is to review this topic with the relevant sub-contractor in advance of any such sub-contracts being placed and satisfy himself that appropriate allowances have been made.

Submitted details for this particular project are to include design drawings, specifications etc., as follows:-

Element:

Permanent Works:

- Mechanical Services Installations
- Electrical Service Installations

- Fitted Units.

Temporary Works:

- Scaffolding
- Propping
- Working Platforms
- Gangways / Access Stairs / Ladders

Any elements not highlighted above, but which are subsequently identified as having a design element are to be dealt with in similar fashion.

Temporary Works, Designer and Qualified Engineer

The main contractor is to appoint a competent Temporary Works Designer to take overall design responsibility for the stability of the structure during the envisaged construction process and also to employ a suitably qualified engineer, with the requirements that both liaise with each other and with the Project Supervisor (PSDP and PSCS). All costs in relation to these appointments are to be included for in the overall tender.

Temporary Works

All Temporary Works Designers will be required to sign-off on Temporary Work.

Permanent Works

All Permanent Works Designers will be required to sign-off on Permanent Works.

Safepass Scheme

The Contractor shall comply with the requirements of the construction industry's safety accreditation scheme, known as the "Safepass" scheme.

Planning Permission

Planning permission for the proposed works is not required.

Asbestos Products

Where the tender documents do not provide for the presence of asbestos and the Contractor encounters any material suspected of containing it – or where asbestos is found or suspected to be present in areas not identified in the tender documents – work shall be immediately suspended in its vicinity and no other work shall be carried out which might expose either the Contractor's personnel or third parties to contact with the suspect material or of releasing it into the environment. The Architect shall be informed immediately and his instructions awaited. If any of the material has been disturbed, the area shall be sealed off and the advice of the Health and Safety Authority obtained on the treatment required for personnel who may have been in contact with it.

Work on asbestos containing materials shall be carried out in accordance with the appropriate legislation and regulations and with the instructions of the Health and Safety Authority.

Fire Safety

The proposed works have been designed to take into account fire safety matters and the works, which are remedial in nature shall not have any adverse impact on the fire performance of the building. Due to the nature of the proposed works, a fire safety certificate application is not required. The proposed works shall be carried out in accordance with the drawings and specification and any deviation from the specification shall be assessed in order to ensure that the fire performance of the existing building is not diminished in any way.

Proprietary names

Wherever a proprietary name is used to specify a material or process it shall be deemed to have the term “or equivalent” appended to it.

Where a material or process is described by reference to its proprietary name, the name is used to indicate the standard of construction, appearance, ease of maintenance and durability acceptable to the Architect. The Architect will consent to the use of alternatives where such alternatives are shown to equal or surpass the qualities of the product or process specified. Accordingly proprietary names wherever mentioned in the Specification or on the drawings shall be deemed to mean the provision of the named product or process or an acceptable alternative. Should the Architect not consent to the use of an alternative proposed material, the contractor is obliged to use the original material.

Tax Clearance Certificate

The award of the Contract will be conditional on the selected tenderer being able to produce a C2 certificate or a tax clearance certificate. In the case of a tenderer being from outside the State, he shall be required to produce a statement of suitability from the Revenue Commissioners. A tenderer asked to produce a C2 or tax clearance certificate shall be allowed ten working days to do so after which, should he have failed to do so, he may be deemed to have withdrawn his tender.

The tenderer shall be responsible for all costs incurred by him in obtaining tax-clearance certificates.

Building Regulation Compliance

CONTRACTOR REQUIREMENTS FOR COMPLIANCE WITH BUILDING CONTROL REGULATIONS 1997-2014

This project is considered an exempted development and therefore submission of a commencement notice to the Local Authority Building Control Department is not necessary. All works shall be carried out in accordance with current Building Regulations where applicable.

Practical Completion

Clause 31 is hereby amended by replacement of the second paragraph by:

"Practical Completion" means that the Works have been carried to such a stage that they can be taken over and used by the Employer for their intended purpose and that any items of work or supply then outstanding or any defects then patent are of a trivial nature only and are such that their completion or rectification does not interfere with or interrupt such use. **Where the building regulations require that a completion certificate be included on the Statutory Register before the building can be opened, occupied or used, Practical Completion shall not deemed to take place until the Certificate of Compliance on Completion has been submitted to the building control authority and relevant particulars thereof have been included on the Register maintained under Part IV of the regulations.**

Timescale

Appointment of Contractor

Start on site as soon as possible.

Period for Completion

Within the period stated by the tenderer on the Form of Tender

Programme

The Contractor will be required to submit a full programme with his tender for the whole works in the form of a bar chart. The programme will be updated and revised by the Contractor as and when required by the Architect.

Historical finds or Ancient Works.

The architect shall be immediately advised of any discoveries of historical importance.

The Contractor shall not disturb any ancient works without the Architect's permission and shall at once hand over to him any object of antiquarian, geological or other interest or value discovered during the process of the work.

Removal of rubbish

The appointed Contractor must remove all rubbish and debris generated by the works and dispose of same off-site.

Inspection

The Contractor shall give such notices and provide such facilities, which may be required by Statutory Bodies entitled to carry out inspections or examinations of the Works.

The Contractor before covering up any work shall give the Architect reasonable opportunity to inspect the work already executed.

Power and light

The Contractor shall provide all necessary temporary power for the works and all suitable heating for drying out the works.

Existing Building Occupation

The existing building (school) will remain in partial use during the progress of the works. internal works shall be carried out during summer months 2026 when students are not present. External re-plastering may take place during term time subject the submission of method statements for approval by the architect and school board of management. All due care is to be taken so as not to interfere with existing buildings or their occupants. Noisy activities are to be kept to a minimum and particularly noisy activities are to be carried out at times to be agreed with the Employer. Services such as water supply and electricity must remain operational for the duration of the contract. Temporary disconnection of services can be facilitated, but prior agreement in relation to the time and duration of any disconnection of services must be forthcoming from the architect and School Board of Management.

Security

Security at the site work areas shall be the responsibility of the Contractor.

Visit Site.

The Contractor will be deemed to have visited the site and satisfied himself as to access and temporary supply of power and water. He shall be taken to have acquainted himself with the existing layout of the building and the confines of the site, the nature of the soil and other features of the site and all other things in so far as they may have any connection with or affect the works.

Labour.

None but fully qualified and competent tradesmen together with their necessary labourers or helpers shall be employed by the Contractor on the works, which shall be carried out and completed in the best and most substantial manner.

Documents.

The Contractor shall carefully examine the drawings, schedules and other documents, check all dimensions and satisfy him-self as to their accuracy and that they cover and embody the work as proposed.

If any discrepancies are discovered they must be referred to the Architect for his decision.

Tolerances.

Unless specifically stated otherwise, the accuracy of the Works shall be in accordance with BS 5606.

Insurance

The Contractor shall produce evidence to the Architect of adequate all risks and Employers Liability Insurance and Public Liability Insurance cover prior to the commencement of the works.

SPECIFICATION OF WORK TO BE DONE AND MATERIALS TO BE USED

Materials.

All materials shall be the best of their various and respective kinds and shall be of Irish manufacture wherever possible. Where there is an Irish Standard or Code of Practice, materials are to comply with the equivalent Eurocode or NDP (Nationally Defined Parameter) and shall be marked as such and/or accompanied by a technical data sheet for inclusion in the safety file.

Samples of materials, manufactured articles and executed work, manufacturers' and / or supplier's certificates of compliance with the standard shall be submitted as required to the Architect for approval before incorporation into the Works.

All unfixed materials shall be carefully stored in accordance with the best practice and in a suitable position on site.

Demolitions

All demolition work is to be carried out in accordance with current health and safety regulations. All demolition material is to be removed to a local Authority approved waste recycling / land fill facility. Where possible materials are to be recycled. See also Waste Management Plan at *Appendix G*.

REPLACEMENT OF LINTOLS & INTERNAL PLASTERING

General

As part of the works it is necessary to expose window lintols and if they are found to be defective they are to be replaced with precast prestressed concrete lintols. For pricing purposes, assume that all lintols from the face of the window frame out to the front face of the wall are to be replaced, unless otherwise directed by the architect and Structural Engineer. Generally, it will not be possible to replace window lintols internally as this goes beyond the scope of the project, however in order to ascertain the general condition of window lintols it is proposed to expose and replace window lintols at room J4 at the corner window at the front elevation (first floor classroom). Window lintols here are to be inspected by the design team architect and engineer as soon as they are exposed and prior to complete removal. The purpose of this is to ascertain the general condition of window lintols at the interior of the building. At this location the internal walls are to be made good with lime based plaster in three coats with building out as necessary. See also Method Statement for removal and replacement of lintols prepared by Structural Engineer at *Appendix F*. The existing window may be reused, but if damaged it is to be replaced at the contractors expense.

Materials

Materials shall comply with the following specifications:

Cement	IS 1
Sand	IS 5, BS 1197, 1199, 1200
Lime	IS 8
Gypsum Plaster	IS 27
Plaster Lath	IS 41
Metal lathing	BS 1369

Different types of plaster shall be distinctively marked and stored separately. All materials shall be handled and stored in accordance with the manufacturer's instructions.

Workmanship

All plastering shall be carried out in a thorough and workmanlike manner as appropriate to the work. Where applicable, detailing shall be as per specifications and illustrations shown in the latest edition of the Homebond House Building Manual.

Workmanship shall comply with the following Codes of Practice unless otherwise described herein:

Internal plastering	BS 5492
External plastering	BS 5262

EXTERNAL RE-PLASTERING

General

At areas shown outlined in a red dashed red line on drawings the existing plaster consists of a sand and cement render – see **Appendix C** for results of analysis. This render is to be hacked off and replaced with a lime based breathable render. Air powered kango hammers must not be used as excessive vibration could cause damage to the existing structure. The use of hand tools is preferable however, low vibration 110 volt electric power tools or battery operated power tools may be permitted at the structural engineers discretion.

Removal of existing sand and cement plaster to be carried out in stages so that the stone work beneath is not left exposed to the weather unnecessarily. Re-plastering to be carried out in complete panels or panels to be feathered together so that stop lines are not evident on completion. Scaffolding to be provided at all areas to be re-plastered. All new lime plaster to be protected between coats with adequate heshing or coats to be wetted down as required, depending on weather conditions.

Existing cast iron rainwater goods to be removed and replaced with cast aluminium down pipes to match existing. Existing electrical items to be removed and electrical cables made safe prior commencement of hacking off of existing plaster. Electrical items to be replaced on completion, all electrical work to be carried out in accordance with 'Safe Electric' regulations.

Where required, walls vents are to be replaced with rodent proof galvanized steel louvered vents and painted in lime wash to match new lime plaster finish.

Repairs and re-plastering to be carried out in the following stages:

Crack and Head repairs

Stitch unstable cracks and areas that need reinforcing with 'Helifix' crack stitching system. The crack/repair itself should be pointed with a lime mortar, 1 part NHL3.5 to 2.5 parts washed sharp sand. The sand size should facilitate the placing of mortar into the crack (i.e. 1mm sand for 2mm wide crack). If the crack is through the wall and only the face of the crack has been filled with mortar then it would be beneficial to back fill with a liquid Lime Grout 'Secil Grout' from Stoneware Studios or similar and approved, which will flow deep into the wall and fill the narrow space. Window and Door Heads to be replaced or repaired as per the Structural Engineers guidelines. See also **Appendix E**.

Dubbing out, pointing and Brick repairs

Brick and brick slips can be used to rebuild deeply recessed hollows. Very deep hollows should be plastered in two, or even three, separate applications to allow for the managed curing of the mortar. Use NHL 3.5 lime plaster with 5mm down washed sharp sand or Secil RB premixed lime render and machine apply. Sand:Lime Ratio of 2.5:1. Fibres(polypropylene) to be added to the dubbing out mortar in the quantity of c. 200g per 25kg bag of lime.

Fibreglass mesh can also be used to reinforce the plaster, and where the brick is particularly unstable, a combination of lime plaster with fibres, fibreglass mesh, and some mechanical fixings should be used to lock the plaster into place.

Scud Coat

Use NHL 3.5 or Secil CS pre-mixed lime scud with gritty sand and fibres added. A small amount of pebble can be added to improve key for next coat. Sand:Lime Ratio of 1.5:1.

Scratch Coats

Use NHL 3.5 or Secil CS pre-mixed lime scud with washed sharp sand and fibres added. Man made fibres or animal hair to be added for extra tensile strength and reduced shrinkage. One or more scratch coats may be required to prepare the wall for the finish coat. Coats to be 10 to 12mm thick. Sand:Lime Ratio of 2.5:1.

Finish Coat

Use NHL 3.5 or Secil CS pre-mixed lime scud with washed sharp sand, no fibres to be added. Choose a 3mm down washed sharp sand and coat thickness of 7-8mm. Sand:Lime Ratio of 3:1.

VENTILATION

There is currently no form of passive ventilation to the various rooms at the St. Josephs Building and while there are no obvious defects as a result of a lack of passive ventilation, it is proposed to introduce wall vents at each room as shown on the drawings. New vents shall be in the form of humidity sensing wall vents - '99Hdb by Icon Building Products' at each room, as shown on the drawings. Galvanized external grilles to be provided externally and painted in limewash to match new plaster finish. Sleeves to be extended as required with PVC pipe of matching diameter to allow for wall thickness. See also technical details in *Appendix H*.

THERMAL IMPLICATIONS ON EXTERNAL ENVELOPE

The use of a thermal imaging camera has identified cold sections in external walls, which is most likely as a result of moisture within the external envelope. Re-plastering in a lime based plaster will reintroduce breathability in the external envelope and will allow any moisture to evaporate to the exterior. This drying out of the external walls will therefore improve the thermal mass properties of the external walls and in turn improve the overall energy efficiency of the building. A further assessment of the external walls with the aid of a thermal imaging camera can be made by the design team on completion of the works.

ROOF

The existing roof structure shall not be altered as part of the proposed works. Gutters are to be cleaned and any defective brackets are to be replaced with galvanized steel brackets to match existing. New cast aluminium down pipes are to be provided as noted on the drawings.

WOODWORK

Materials

Materials and workmanship shall comply with the following specifications:

Part 1-1: General - Common rules and rules for buildings	I.S. EN 1995-1-1: 2005
Part 1-2: General - Structural fire design	I.S. EN 1995-1-2: 2005

Where applicable, detailing shall be as per specifications and illustrations shown in the latest edition of the Homebond House Building Manual.

Sources

Where possible timber should be sourced within Ireland and should be from sustainably managed forests.

Hardwoods

All hardwoods shall be primed selected quality free from all defects and well cut and seasoned. They shall be in conformity with samples submitted to and approved by the Architect.

Quality of Timber.

All timber shall be free from loose and unsound knots, clusters of knots, wane, pitch pockets, decay and woodworm. Timber for joinery shall comply with the requirements of I.S. EN 1995-1-2: 2005.

Storage of Materials

All materials for carpentry and joinery work shall be kept perfectly dry and free from damp by storing under cover both on site and in the joinery works.

Joinery work shall be given a waterproof covering while being transported to the site.

Joinery work shall not be stored or fixed in the building until the building has reached a relatively dry condition and can be maintained in such condition.

Carpentry

All carpentry shall be carried out in a thorough and workmanlike manner with joints, fixings etc. as appropriate to the work. Where applicable, detailing shall be as per specifications and illustrations shown in the latest edition of the Homebond House Building Manual.

Internal doors and joinery

Alterations to internal doors and joinery is generally not required, however the window and associated window board and linings at Room J4 are to be made good on completion of works at this window.

WINDOWS AND DOORS

Existing windows and doors are to remain in place. Windows and doors are to be adequately protected with plywood sheeting during the works. Any damage to same shall be made good at the contractors expense.

METALWORK

Existing rain water downpipes and soil pipe are to be removed and replaced as part of the works and additional galvanized steel brackets are to be provided at the gutters. Existing cast iron gutters at the bay windows are to be replaced with cast aluminium Ogee type gutters and new cast aluminium down pipes.

Materials

All metalwork shall be carried out in a thorough and workmanlike manner with joints, fixings etc. as appropriate to the work. Where applicable, detailing shall be as per specifications and illustrations shown in the latest edition of the Homebond House Building Manual.

Materials shall comply with the following specifications:

Part 1-1: General rules	I.S. EN 1999-1-1: 2007
Part 1-2: General - Structural fire design	I.S. EN 1999-1-2: 2007
Part 1-3: Additional rules for structures susceptible to fatigue	I.S. EN 1999-1-3: 2007
Part 1-4: Supplementary rules for trapezoidal sheeting	I.S. EN 1999-1-4: 2007
Part 1-5: Supplementary rules for shell structures	I.S. EN 1999-1-5: 2007

Workmanship

Workmanship shall be of the best quality. All welds are to be carried out by competent operatives and shall be of sufficient strength durability. In exposed work welds shall be ground to a smooth finish. Fixings to concrete shall be packed out and grouted to ensure a true line in the finished metalwork.

PLUMBING AND MECHANICAL INSTALLATIONS

Existing external cast iron foul pipe from first floor level is to be replaced with a new cast iron foul pipe supplied by Round Tower Lime or similar and approved and painted in an off-white lime wash to match the existing render. All rainwater down pipes are to be replaced in cast aluminium, sizes shall match existing. Existing cast iron gutters at the bay window shall be replaced with cast aluminium half round gutters and down pipes.

The following shall also be adhered to:

Making Good

The Contractor shall make good at his own expense all damage occasioned by negligence of plumbers, overflows, leakages etc.

Testing

The whole of the work is to be tested at the Contractor's expense, at such times and in such manner as the Architect shall direct to his satisfaction.

Builders Work in connection with Plumbing and Mechanical Installation

The Main Contractor is to provide for forming or cutting holes in structures, fixing pipe sleeves; making good structure and finishing's; excavation of trenches for water services and connections to existing services.

ELECTRICAL INSTALLATION

Generally

Existing electrical services are to be removed and cabling made safe for duration of works. On completion of plastering, electrical items to be replace and all work to be carried out in accordance with 'Safe Electric' regulations.

PAINTING AND DECORATING

Generally painting and decoration is not required at the exterior, apart from painting of the replacement foul pipe serving first floor toilet. Internal painting and decoration will be required at Room J4 as part of making good to walls and reveals as part of the replacement of lintols at the front window.

Painting here shall be done with a breathable lime based paint sourced from Stoneware studios Youghal or similar and approved. Non breathable paint on lime plaster is strictly not permitted.

Materials

Materials shall comply with the following specifications:

Oil paints	IS 15, 32, 115
Water paints and distempers	IS 22, 73, 74, 75
Knotting	IS 16
Priming paints	IS 18, 33, 110
Varnishes	IS 10, 103, 104
Emulsion paint	IS 129
Linseed oil	IS 14, 93, 94
White spirit	IS 11
Turpentine	IS 12, 92
Wallpapers	IS 55, 56
Gold size	IS 17

All painting materials shall be obtained from an approved manufacturer and shall be delivered to site in the manufacturer's sealed containers which shall not exceed five litres capacity.

The materials supplied shall be used strictly in accordance with the manufacturer's instructions. All materials shall be kept in a clean, dry store, protected from frost.

Workmanship

Workmanship shall comply with the following Codes of Practice:

Painting of buildings	BS 6150
-----------------------	---------

Tints

Full particulars of the various tints to be used, work to be picked out and colour scheme for all internal and external painting shall be obtained from the Architect.

Painting Generally

All surfaces to be painted or decorated shall be properly prepared according to approved practice and in strict accordance with the manufacturer's instructions.

Sealing coat for emulsion shall be as recommended by the paint manufacturer for the particular background to be painted.

The quality of workmanship and finish shall be to the highest standard.

No painting on exterior work is to be carried out during wet, foggy or frost weather or on surfaces that are not thoroughly dry.

All surfaces shall be kept clean and free from dust during painting work and painting shall not be carried out in the vicinity of other operations which might cause dust.

Finished surfaces shall be protected as necessary with dust sheets etc., from paint splashes and stains.

All coats of paint must be thoroughly dry before subsequent coats are applied and rubbed down with fine waterproof abrasive.

All ironmongery, metal fittings and the like shall be removed before painting work is commenced and cleaned and re-fixed in position on completion.

Fittings which cannot be removed shall be adequately protected to ensure that they are not defaced by paint splashes etc.

Preparation of Existing Surfaces

All surfaces which are to be repainted shall be thoroughly washed, rubbed down, filled and rubbed down until a smooth surface is obtained. All cracks shall be cut out and filled.

Softwood

All softwood to be painted shall be knotted, primed, stopped with patent aluminium wood primer, grain filled with oil bound water paint and rubbed to a perfectly smooth surface, given two undercoats and a finishing coat of high gloss paint obtained from an approved manufacturer.

Hardwood

Hardwood surfaces shall be clean and rubbed down followed by the finish specified. Thoroughly rub down surfaces between each coat.

Steel

Galvanised steel surfaces shall receive one coat calcium plumbate primer and three coats oil paint.

APPENDIX A

SCHEDULE OF DRAWINGS

1. Architect's Drawing no. 9907.05 comprising ground and first floor, scale 1:100 @ A1
2. Architect's Drawing no. 9907.06 comprising second floor plan and roof plan, scale 1:100 @ A1
3. Architect's Drawing no. 9907.07 comprising elevations and specification notes, scale 1:100 @ A1
4. Architect's Drawing no. 9907.08 comprising existing site layout, scale 1:500 @ A1.

APPENDIX B

HEALTH AND SAFETY PLAN

Preliminary Health & Safety Plan

FOR THE CLIENT & THE ARCHITECT

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2017

PROJECT TITLE Re-plastering and associated works at St. Joseph's Building, St. Angela's Secondary School

ADDRESS St. Angela's Secondary School, Ursuline Convent, Ballytruckle, Waterford.

PREPARED BY Declan Carroll of Carroll Architects, 6 Colbeck Street, Waterford.

e)

DATE

27

04

26

Contents

- | | | |
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| 1 General Description of Project | 4 Project Completion Time Frame | 7 Continuing Liaison |
| 2 Other Work Activities | 5 Conclusions With Regard to The Taking Account of The Principles of Prevention | 8 Safety File |
| 3 Particular Risks/Safety Critical Risks, Statutory Provisions & General Safety Requirements | 6 Services For The Provision of Welfare Facilities | |

1

General Description of Project

This Safety & Health Plan has been prepared on a preliminary basis in accordance with Article 12(1) (a) of S1 291 of 2013, the Safety, Health and Welfare at Work (Construction) Regulations 2013, and is based on project information available to the PSDP on the cover date.

1.1 Is there a Safety File available for the premises or site?

Yes

X

No

1.2 What is the Client's name?

Board of Management St. Angelas's Secondary School

1.3 What is the name of the Project Supervisor for Design Process and their contact details?

Declan Carroll

MOBILE 087 2267022

PHONE 051 877282

EMAIL declan@carroll.ie

1.4 What is the location of the site?

St. Angela's Secondary School, Ursuline Convent, Ballytruckle, Waterford.

1.5 Please describe the scope of the works.

External re-plastering in lime plaster and associated works

1.6 Please give a description of the property/site.

The subject part of the property the school consists of a three storey building with partial basement and accommodates a number of classrooms, a study hall and associated school accommodation.

1.7 Please enter the working hours.

7.30 am to 6pm (during summer months)
by agreement with BOM during term time

1.8 Please enter operative car parking arrangements/restrictions.

Access to the work area will be by the existing vehicular entrances at the Kilcohan Road. Car parking is available at the staff car park during the summer months.

1.9 What is the Contract Commencement date?

DATE	01	06	26	subject to confirmation after tender process
------	----	----	----	--

1.10 What is the Contract Completion date?

DATE	30	10	26	subject to confirmation after tender process
------	----	----	----	--

1.11 Please enter information on the access to the site for construction traffic.

Access to the work area will be by the existing vehicular entrances at the Kilcohan Road.

Please enter the following information for the Known Existing Services:

Underground Services

1.12 Water Mains

The existing school is connected to the public water mains. The exact location of any underground water mains is not known, care to be taken when carrying out excavations, however excavations should not be necessary for the proposed works .

1.13 Electric Cables

It is not known if there are any existing underground electricity cables traversing the site, Contractor / PSCS to check with ESB Networks and to use all necessary electronic detectors when carrying out excavations, however excavations should not be necessary for the proposed works.

1.14 Telephone Cables

It is not known if there are any underground telephone cables traversing the subject site, the property is connected to the telephone network and the possibility of underground cables cannot be ruled out, Contractor / PSCS to liaise with Eircom and electronic detectors should be used when carrying out excavations, however excavations should not be necessary for the proposed works.

1.15 Gas Mains

The existing school building is connected to the natural gas supply, the exact location of the underground supply pipe is not known. Contactor / PSCS to liaise with Gas Networks Ireland should any alterations to gas mains be required, but this is not envisaged.

1.16 Other Liquids/Gases Under Pressure

None evident.

Overground Services

1.17 Electric Lines

There are overhead electric lines connected to the exterior of this building. These are to be made safe prior to commencement of works, Contractor to liaise with ESB Networks.

Overground Services

1.18 Telephone Cables

Overhead telephone lines are connected to the exterior of this building. These lines are to be made safe prior to commencement of erection of scaffolding and re-plastering. The Contractor / PCSC is to liaise with eircom.

1.19 Other

N/A

2

Other Work Activities

The following other activities, not related to or included within the scope of the project, will be carried out on site (within or around the subject site/property during the refurbishment works).

2.1 Please enter information on other activities on the site, in the premises or adjacent to the site and premises.

The existing school shall remain operational for the duration of the works. Other surrounding uses include residential and educational uses.

3

Particular Risks/Safety Critical Risks, Statutory Provisions & General Safety Requirements

And other matters to be brought to the attention of the Contractor / PCSC.

The following is the non-exhaustive list of Particular / Safety Critical Risks to the safety and health of persons (as set out in Schedule 1, of S1 291 of 2013) together with the opinion of the Project Supervisor for Design Process on what elements of the works may fall within each Particular Risk category. It should be noted that many of the risks on the project may arise out of working methods which are at the discretion of the Contractor and as such cannot be determined by the Project Supervisor for the Design Process. Note that in relation to the following:

Note 1:

A Safety Critical Risk is a risk which if the outcome comes to pass will result in a fatality, serious injury, damage to property or damage to the environment.

Note 2:

Only those risks which would be evident and reasonably deducible from drawings or other support documentation and Design Risk Assessments are listed.

3.1 Particular/Safety Critical Risks

Including but not limited to those referred to in Schedule 1 to the Regulations.



Enter risk information if such a risk exists or otherwise enter not applicable.

3.1.1 Falling from height (aggravated)

It will be necessary for construction workers to work at height for the re-plastering work and preventative measures should be implemented to minimize the risk of falling from a height such as adequate working platforms with guardrails and installation of temporary bean bag cushioning systems if necessary.

3.1.2 Burial under earth falls (aggravated)

Deep excavations for foundations are not envisaged, however if any deep excavations are found to be necessary, preventative measures are to be implemented by the Contractor / PSCS in advance of any work being carried out in trenches.

3.1.3 Engulfment in swampland (aggravated)

N/A



3.1.4 From chemical or biological substances	Particular risks in connection with the use of lime based renders will exist and preparation of method statements, a daily plan of works and the use of appropriate PPE (personal protective equipment) is recommended.
3.1.5 Use of ionising radiation	Not Applicable
3.1.6 Work near high voltage power lines	Over head power lines are connected to this part of the property, their voltage is not known. As previously noted these are to be made safe prior to commencement of the works. Contractor / PSCS / electrician to liaise with ESB Networks in this regard.
3.1.7 Risk of drowning	Not Applicable
3.1.8 Works on wells, underground earthworks and tunnels	Not Applicable
3.1.9 Work by divers with a system of air supply	Not Applicable
3.1.10 Work in a caisson with compressed air supply	Not Applicable
3.1.11 Work involving the use of explosives	Not Applicable
3.1.12 Work involving heavy prefabricated materials	The work will involve the installation of new gutters and down pipes. It is recommended that a plan of work is agreed prior to commencement of this element of work
Refer to Appendix 1 for guidance on other possible Particular/Safety Critical Risks	
3.1.13 Enter other Particular/Safety Critical Risk	Particular risks in connection with the use of lime based renders will exist and preparation of method statements, a daily plan of works and the use of appropriate PPE (personal protective equipment) is recommended.



3.1.14 Enter other Particular/
Safety Critical Risk

Not Applicable

3.1.15 Enter other Particular/
Safety Critical Risk

Not Applicable

3.1.16 Enter other Particular/
Safety Critical Risk

Not Applicable

3.1.17 Enter other Particular/
Safety Critical Risk

Not Applicable

3.1.18 Enter other Particular/
Safety Critical Risk

Not Applicable

3.2 Statutory Provisions

3.2.1 Duties of Employers

- It is the duty of the Contractor engaged in this project to comply in every respect with the relevant Statutory Provisions in relation to his/her duties as employer undertaking Construction activities.

3.2.2 Competence

- Note: Under the SHWW Act 2005 a person is deemed to be competent where *"having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work the person possess sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken."*
- It is the duty of the Contractor to ensure that all persons engaged in this project for the purposes of construction are competent.

3.2.3 Systems of Work

- It is the duty of the Contractor to provide safe systems of work that are planned, organised, performed, maintained, and revised as appropriate so as to be, so far as reasonably practicable, safe and without risk to health.

3.2.4 Plant Machinery and Equipment

- It is the duty of the Contractor to provide and maintain plant, machinery and equipment which are safe and without risk to health.

3.2.5 Personal Protective Equipment

- It is the duty of the Contractor to provide and maintain suitable protective clothing and equipment as is necessary to ensure, so far as reasonably practicable, for the safety health and welfare of his/her employees.

3.2.6 Principles of Prevention

- When assessing risks, it is the duty of the Contractor to take account of the Principles of Prevention. The Contractor must therefore, as a priority, eliminate hazards and reduce risks to an acceptable level. For residual risks the Contractor must as far as reasonably practicable provide for integrated safety systems and collective protective measures in favour of personal protective measures.

3.2.7 Emergency Plans (shared areas/occupied premises)

- The Contractor must provide for consultation and co-ordination with the Client in relation to Emergency Plans. Emergency Plans must be reviewed and co-ordinated on a regular basis and at any change of circumstances.

3.2.8 Licences

- It is the responsibility of the Contractor to apply to the Local Authority for any necessary licences relating to the erection of cabins, hoardings, placing of skips/use of mobile cranes and any other possible activities in the public domain.

3.2.9 Sub-contractors

- There may be a number of sub-contractors engaged in these works. All sub-contractors' activities must be carefully co-ordinated to ensure proper protective measures are in place at all times. It is the function of the PSCS to ensure for the co-ordination of all sub-contractors and this duty should be specifically addressed in the Safety Plan for the Works. The competency of sub-contractors, if used, shall be assessed in respect of Health and Safety by the principal Contractor. Only competent and trained sub-contractors and operatives shall be permitted on the site.

3.2.10 Operatives

- All operatives must be holders of Safe Pass safety training card or a recognised equivalent. Operatives must wear adequate personal protective equipment (to be determined by the nature of the works on hand) at all times.

3.2.11 First Aid

- The Contractor must provide adequate first aid facilities on site.

3.3 General Safety Requirements

Enter General Safety requirements as necessary and as identified by the Design Team.

		Yes	No			Yes	No
Working in an Existing Building							
3.3.1	Essential Services/ Fire Safety Systems All essential services, including fire safety systems, must be maintained in working order at all times during the works. Any downtime to services must be notified in good time in advance to the Project Architect.	X		3.3.4	Stability of Existing Structures The existing structure has been assessed and found to be in good structural order and without risk to its stability from the proposed works by:	X	
				STRUCTURAL ENGINEER		Mr. Tomás O'Donoghue	
3.3.2	Fire Escape Routes All fire escape routes for the occupants must be maintained without obstruction at all times.	X		3.3.5	Access for Emergency Services The Construction Safety Plan should outline Emergency Plans and the provision of access for Emergency Services in the event of accident arising from the works and for the occupants of the premises.	X	
3.3.3	Fire Safety (Existing or Nearly Completed Buildings) There is always the risk of fire from construction activities in an existing building. The PSCS must outline Fire Safety procedures which will be implemented for the duration of the contract. The Contractor should ensure that adequate first aid fire fighting equipment is on hand at all times. A preclosure fire safety inspection should be undertaken before closure each and every evening. Smoking will not be permitted in the premises. Hot works should be avoided wherever possible. If, however hot works are necessary they must only be undertaken on foot of a hot works permit.	X		3.3.6	Asbestos/ACMs An asbestos survey has been undertaken of the premises. Asbestos or asbestos containing materials were identified (or specify findings and refer to and attach the Asbestos Report).	X	
				3.3.7	Isolation of Live Services All live services must be isolated prior to work. Live work to be avoided where possible. Isolation of live work to be co-ordinated with tenants to ensure against accidental 'switch on'.	X	
Working in a Greenfield/Brownfield Site							
3.3.8	Site Enclosure Layout See attached site plan outlining site enclosure and hoarding requirements.	X		3.3.13	Protection of Pedestrians/Public All waste, construction materials and skips located in the public domain must be enclosed with double clipped Heras fencing suitably dust proofed and affixed with suitable safety signage.	X	
3.3.9	Site Investigations/Ground Conditions/Excavations Site investigations have been undertaken. See site investigations report with tender documents.		X	3.3.14	Cleaning of Roads The Contractor must allow for cleaning of dirt emanating from the works to roads and footpaths in the vicinity of the site.	X	
3.3.10	Services For Construction Activities Mains water is available on site.	X		3.3.15	Hoarding Standard Hoarding to be designed by TWD to the relevant standards and installed to ensure against collapse in high winds or adverse weather conditions.	X	
3.3.11	Services For Construction Activities Mains electricity is available on site.	X		3.3.16	Manual Handling Manual handling must be avoided as far as is reasonably practicable. The Contractor must therefore make arrangements for the mechanical lifting of materials wherever and whenever practicable.	X	
3.3.12	Control of Dust/Dirt/Noise The Contractor must ensure for the control of dirt, dust and noise and is required to keep the site tidy at all times to minimise nuisance to neighbours. Spray suppression or other similar methods should be used for the control of dust as necessary. Adequate and suitable PPE (eye, ear and face protection) should be provided to at risk operatives. Excessive noisy activities must be limited as far as reasonably possible and must not be undertaken before:	X		3.3.17	External Storage of Materials Materials if stored externally must be secured at all times to ensure against being blown and dispersed.	X	

TIME

7:30am

3.4 Temporary Works

3.4.1 Temporary Works Co-ordination

- The main Contractor is wholly responsible for the design, installation, inspection and striking of Temporary Works (TWs). This includes Temporary Works designed by sub-contractors. The Permanent Works Designer (PWD) must provide the Contractor with all necessary design information relating to the Permanent Works to allow design of the Temporary Works. The PWD has no duty to the Contractor to detect or prevent faults in the Temporary Works.

3.4.2 The Duties of the PSCS (Temporary Works)

- The duties of the PSCS in relation to TWs shall include:
 - Issue to the PSDP the TWs schedule at the commencement of the works.
 - Co-ordination of all TWs activities including those of sub-contractors.
 - Communication with all parties involved.
 - Preparation of TWs design brief.

- Ensuring TWs are designed and checked.
- Issuing of permits to load and dismantle.
- Keeping of records.
- Ensuring that the various responsibilities have been allocated and accepted.
- Ensuring that the designs of TWs are communicated to the Permanent Works Engineer.
- Ensuring that TWs are designed to the appropriate standard.
- Ensuring that Temporary Works Design Certificates are signed by the appropriate parties.
- Completion and issue to the PSDP of Monthly Temporary Works Report.

3.4.3 Temporary Works Certificates

- Responsibility for the actual design of the Temporary Works remains with the Designers of the Temporary Works and it is recommended by the HSA that Certificates (Permanent and Temporary)

are used by the PSDP to record the co-operation of the activities of all designers.

- In signing the "Temporary Works Certificate" the PWD confirms that he/she has communicated his/her design assumptions to the Temporary Works Designer. Then as stated in the certificate "Erection of the Temporary Works" may proceed subject to the provision of a Temporary Works Method Statement agreed by the Contractor, Temporary Works Erector and PSCS as being adequate.

3.4.4 Suitability of Materials

- Materials used for temporary works shall be the best of their kind and appropriate for the intended function.

4

Project Completion Time Frame

It is considered that the project can be safely completed in this time frame. Tenderers when tendering should however indicate any reservations they may have with regard to the safe delivery of the project within this time frame.

4.1 The project programme from commencement to completion is:

CONTRACT DURATION

16 weeks

5

Conclusions With Regard To The Taking Account of The Principles of Prevention

5.1 The Design Team and PSDP have endeavoured as far as reasonably practicable to take account of the Principles of prevention. The foregoing residual Particular/Safety Critical Risk (Section 3) activities have been identified. (See attached Design Risk Assessments submitted by the Design Team) The PSCS should address the foregoing risks in the Safety Plan and Method Statements should be prepared for these and any other high risk activities on this project.

5.2 In preparing the relevant Method Statements and systems of work the Contractor must take account of the Principles of Prevention and endeavour to reduce risks by the use of alternative and safer work practices. All those involved in the planning of the works must take account of the Principles of Prevention

by eliminating hazards, reducing risk and putting in place collective protective measures in favour of personal protective measures. In particular, collective protective measures must be provided in relation to working from height.

5.3 There may be a number of sub-contractors involved in the works. Co-ordination of the sub-contractors is a key requirement for the duration of the works. The Contractor must ensure and confirm to the client the competency of all sub-contractors engaged in the works.

5.4 Fire Safety is an absolute priority. The Contractor must put in place procedures to ensure for the highest level of fire safety throughout the project. A preclosure fire safety inspection must be undertaken at the conclusion of each day's activities. Smoking on site is not permitted.

5.5 Security of the site to ensure against unauthorised access particularly during non-working hours and weekends is essential.

5.6 Enter names of Design Team members who have submitted Designer Risk Assessments.

Declan Carroll, Architect

6

Services For The Provision of Welfare Facilities

6.1 Welfare Facilities For Construction Personnel

- The Contractor must provide toilet, canteen and drying facilities for operatives in accordance with the requirements of the SHWW (Construction) Regulations 2013 and must also provide adequate office and meeting room facilities for management and Design Team.

6.2 Are there drainage systems for connection available on site?

Yes X No

6.3 Can a mains water supply to which a connection can be made be available on site?

Yes X No

7.1 Design Changes During The Construction Stage

- In the event of design changes during the Construction Phase existing Design Risk Assessments must be reviewed or new Risk Assessments generated. It is the Designers' responsibility to ensure that they inform the PSDP of any changes in their design and that the appropriate Design Risk Assessments are completed and notified to the PSDP and PSCS.

8.1 Information Delivery Requirements

- It is the duty of the PSCS to provide the PSDP with relevant information to enable preparation of the Safety File. Information in hard and soft copy format to be presented. The Contractor must therefore allow for any costs in procuring the relevant information including as built drawings. Safety File information must be submitted to the PSDP before Practical Completion.

Signature Of Project Supervisor For Design Process

SIGNED

Declan P. Carroll B.A., B. Arch., M.R.I.A.I

DATE

28

04

26

The information contained in this Preliminary Health & Safety Plan has been prepared prior to the commencement of the work on site. It does not take account of any matters or information, which may come to light after that time.

Appendix 1 Particular/Safety Critical Risks



Particular/Safety Critical Risks are those risks which if they come to pass will result in a fatality, serious injury, damage to health, damage to property, damage to the environment or dangerous incident.

As noted Schedule 1 to SHWW (Construction) Regulations 2013 (Particular Risks) is a non-exhaustive list. Designers and the PSDP must therefore identify other risks falling within this category.

As a guideline, therefore the following might be considered within this category (note that the following is also a non-exhaustive list).

Risks involving works:

• On a particularly restricted site which may result in any of:

- Restricted working space
- Hazardous access/egress
- Non-standard scaffolding or other similar restrictions

• Close to traffic/rail lines and similar

• Close to the public

• In an occupied premise

• In historic, unstable or derelict buildings

• Close to children

• In the public domain—road crossings, works on footpaths

• On filled/contaminated ground

• On lands with high water table

• Near water

• On public boundary

• On roads

• On works which might involve:

- Demolitions
- Pilings
- Crane erection
- Asbestos removals
- Tree felling
- Extreme weather conditions
- Confined space
- Live works
- Excessive noise



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APPENDIX C

RESULTS FROM TECHNICAL ANALYSIS OF EXISTING RENDER



Stoneware Studios Ltd
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Youghal
Co. Cork
024 90117
mail@stonewarestudios.com
www.stonewarestudios.com

Structure & Reference:	St Angelas
Address:	Waterford City

Samples supplied by:	Carroll Architects
Reason for sampling material:	Material identification

Location on building:	External
Phase:	Unknown
Feature:	External Render

Photographs:	N/A
---------------------	-----

ANALYTICAL PROCEDURES

The selected sample of material was dried to a constant weight and examined under a binocular microscope at x40 and x100 magnification.

An assessment of the binder type was made by evaluating the physical characteristics of the mortar based on our knowledge, experience and understanding of materials.

18% Hydrochloric acid was used to enact a dissolution of the binder enabling relative proportions of carbonate binder to aggregate to be determined. Proportions of insoluble binder (and soluble aggregate) were determined and factored into this calculation. Subsequent aggregate characterisation was undertaken by means of dry sieve analysis and microscopic analysis.

The analysis results and interpretations made from it provide information on the composition and characteristics of the mortar sample received by the Stoneware Studios laboratory.

Provided the sample was representative of the mortar generally, the analysis will give a reasonable indication of the original materials and provide a basis for specification of repair mortars. If more detailed information is required (for example, for purposes of historic research) more sophisticated analytical procedures can be undertaken using XRD or SEM analytical tools.

Filtration

20 -25 μm PAPER TYPE: Whatman Type 41



Mortar sample as received, top view



Mortar sample as received, side view

Stoneware Studios was tasked by Declan Carroll of Carroll Architects to verify the presence, or absence, of Portland Cement in this render sample.

After testing, we can verify that Portland Cement is the dominant binder in this render. There is a small amount of hydrated lime in this mortar mix but only sufficient to act as a plasticiser, and not as the primary binder. The sample is very hard and dense with high compressive strength but low tensile strength. The physical characteristics of cement mortars mean that they have a tendency to retain moisture and also are susceptible to substantial cracking. Solid masonry structures such as this building at St Angelas in Waterford almost always will benefit greatly from the removal of this cement-based mortar and replacing it with a lime render.

Here is what we recommend for the lime render application, see the next two pages.

EXTERNAL PLAIN FACE LIME RENDER - STONEWARE STUDIOS						
COAT	MIX Ratio SAND : LIME	NHL STRENGTH	FIBRES ADDED	SAND TYPE	APPROX. COAT THICKNESS	COMMENTS
Crack and Head Repairs	Stitch unstable cracks and areas that need reinforcing with Helifix crack stitching system. The crack/repair itself should be pointed with a lime mortar, 1 part NHL3.5 to 2.5 parts washed sharp sand. The sand size should facilitate the placing of mortar into the crack (eg. 1mm sand for 2mm wide crack). If the crack is through the wall and only the face of the crack has been filled with mortar then it would be beneficial to back fill with a liquid Lime Grout (we recommend Secil Grout- info attached) which will flow deep into the wall and fill the narrow space. Window and Door Heads can be replaced or repaired as per the Engineers guidelines.					
Dubbing out & pointing & brick repairs	2.5 : 1	NHL3.5 Or use Secil RB - premixed lime render and machine apply	No	5mm down WASHED, SHARP	n/a	Brick and brick slips can be used to rebuild deeply recessed hollows. Very deep hollows should be plastered in two, or even three, separate applications to allow for the managed curing of the mortar. Fibres(polypropylene) should be added to the dubbing out mortar in the quantity of c. 200g per 25kg bag of lime. Fibreglass mesh can also be used to reinforce the plaster, and where the brick is particularly unstable, a combination of lime plaster with fibres, fibreglass mesh, and some mechanical fixings should be used to lock the plaster into place.
SCUD	1.5 : 1	3.5 or use Secil CS pre-mix lime scud	Yes	GRITTY	standard scud	CAN ADD SMALL AMOUNT OF PEBBLE TO IMPROVE KEY FOR NEXT COAT
SCRATCH Coat(s)	2.5 : 1	3.5 or use Secil RB premixed lime render	YES	WASHED, SHARP	10-12mm per coat	MAN MADE FIBRES or ANIMAL HAIR added for extra tensile strength and reduced shrinkage. One or more Scratch Coats may be required to prepare the wall for the Finish Coat.
FINISH	3:1	3.5 or use Secil RB pre-mixed lime render	No	WASHED, SHARP	7-8mm	Choose 5mm down washed sharp sand for Floated or Float and Sponge finish. For finer finishes, choose a 3mm down washed sharp sand. Suitable sands are available from Stoneware Studios.
Decoration	If the Render is to be decorated, it is imperative that a breathable paint or limewash is used for decoration. We recommend Earthborn Silicate Paint, Remmers LA paint or Stoneware Studios Limewash. For application technique follow manufacturers instructions and guidelines.					

Stoneware Studios
General Guide & Essential do's and don'ts to produce first class work with
Lime.

1. Avoid excessively fast evaporation & drying out period.
2. Avoid substrates that are significantly different in strength or density to the lime application, or adjust your lime to suit.
3. Make sure the substrate is thoroughly cleaned to guarantee good initial adhesion.
4. Insure cleaning materials, biocides etc. are fully cleaned off and have not left residual contaminants on substrate.
5. Wet substrate enough to control suction but not so much to lead to poor adhesion.
6. In general, avoid very weak limes; common hydrated lime or excessively strong limes in certain circumstances. Excessively weak lime will lead to susceptibility to cracks from expansion contraction forces of either frost or salt crystallisation while excessively strong limes can diminish the materials compatibility with softer substrates.
7. Avoid white or grey cement. For many reasons.
8. Avoid poor batching of materials on site which will lead to patchiness and strength variations.
9. Inaccuracies and/or inconsistencies in mix ratios will also lead to strength variations and the possibility of cracking.
10. Avoid too much water in the mix, Too much or little lime in the mix, Too much or little sand in the mix.
11. In general, Mix very thoroughly. If other ingredients (air-entrainers etc.) are added to lime/sand mix follow manufacturer's instructions as some additives can weaken mortar if over mixed.
12. Use sharp, clean sands. Too much fines and clay in sand will always give problems.
13. Insure there is no variation in sand batches. Make sure sand is supplied properly batched and on-site procedures are in place for sand protection.
14. Avoid contamination of mix with dirty water.
15. Insure sand is graded for the purpose intended.
16. Avoid excessive closing down, compacting and rubbing of face of lime mortar.
17. Avoid excessive smoothness on surface.
18. Insure Finish / Top coats of application are weaker than underlying coats.
19. Where appropriate, add integral reinforcement into lime mortar; fibre or hair.
20. Protect new work from fast drying conditions.
21. Understand the specific lime requirements for correct curing. Each lime requires difference aftercare and protection.
22. Avoid excessively thick coats.
23. Allow enough time between coats to harden, but not dry out.
24. Avoid poor quality Lime or lime that was stored in poor conditions and not suitable for use.
25. Insure there is sufficient mechanical key.
26. Insure there is adequate keying/scratching of backing coats.
27. Use lime-experienced people to design, supervise, supply, apply and decorate with lime.

APPENDIX D

AGREEMENT FOR APPOINTMENT OF PROJECT SUPERVISOR FOR CONSTRUCTION STAGE

Appointment of Project Supervisor for Construction Stage

THIS AGREEMENT is made on _____ **BETWEEN**

1. *The Client* _____

Whose principal office is at _____

and

2. *The Project Supervisor* _____

Whose registered office is at _____

BACKGROUND

A. By a contract (the **Contract**) made on or about _____¹, the Client, as employer, has appointed _____² as contractor (the **Contractor**) for

Name of Contract _____
Investigation (the **Works**).

B. This Agreement is collateral to the Contract.

C. The terms **competent person** and **relevant statutory provisions** are construed according to section 2 of the Safety, Health and Welfare at Work Act 2005 and any amendment to it.

IT IS AGREED AS FOLLOWS:

1. The Client appoints the Project Supervisor as project supervisor for the construction stage according to the Safety, Health and Welfare (Construction) Regulations 2006 and any amendment to them (the **Construction Regulations**) for the project comprising

- the Works
- and ³

(the **Project**).

2. The Project Supervisor's appointment starts on the date of this Agreement and continues for as long as, under the Construction Regulations, the Client is required to have a

project supervisor for the construction stage for the Project, unless the appointment is terminated earlier.

3. The Project Supervisor accepts the appointment.
4. The Project Supervisor shall perform all of its duties under the Construction Regulations as project supervisor for the construction stage for the Project.
5. The Project Supervisor represents and warrants to the Client that the Project Supervisor is and will continue to be a competent person to carry out its duties under this Agreement and the Construction Regulations and has allocated and will allocate sufficient resources to enable itself to comply with the requirements and prohibitions imposed on the Project Supervisor by this Agreement and under the relevant statutory provisions.
6. The Project Supervisor represents and warrants to the Client that the time allowed by the Contract for the completion of the Works is appropriate and sufficient to enable the Project Supervisor to perform its duties under this Agreement and the Construction Regulations.

¹ Date of letter of acceptance

² Insert "the Project Supervisor" or the name of the Contractor, as appropriate.

³ Specify any additional scope for which this Project Supervisor is to be appointed PSCS.

7. The Project Supervisor represents and warrants to the Client that the information provided by the Client to the Project Supervisor about the state or condition of the Site (as defined in the Contract) and any premises on it is appropriate and sufficient to enable the Project Supervisor to perform its duties under this Agreement and the Construction Regulations.
8. The Project Supervisor shall ensure that it is insured by insurances in the same terms as the insurances the Contractor is required to have under clause 10.3 of the Conditions of the Contract, and that those insurances comply with all the requirements of the Contract, and are kept in force for the same period as required by the Contract, and include cover for death or injury resulting from the Project Supervisor's performance or non-performance of its duties under this Agreement and the Construction Regulations.
9. Payment for the Project Supervisor's service is provided for under the Contract. Accordingly, the Client is not liable under this Agreement for the Project Supervisor's fees or expenses.
10. If the Project Supervisor breaches its obligations or warranties under this Agreement, or if the Contractor's obligation to complete the Works is terminated under the Contract, the Client may terminate the Project Supervisor's appointment under this Agreement.

11. Without limiting its obligations under the Construction Regulations, the Project Supervisor shall give the Client all documents it prepares in the course of and for the purpose of performing its duties under this Agreement (**Project Supervisor's Documents**). If the Project Supervisor's appointment under this Agreement terminates, the Project Supervisor shall give all Project Supervisor's Documents to the Client immediately. Ownership of and copyright in the Project Supervisor's Documents shall become the Client's when the Project Supervisor delivers them to the Client, or the appointment is terminated, whichever is earlier. The Project Supervisor shall indemnify the Client against any liability resulting from the use or copying of the Project Supervisor's Documents infringing the property (including intellectual property) rights of any person.
12. This Agreement is governed by and construed according to Irish law. The parties submit to the jurisdiction of the Irish courts in relation to all matters concerning it.

Signed on behalf of the Client

Signature of authorised person _____

In the presence of

Name of witness _____

Signature of witness. _____

Witness's occupation _____

Witness's address _____

Signed on behalf of the Project Supervisor

Signature of authorised person _____

In the presence of

Name of witness _____

Signature of witness _____

Witness's occupation _____

Witness's address _____

This Document contains the pages that are identified in the contents section and inferred by the structure of the document.

The Contractor shall ensure that no page is either missing or duplicated

CONTRACTORS NAME: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

SIGNATURE: _____

DATE: _____

APPENDIX E

STRUCTURAL ENGINEERS DETAILS FOR CRACK REPAIRS

Crack repair at.

Angela's Ursuline Secondary School,

Waterford.

NOTE: Prior to works being carried out, agreement to be made with site engineer.

This specification refers to a specific Helibar as supplied by Helifix.

Any proposal to use alternative fixing systems is subject to agreement with the site engineer.

Helifix Crack Stitching repairs and stabilizes cracked masonry using helical stainless steel [HeliBars](#) bonded into cut slots with [HeliBond](#) grout for a quick, simple, effective and permanent solution.

Cracked masonry is best stabilized by bonding HeliBar (helical stainless steel bars) into appropriate bed joints or cut slots, in bricks, blocks or stonework with HeliBond cementitious grout. Tensile loads are redistributed along the masonry to minimize further developments of the crack which may occur with simple injection methods.

Technical Details

- Available diameters – 6mm (or 4.5mm for thin mortar joints).
- Length: Cut lengths up to 80".
- Material – Austenitic stainless steel Grade 304 or 316.
- Vertical spacing – Every 4-6 brick courses (12"-18").
- Depth of slot – Single skin/cavity wall 1"- 1¼" Solid wall 1"-1½ " .

Installation Process

1. **Slot Preparation:** Cut horizontal slots into the mortar bed or masonry to the specified depth (typically 35–40mm) and width (10mm for 6mm HeliBars). Remove all loose mortar and debris, then flush with water or prime with HeliPrimer WB. [↻ 1](#)
2. **Grouting:** Inject a bead of HeliBond into the back of the slot using a pointing gun.
3. **Inserting HeliBars:** Push the HeliBar into the grout to ensure full coverage, then apply a second bead of HeliBond over the exposed bar and iron it into the slot.
4. **Finishing:** Leave 10–15mm for new pointing, then re-point the mortar bed and make good the vertical crack with CrackBond TE3 or similar. [↻ 1](#)
5. **Length and Placement:** Each HeliBar should extend at least 500mm beyond the outer cracks. For cracks near corners or openings, bend the bar around the corner and bond into the return wall, avoiding any damp-proof course (DPC) membrane. [↻ 2](#)
6. **Vertical Spacing:** Typically, HeliBars are spaced every 450mm (6 brick courses) to ensure effective load distribution. [↻ 1](#)

System components available

- HeliBar
- HeliBond cementitious grout
- Mixing paddle
- Applicator with fitted applicator nozzle

For information on crack stitching applications click [here](#)

1. Rake out or cut slots into the horizontal mortar beds, a minimum of 20" either side of the crack, to the specified depth.
2. Clean out slots and flush clean with water and thoroughly soak the substrate within the slot.
3. Using the Helifix Pointing Gun Kit, inject a bead of HeliBond along the back of the slot.
4. Using the brick jointer, or similar, push one HeliBar into the grout to obtain good coverage.
5. Insert a further bead of HeliBond over the exposed HeliBar, finishing ½" from the face, and 'iron' into the slot using a brick jointer.
6. Re-point the mortar bed and make good the vertical crack with CrackBond TE3.

Repairing Cracks Near Corners & Openings

Where cracks are less than 20" from an external corner (A) or an opening (B) at least 4" should be bent around the corner and bonded into the return wall or bent and fixed into the reveal, avoiding any DPC membrane.

Where two or more cracks are close together these may be stitched using one continuous length of HeliBar which must be long enough to extend 20" beyond the outer cracks. e.g. if there are three cracks, each 10" apart, then the overall length of HeliBar required would be 60".

The horizontal slot, normally the mortar bed, can be cut using a twin diamond blade chaser with vacuum attachment, an angle grinder or a mortar chisel.

Additional Advice

- Where two or more cracks are close together these may be stitched using one continuous length of HeliBar which must be long enough to extend 20" beyond the outer cracks. e.g. if there are three cracks, each 10" apart, then the overall length of HeliBar required would be 60".
- The horizontal slot, normally the mortar bed, can be cut using a twin diamond blade chaser with vacuum attachment, an angle grinder or a mortar chisel.
- All mortar must be removed, together with any loose debris, to ensure a sound bond.
- Prepare the slot with HeliPrimer WB or thoroughly wet the slot with clean water.
- As standard, slots should be 10mm wide to accommodate the 6mm diameter HeliBar.
- HeliBond grout is the recommended bonding agent. PolyPlus resin is used for smaller jobs and where loads are to be rapidly applied.
- Fully concealed, non-disruptive repair solution
- More reliable than crack injection methods
- HeliBond cementitious grout is injectable and rapidly produces high compressive strength
- HeliBars and HeliBond grout combine to create excellent tensile strength within the masonry
- No additional stresses are introduced during installation
- Masonry remains flexible enough to accommodate normal building movement
- Tensile loads are redistributed
- Reduces likelihood of further cracking nearby
- Avoids costly and disruptive taking down and rebuilding

All mortar must be removed, together with any loose debris, to ensure a sound bond. Prepare the slot with HeliPrimer WB or thoroughly wet the slot with clean water.

As standard, slots should be 10mm wide to accommodate the 6mm diameter HeliBar.

HeliBond grout is the recommended bonding agent. PolyPlus resin is used for smaller jobs and where loads are to be rapidly applied.

T. O'Donoghue CEng. *Mob* 0874184446

07/05/2026

APPENDIX F

STRUCTURAL ENGINEERS METHOD STATEMENT FOR REMOVAL AND REPLACEMENT OF LINTOLS

T. O'Donoghue
Consulting Civil
&
Environmental Engineer

12 Booterstown
Dunmore Road
Waterford.
mob. 087-4184446
12/06/2026

This method statement is set out with reference to the replacement of failed(timber) lintels, to the external face of selected window openings at St. Angela's Secondary School, Waterford, with precast concrete lintels.

Precast Concrete Lintel Installation.

Lintel sizes 100*65, 150*65, as appropriate.

Assessing the condition of existing lintels.

Based on agreement with the site engineer, the condition of the existing lintels shall be assessed by;

- (1) the removal of the covering render, where appropriate,
- (2) using an 8mm or greater drill head to assess the condition of lintels.

Note.

All lintels for the full depth of the window ope are to be inspected unless otherwise agreed with the engineer.

Preparation for removal of existing lintels.

- (i) Replacement of window lintels should follow the sequence of starting with those at the highest floor levels and completing the works by advancing to the lower levels in a sequential manner.
- (ii) Once agreed to remove and replace a lintel, the supported masonry and mortars shall be inspected and assessed for their condition and stability.

- (iii) On exposure of the supported stone/brickwork, should the overhead stone/brickwork be deemed unstable, all loose material shall be removed while maintaining the stability of the ope using appropriately sized timber formwork/falsework.
- (iv) Steel helibars as specified elsewhere shall be used to stitch structural cracks as deemed necessary by the engineer.
- (v) The remaining exposed surfaces are to brush cleaned and the wall rebuilt to its original condition, using a lime based mortar of appropriate strength and workability. The rebuilt wall should be carried down to within 15mm of the top of the proposed concrete lintel or as otherwise agreed with the engineer.
- (vi) When the mortar is considered to have achieved sufficient set to carry the newly installed masonry, the timber lintel is to be removed, the lintel bearing area examined to assess its size, condition and suitability to carry the proposed precast concrete lintels.
Use a hammer and chisel to increase the size of the bearing area if necessary, based on a 100mm bearing length for opes up to and including 1.2m and a minimum of 150mm for greater spans.
- (vii) Existing dpc's and all other weathering materials, electrical cabling or pipework shall be protected, replaced, enhanced, extended or added as deemed necessary by the architect.
- (viii) Remove all existing mortar beds and prepare and lay a full level bed of freshly mixed mortar to sit the proposed precast concrete lintels.
- (ix) The lintel is to be installed, propped, levelled and aligned and a bed of mortar and slate slips used to fill the horizontal gap between the top of the lintel and the supported masonry wall. Only when the mortars have fully matured should any propping be removed.

Signed;

A handwritten signature in cursive script, reading "Tomás O'Donoghue B.E.", written in dark ink on a light background.

Date 12/06/2026

Tomás O'Donoghue. Civil Engineer B.E. MEngSc.C Eng. MIEI.

APPENDIX G

WASTE MANAGEMENT PLAN



6 Colbeck Street Viking Triangle Waterford

Eircode: X91 V972 Tel: +353 (0) 51 877282

Web: www.carroll.ie Email: info@carroll.ie

CONSTRUCTION & DEMOLITION WASTE MANAGEMENT PLAN

Prepared per EPA Best Practice Guidelines (2021) · DoE TGD-020

Development	Re-plastering at St. Josephs Building, Ursuline Secondary School, Ursuline Convent, Ballytruckle, Waterford.
Site / Client	Board of Management, Ursuline Secondary School, Ursuline Convent, Ballytruckle, Waterford. X91 TK83
Planning Authority	Waterford City & County Council
Prepared by	Carroll Architects (Agent / Design Team) · Project Architect: Declan Carroll
Status / Date	Rev. P1 — for written agreement prior to commencement · Date: _____ 2026

1. Introduction & Compliance

This Construction Waste Management Plan ("CDWMP") is prepared by Carroll Architects on behalf of the Client to satisfy The Department of Education Technical Guidance Document No. 020 – The design team shall prepare a Construction and Demolition Waste Management Plan where construction and demolition waste will arise. This TGD requires a Construction & Demolition Waste Management plan prepared in accordance with the EPA Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for C&D Projects (2021), demonstrating adherence to best practice and protocols and including specific proposals for measuring and monitoring its effectiveness. The Plan is to be agreed in writing with the Planning Authority and appointed contractors before commencement, implemented and updated throughout the works, and all records kept on the site file for inspection at all times.

Objectives: prevent and minimise waste; maximise on-site reuse and off-site recycling/recovery in line with the waste hierarchy; ensure all wastes are handled only by authorised collectors and facilities; set measurable targets and monitor performance; and maintain auditable records.

2. Project Description

The works comprise the removal of cement based render and replacement with a lime based render at an existing school building (A protected structure) together with associated works. Permitted hours: Mon–Fri 08:00–18:00, Sat 08:30–13:00, none Sundays/public holidays.

Sequence: site set-up & fencing; pre-commencement and all necessary scaffolding and netting. Disconnect any electrical items such as light fittings.

3. Legislative & Policy Context

The Plan applies the waste hierarchy and circular-economy principles and has regard to: the EU Waste Framework Directive 2008/98/EC (as amended), incl. the 70%-by-weight recovery benchmark for non-hazardous C&D waste and the by-product (Article 27) and end-of-waste (Article 28) mechanisms; the Waste Management Act 1996 (as amended), under which the waste holder/producer (the Client, and the Contractor during works) is responsible for correct management under the polluter-pays principle; the European Union (Waste Directive) Regulations 2011–2020; the hazardous-waste shipment regulations (for asbestos etc.); and Ireland's Waste Action Plan for a Circular Economy 2020–2025. Clean surplus soil/stone will be considered for by-product classification before being treated as waste.

4. Roles & Responsibilities

A suitably experienced Resource Manager (RM) will be appointed — at design stage within the Design Team and at construction stage within the Contractor — with responsibility for implementing, recording and monitoring the Plan.

Party	Key responsibilities
Client	Waste producer/holder; sets targets; imposes CDWMP duties on the Contractor; ensures the Plan is agreed before commencement; requests the end-of-project report.
Design Team / Agent	Drafts and maintains the Plan through design/planning; incorporates conditions; identifies waste-avoidance; hands over to the Contractor at commencement.
Contractor (TBA)	Implements, records and reviews the Plan; appoints the site Resource Manager; engages only authorised collectors/facilities; manages sub-contractors; makes by-product/end-of-waste notifications; prepares the end-of-project review.
Planning Authority	Agrees the Plan in writing before commencement and enforces the conditions during construction.

Contractor-stage details (named RM, appointed collectors, confirmed facilities and final quantities) to be inserted by the Contractor before commencement.

5. Targets (KPIs)

Key Performance Indicator	Project target
Diversion of non-hazardous C&D waste from landfill (reuse+recycle+recover)	≥ 80% by weight
Reuse of clean excavated soil/stone on site	≥ 90% retained on site
Waste segregated at source	≥ 90%
Hazardous waste identified & removed by authorised operators	100%
Off-site movements to authorised collectors/facilities, with dockets	100%

6. Designing Out Waste

- Carry out a pre-commencement audit and adopt soft-strip/selective deconstruction to recover any reusable items and segregate clean streams; crush suitable masonry for reuse as hardcore (subject to end-of-waste).
- Specify standard/modular sizes and pre-fabricated components to cut off-cuts and on-site cutting; use pre-mixed plaster if possible and order-to-quantity, just-in-time deliveries to avoid over-ordering and stockpiling.
- Apply green procurement — durable, repairable, recyclable products, recycled content where appropriate, and supplier take-back of packaging.

7. Pre-Demolition Audit & Hazardous Materials

A pre-demolition audit will inventory materials and refine the waste streams below. Asbestos Survey by a competent surveyor will be conducted before commencement. Any asbestos-containing materials (EWC 17 06 05*) and other hazardous wastes will be removed first by competent, authorised operators in line with HSA requirements, transported by a permitted haulier under a Waste Transfer Form, consigned only to a facility authorised for that hazardous waste, and recorded separately.

8. Anticipated Waste Streams

Indicative only; to be refined by the pre-demolition audit and recorded during the works.

Material / waste stream	EWC code	Haz.	Preferred management route
Soil & stones (clean)	17 05 04	No	Reuse on site; surplus as by-product (Art. 27) or to authorised facility
Concrete / masonry / brick	17 01 01–07	No	Segregate; crush for reuse as hardcore on site / recycle off site
Tiles & ceramics	17 01 03	No	Reuse / recycle
Timber	17 02 01	No	Reuse; otherwise recycle / energy recovery

Material / waste stream	EWC code	Haz.	Preferred management route
Glass / plastics	17 02 02/03	No	Segregate; recycle
Bituminous mixtures / asphalt	17 03 02	No	Recycle off site at authorised facility
Metals (ferrous & non-ferrous)	17 04 05/07	No	Segregate; recycle (scrap merchant)
Insulation	17 06 04	No	Recycle / recover where possible
Gypsum / plasterboard	17 08 02	No	Keep dry; recycle via take-back
Mixed C&D residual	17 09 04	No	Sort at facility; recover; minimise to landfill
Packaging	15 01 xx	No	Segregate; recycle; supplier take-back
Asbestos-containing materials	17 06 05*	No	Specialist removal first; authorised hazardous haulier & facility only

9. Site Management & Controls

- Provide dedicated, labelled, covered skips/containers within the site for segregated streams (inert/masonry, metals, timber, plasterboard, recyclables, residual); segregate at source and keep moisture-sensitive recyclables dry.
- Remove waste only via a haulier with a valid Waste Collection Permit to a facility holding the appropriate authorisation; record permit/licence numbers and obtain a docket for every load (Conditions 3(f), 5).
- Employ Best Practicable Means for dust — cover skips/slack-heaps, net scaffolding, damp-down/wash hard surfaces; comply with BS 5228 (Condition 7).
- Provide a clean stone access and carry out wheel-cleaning/road-sweeping to prevent deposit of clay, rubble or debris on adjoining roads (Condition 8); secure the site and waste areas against unauthorised tipping/removal.

10. Measurement & Monitoring of Effectiveness

The Resource Manager (Contractor) will measure and monitor the Plan as follows. What is measured: the quantity (tonnes/m³) of each stream against the inventory; the route applied (reuse/by-product/recycle/recover/dispose); the landfill-diversion rate (reuse+recycle+recover ÷ total, % by weight); and performance against each KPI in Section 5.

How: a docket is obtained for every off-site load (date, material/EWC, quantity, collector + Waste Collection Permit no., destination facility + authorisation no.; hazardous loads also under a Waste Transfer Form). The RM maintains a Site Waste Tracking Log reconciling every docket and updating cumulative quantities and the diversion rate. Where a KPI is at risk, the cause is recorded and corrective action taken (extra containers, toolbox talks, change of outlet) and verified at the next review; a simple on-target / at-risk / off-target status flags each KPI. Segregation is reinforced at induction and toolbox talks. All records are kept at the site office and available for inspection at all times.

Monitoring activity	Frequency	Record
Record each off-site load (docket/transfer form)	Every load	Tracking log
Update log & cumulative diversion rate	Weekly	Tracking log
Segregation & storage inspection	Fortnightly	Inspection record
KPI review vs targets + corrective action	Monthly & phase-end	KPI review note
Verify collector permits & facility authorisations	On appointment / if changed	Permit copies on file
End-of-project RWMP Implementation Review Report	Completion	Report to Client

11. Records, Reporting & Closing

All records (dockets, transfer forms, tracking log, permits, authorisations, inspection and KPI notes) are retained for the project duration on the site file, available for inspection at all times and retained as part of the public record. At completion the Contractor prepares an end-of-project review report (total arisings by stream, final diversion rate vs targets, lessons learned, confirmation of authorised handling) for the Client and the Planning Authority on request.

Signed: _____

Date: _____

Declan Carroll B.A., B.Arch MRAI

APPENDIX H

TECHINICAL DETAILS FOR NEW WALL VENTS

Fresh 99HdB Humidity Vent

Technical Data Sheet

April 2022

PRODUCT



FEATURES & BENEFITS

- Non electrical through wall vent for background ventilation
- Fully automatic—no user interaction
- Demand controlled which responds automatically to changes in room humidity
- Round shaped internal wall vent
- Unique air distribution pattern
- Ideal choice for social housing, student accommodation and hotels.
- Virtually maintenance free
- Easy to and install
- Sound reduction up to 40dB Dn,e,w
- Energy saving through reduced heat loss
- Operating range 30% to 75% Relative Humidity
- Trickle facility even when closed to ensure fresh air ingress

INSTALLATION

- Place vent as high as possible at least 10cm below ceiling, preferably above radiator
- Check for services before drilling
- Use core drill with minimum dim Ø 145-150mm for Fresh 99HdB
- Drill hole so pipe slopes slightly downwards
- If wall thickness is less than 300mm pipe can be cut to required length, if over additional pipes may be required
- Seal pipe both inside and outside with a suitable sealant agent
- Mechanically fix external grille into place
- Remove internal vent housing and fix with 4 screws
- Attached front cover and check vent is fully operational



Product Details

Free Area 99HdB	5600mm ² (3930mm ² equivalent)
Wall opening	Fresh 99H dB - 140mm diameter
Maximum thickness	Fresh 99HdB - 300mm
Airflow rate @10Pa	10.5 l/s 9.8 l/s

Colour	White
Code	Fresh 99H dB (acoustic)

